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Towards Effective Teaching Methods in EFL Listening for Intermediate Learners

**A Thesis Submitted for the Degree of Doctor of Philosophy,
Studies in Language and Culture,
Graduate School of Language and Culture,
Osaka University**

by

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論文要旨

本論文は、日本人英語学習者の中でも特に中位層を対象に、効果的なリスニング指導法について論じている。本論文の特徴は、大きく4つに分類される。

- 1 つ目は、日本人英語学習者の中で一番対象者数が多い、中位層に特化した研究である。
- 2 つ目は、学習者のリスニング能力に応じて、最適の学習方法を提案している。
- 3 つ目は、実験前後の実験協力者のリスニング能力測定及び実験協力者の分類に、標準テストを用いた。
- 4 つ目は、リスニング能力向上には、メタ認知における問題解決能力の向上が重要であるということを示した。

大学生に中学や高校でリスニングに関して、どのような指導を受けてきたのかを尋ねてみると「注意して聞きなさい。」「わかるまで何回も聞きなさい。」という回答がほぼ全てである。これは、1970代と全く同じ指導法である。約40年間、変化が無いこと自体が問題ではなく、その指導法で、日本人英語学習者の多くが未だにリスニングを不得手としていることが問題なのである。「聞いただけではわからないが、見たら（読んだら）わかる。」という学習者は非常に多い。旧態依然としたリスニング指導を、もっと効果的にすることが強く望まれる。

第1章では、研究目的、論文構成、本研究で用いられる語句の定義、コミュニケーションにおけるリスニングの占める割合を述べている。本論文では、中位層学習者 (TOEIC®のリスニング・テスト 495 点満点中、166～330 点の学習者)を対象としているが、理由は一番人数が多いからである。2011 年の TOEIC®公式データによると、日本人全受験者の 68.1%がリスニングにおいて中位層である。この現象は 2010 年、2012 年も同じであった。英語学習者の大半がリスニングにおいて中位層であるという現象は、日本を含むアジアや南米の多くの国にも共通している。中位層を対象とした、学習者の能力に合わせた効果的なリスニング指導法を、実証的研究により導きだすことができれば、日本のみならずアジアや南米諸国の英語学習者にも有益である可能性を示している。

第2章では、本研究の基礎となっている2つの理論やリスニング・ストラテジー (LS) についての先行研究で明らかになっていることや論争が継続していること、その原因を論じている。認知科学の分野において Schneider and Shiffrin (1977) は、人間の情報処理には2段階 (制限過程と自動過程) あると述べている。前者は意識しなければ遂行できない行動で、後者はそれを繰り返し行うことで、徐々に意識しなくてもできるようになってくる行動である。また、応用言語学の分野では Anderson (1980) が、言語学習における3段階 (perception, parsing, utilisation) からなる認知心理学理論を唱えている。この理論を用いれば、どのレベルで学習者が理解できなくなったかをピンポイントで指摘することが可能である。先行研究で明らかになっていることは、主に3つで、上位層学習者はトップ・ダウンとボトム・アップの両方

を用いているということ、下位層学習者は主にボトム・アップを用いているということ、両者の決定的な相違は上位層学習者が複数のメタ認知ストラテジー (planning, monitoring, evaluation) を用いているということである。論争が継続している点は、上位層学習者が用いている LS を下位層学習者に指導すれば、リスニング能力が向上するのではないか、ということであり、賛成派と懐疑派に分裂している。その原因の一つとして、多くの先行研究において標準テスト (国際的に有名であり入手が容易、なおかつ他のテストと互換性があるテスト) が使われていないことや実験協力者がどのように選別・分類されたのかが明確にされていないことが考えられる。標準テストが用いられていないことにより、多くの先行研究結果を他の研究結果と科学的且つ客観的に比較することができないのである。そこで、本論文では標準テストとして TOEIC® のリスニング・テストを用い、3 分割 (0～165, 166～330, 331～495) した上で、166～330 点の学習者を中位層学習者として実験協力者とした。TOEIC® は以下の様に、複数の標準テストに大まかではあるが換算可能である。

| TOEFL® | TOEFL®iBT | IELTS | Cambridge | TOEIC® | EIKEN |
|--------|-----------|---------|----------------|---------|------------------------|
| 677 | 120 | 9.0 | CPE | 990 | |
| 650 | 115 | 7.5–8.5 | | 890 | |
| 600 | 100 | 6.0–7.0 | CAE | 660–810 | Grade 1 |
| 550 | 80 | | | | |
| 500 | 61 | 5.5 | FCE | 590 | Grade Pre-1 |
| 470 | 52 | 5.0 | | 450–520 | |
| | | 4.5 | | | |
| 450 | 45 | 3.5–4.0 | PET | 310–380 | Grade Pre-2 to Grade 2 |
| | | 2.5–3.0 | KET | 220 | Grade 3 |
| | | 1.0–2.0 | Young Learners | | Grade 4 to 5 |

第 3 章では、第 1 実験としてディクテーション訓練と LS 訓練の実証研究手法や結果を論じている。前者は上記 2 つの理論に基づいた訓練で、音素や語句の音声による知覚・反復学習である。後者は、複数のメタ認知ストラテジーの理論と実践学習である。実験期間は 15 週間、初回講義で TOEIC® のリスニング・テストで 108 名の実験協力者を選別し、3 群 (統制群 10 名、ディクテーション訓練群 52 名、LS 訓練群 46 名) に分類した。第 2～14 週の 13 週間毎週 1 回、統制群には通常講義のみ、ディクテーション訓練群には、弱音や連結などを含むディクテーション訓練を、LS 訓練群には複数の LS の理論と実践を各群 90 分の通常講義内に 30 分行った。最終週である 15 週目に TOEIC® のリスニング・テストを実施し、第 1 週のデータと比較して各訓練の効果を分析した。分析手法には、分散分析や多重比較 (ライアン法)、効果量、分散図を用いた。その結果、ディクテーション訓練と LS 訓練の両方に有意差が得られた。また、中位層学習者をさらに下・中位層学習者 (第 1 週の TOEIC® のリスニング・テストで 166～249 点の学習者) と上・中位層学習者 (第 1 週の TOEIC® のリスニング・テストで 250～330 点の学習者) とに分けて分析した結果、前者には特にディクテーション訓練に有意差が得られた。この結果は、人間の情報処理や言語学習には下から積み上げるように、段階を経て向上していくという上記 2 つの理論と整合する。

第4章では、第2実験として第3章で有意差が得られた2つの訓練を複合した複合訓練の実証研究手法や結果を論じている。実験期間や実験協力者の選別・分類、実験結果の分析手法は第1実験と同様である。実験協力者は57名で、統制群(28名)には通常講義のみ、複合訓練群(29名)には第1実験で実施した両訓練を90分の通常講義内にそれぞれ30分ずつ合計60分行った。第1実験では2つの訓練に有意差が得られたが、得点が下がった学習者もいた。そこで、第2実験では、MALQというリスニングにおけるメタ認知に関するアンケートという分析要素を増やし、第1及び15週に実施した。結果、複合訓練に有意差は得られなかった。個々に指導された場合、有意差が得られる指導法であっても、複合された場合、中位層には処理しきれない膨大な情報量となってしまう、効果がなかったと推測される。この結果は、上記2つの理論と整合する。また、MALQの分析結果から、複合訓練群の点数が上がった上位11名の学習者に共通することは、計画/評価能力と問題解決能力の向上であった。具体的には、聞く前にどのように聞くのか計画を立てたり、聞いた後に次回からはどのようにして聞くべきであるかを内省したり、分からないところがあっても、言語能力のみならず他の認知能力を活用し、諦めずに聞き続け理解しようとする態度や今までの理解が間違いであると判断した時は、直ぐに考えを切り替えるといった能力の向上である。

第5章では、第3実験として第1実験の瑕疵2点(統制群の実験協力者数が10名と少なかったことやMALQを用いていなかったこと。)を補うための実証研究手法や結果を論じている。実験期間や実験協力者の選別・分類、実験結果の分析手法は第1実験と同様であり、MALQを第1及び15週に実施した。実験協力者は94名で、統制群(23名)、ディクテーション訓練群(34名)、LS訓練群(37名)に分類した。結果、第1実験と同様にディクテーション訓練とLS訓練の両方に有意差が得られた。特に上・中位層学習者にはLS訓練に有意差が得られた。この結果は、第1・2実験同様、上記2つの理論と整合する。さらに、MALQの分析結果から、特別なリスニングの訓練を受けない場合やディクテーション訓練ではメタ認知ストラテジーは向上しないことも明らかになった。LS訓練は、翻訳をせずに聞く能力や聞く前にどのように聞くかの計画を立てたり、聞いた後に次回からはどのようにして聞くべきであるかを内省したり、分からないところがあっても、言語能力のみならず他の認知能力を活用し、諦めずに聞き続け理解しようとする態度の向上に効果があることが判明した。点数が上がったLS訓練群の上位12名の学習者に共通することは、第2実験同様、問題解決能力の向上であった。具体的には、分からないところがあっても、言語能力のみならず他の認知能力を活用し、諦めずに聞き続け理解しようとする態度や今までの理解が間違いであると判断した時は、直ぐに考えを切り替えるといった能力の向上である。

第6章では、3つの実験結果をまとめるとともに、研究結果を元にした学習者の習熟度に応じた診断的で具体的なリスニング指導法を述べた。また、今後の研究の指針として次の3点を述べた。

- (1) アジアや南アメリカの国での研究：中位層学習者が大半を占めるこれらの国で、本研究と同様の研究を行った場合、同様の効果や結果が得られるだろうか。理論的には、本研究と同様の結果が得られる筈であるが、文化や習慣などの違いという要因もあり、リスニング研究へのさらなる貢献のために研究結果を検証する必要がある。
- (2) 統制群無しでの研究：一週間に一度30分通常講義の中で、先にディクテーション訓練を6週間、その後LS訓練を同期間指導する群と、先にLS訓練を6週間、その後ディクテーション訓練を同期間指導する群の2群に分けて実験を行った場合、どのような効果や結果が得られるだろうか。実証的な研究であっても、統制群を持たない新しいスタイルの研究の可能性を検証する必要がある。
- (3) 教室で導入する指導法の効果について：統計的に有意であると出た指導法であっても他の指導者が同じ方法を用いて効果を上げるかどうかは別の問題である。効果を上げるためには、適切な運用が欠かせず、適切な運用は指導者が常に学生の反応や理解度といった現場を見ながら判断していくことが重要で、方法と運用は常にセットになっていることを指導者は強く認識する必要がある。最終的には、様々な条件や制約を考えながら如何に本研究結果を教育の現場に還元するかを考えていかねばならない。

Abstract

Towards Effective Teaching Methods in English as a Foreign Language Listening for Intermediate Learners

Marisa Ueda

This study investigates effective teaching methods in English as a foreign language (EFL) listening specifically for intermediate learners based on the theories of Schneider and Shiffrin (1977) and Anderson (1980). Both theories claim that there are gradual steps in human information processing and language learning, respectively. The present study is unique for several reasons. Firstly, it focuses on intermediate learners in EFL listening. In this study, the term ‘intermediate’ refers to those with the Test of English for International Communication® (TOEIC®) listening scores between 166 and 330. In general, the maximum attainable TOEIC® listening score is 495, which is sub-divided into three score ranges, i.e. low (0–165), intermediate (166–330) and high (331–495). Previous listening strategy studies have primarily focussed on listeners at two competency levels to reveal how skilled listeners outperform their less-skilled counterparts. Thus, the present study fills the gap by examining this particular level.

Secondly, a standardised test is employed to define the proficiency level of the participants *before* the experiments and to measure the effects of different teaching methods both *before* and *after* the experiments. In this study, a standardised test is defined as any language proficiency test that is reliable, international, popular, relatively easy to access and capable of being compared/converted to other tests. Some previous studies about EFL/ESL listening strategies have shown that, for less-skilled learners, it is effective to teach the listening strategies that are employed by skilled listeners (Rubin, 1994; Cross, 2009; Graham, Santos and Vanderplank, 2011), whereas other studies question such an approach (Field, 2008; Lynch, 2009). One of the reasons for such a debate is mainly due to the lack of using a standardised test,

which diminishes the overall generalisability of the findings. For, researchers' classifications of learners as skilled- or less-skilled listeners vary significantly across studies, and without the use of a standardised test, those categorised as skilled-listeners in one study might be grouped as intermediate in another, whilst those categorised as intermediate in one study might be classified as less-skilled listeners in another. Hence, the present study is unique since it utilises a standardised test to focus on intermediate learners within the framework of EFL listening strategies.

Thirdly, the present study provides diagnostic instructions based on the proficiency level of the participants, the results of this study and Anderson's (2010) theory. For decades, instructors have merely provided students with an opportunity to listen. However, instruction concerning *how* to listen was rarely taught. Consequently, by interviewing the participants and analysing their errors, it is possible to pinpoint where comprehension breaks down, which can be specifically helpful for instructors regarding effective teaching methods for students.

The following hypotheses are tested in this study:

H-1 For intermediate listeners, dictation training is more effective than listening strategy training.

H-2 For low-intermediate listeners, dictation training is more effective.

H-3 For intermediate listeners, the combined training of dictation and listening strategy is not effective for improving EFL listening comprehension.

H-4 For intermediate listeners, the combined training of dictation and listening strategy is not significantly effective for improving metacognitive skills in EFL listening.

H-5 For intermediate listeners, both dictation training and listening strategy training are effective with significance.

H-6 For upper-intermediate listeners, listening strategy training is more effective.

H-7 Intermediate listeners with listening strategy training show a greater change in their metacognitive skills.

Three experiments were conducted in this study (i.e. Experiments I, II and III). The participants consisted of 259 Japanese university students at the intermediate level in EFL listening. Experiment I involved 108 participants to examine Hypotheses 1 and 2. The results reveal that dictation training is significantly more effective for intermediate listeners than listening strategy training, and that dictation training is significantly more effective for low-intermediate listeners. Experiment II comprised 57 participants to examine Hypotheses 3 and 4. The results reveal that, for intermediate listeners, the combined training of dictation and listening strategy is not effective for improving EFL listening comprehension and metacognitive skills in EFL listening. In addition, intermediate listeners do not improve their metacognitive skills in EFL listening without special listening training. Experiment III was conducted with 94 participants to examine Hypotheses 5, 6 and 7. The results indicate five aspects: 1) both dictation training and listening strategy training are significantly effective for intermediate listeners, 2) listening strategy training is significantly effective, especially for upper-intermediate listeners, 3) listening strategy training is effective for intermediate listeners to improve some metacognitive skills in EFL listening such as mental translation, planning/evaluation and problem solving, 4) dictation training is not effective for intermediate to improve metacognitive skills in EFL listening and 5) the improvement of planning/evaluation and problem solving in metacognitive skills is vital for becoming an advanced listener in EFL listening. All these results are in agreement with the theories of Schneider and Shiffrin (1977) and Anderson (1980).

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Chapter One: Introduction

1.1 Background of the Study

1.1.1 Teaching of English as a foreign language listening in Japan during the late 1970s.

For more than four decades, English as a foreign language (EFL) listening classes in Japan have remained relatively unchanged. For example, during the late 1970s, when I was a junior high school student, our English teacher frequently instructed us to ‘listen carefully’ and ‘listen many times’. However, no matter how carefully or how many times we listened, occasionally, it was still difficult to comprehend the texts. In addition, the teacher neglected to indicate where and why our comprehension was incorrect or what should be the subsequent step. Instead, the teacher simply presented the answers along with the audio script. Currently, I teach EFL listening classes at a university in Japan, and at the beginning of every academic year, I ask my students whether they understand the concepts of scanning and skimming, which are basic listening strategies; merely one or two students in each class are aware of such strategies. Thus, it is apparent that the situation has remained unchanged for nearly 40 years; that is, learners are tested and exposed to listening but not taught ‘how to listen’. According to Mendelsohn (1995, pp. 132–133), second/foreign language teachers have limited confidence on how to teach their students to listen.

Moreover, if learners are taught listening strategies or ‘how to listen’, then would their listening comprehension in EFL improve? Before seeking an answer to this question, it is necessary to first focus on the importance of listening in communication.

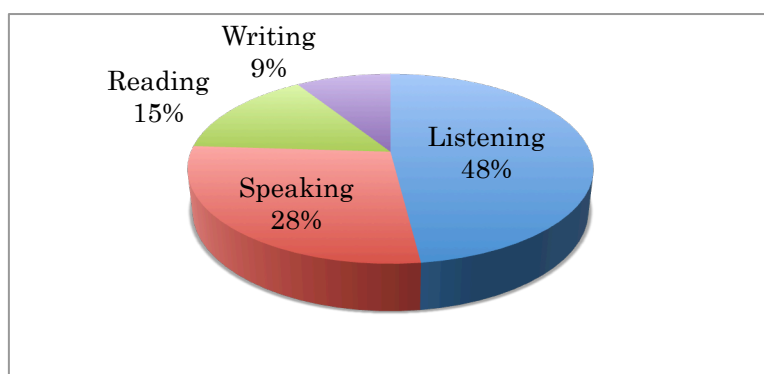
1.1.2 Ratio of listening in communication.

It has long been a common misunderstanding that speaking skills in EFL are a prominent skill in communication. In fact, the majority of the students in my classes seem to be much more interested in speaking than in listening. Richards (2005, ix)

claims that listening is still somewhat neglected in second language acquisition research, but it plays a more central role in language teaching.

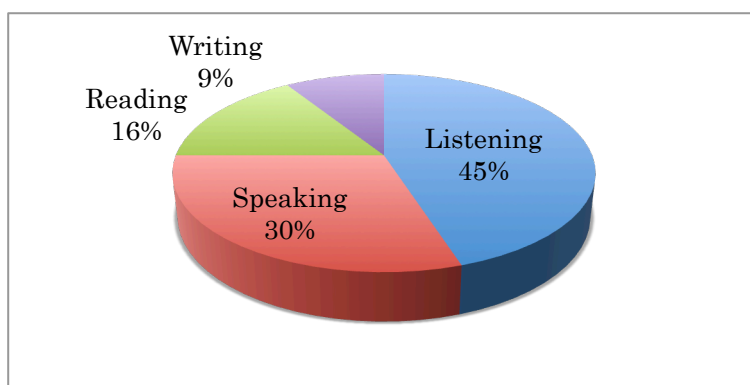
Previous studies report that listening is a vital aspect of communication. For example, Rivers (1984) reports that adults spend 40%–50% of their communication time listening, 25%–30% speaking, 11%–16% reading and 9% writing (Figure 1.1).

Figure 1.1. Total time devoted to communication (Rivers (1984)) .



Similarly, Yorio (1992) describes listening comprehension as an extremely important skill for adults because they spend approximately half of their communication time in listening (Figure 1.2).

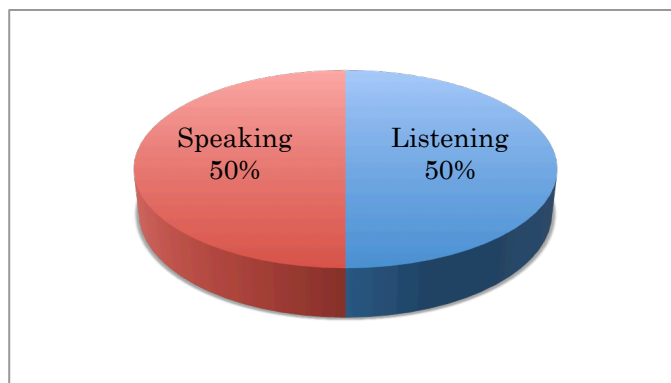
Figure 1.2. Total time devoted to communication (Yorio (1992)).



Rubin and Rubin (1995, p. 7) make an even stronger claim that listening is a critical aspect of communication and that 50% of a person's time is spent listening

(Figure 1.3).

Figure 1.3. Total time devoted to communication (Rubin and Rubin (1995)).



These aforementioned studies elucidate that listening actually has a much greater share of communication and language comprehension than we possibly think. Conversely, it is true that experimental research in EFL listening is much less than that in EFL reading. According to Anderson (2010, p. 358), researchers' choice between written or spoken material is determined by what is experimentally easier to conduct. Although listening shares a much greater portion than any other communication skill, many aspects of EFL listening remain rather unclear. As previously stated, if learners are taught 'how to listen' or listening strategies, would their listening comprehension in EFL improve? Some studies respond with a 'yes' (Rubin, 1994; Cross, 2009; Graham, Santos and Vanderplank, 2011), whereas others are 'sceptical' (Field, 2008; Lynch, 2009).

1.2 Definitions of Terms

The terms used in this study are defined as follows:

Bottom-up processing: This refers to an action or procedure that begins by gathering the smallest items and combining them into larger holistic ideas (Lynch and Mendelsohn, 2002).

Top-down processing: This refers to an action or procedure that begins with broad global notions and moves towards smaller individual units (Lynch and Mendelsohn, 2002).

Listening: This refers to understanding spoken English in a non-collaborative situation and interpreting a speaker's utterances.

Dictation: In this dissertation, dictation refers to the act of listening to a sentence or a very short passage in English and writing down what has been heard. The use of knowledge of grammar or background context is minimal, since the length of a sentence or a passage is very short. Listeners primarily utilise acoustic information to interpret the spoken words and phrases.

Listening strategy/strategies: This term represents listeners' conscious intention to manage incoming oral speech, especially when listeners know that they must compensate for incomplete input or partial understanding (Rost, 2002, p. 236).

Intermediate listeners: This term refers to those with the Test of English for International Communication® (TOEIC®) listening scores between 166 and 330. The maximum attainable TOEIC® listening score is 495, and it is sub-divided into three score ranges, i.e. low (0–165), intermediate (166–330) and high (331–495).

1.3 Purpose

This study investigates the effects of three different teaching methods (i.e. dictation training, listening strategy training and combined training of dictation and listening strategy) on intermediate learners in Japan within the framework of applied linguistics and cognitive psychology by using a standardised test. For this study, the listening parts of the TOEIC® are used as the standardised test since it is international, popular and relatively easy to access.

This study focuses on intermediate learners for three reasons. First, studies on the listening strategies of intermediate EFL learners are insufficient. Previous listening strategy studies have primarily focussed on listeners at two competency levels to reveal how skilled listeners outperform their less-skilled counterparts (DeFilippis, 1980; Murphy, 1987; O'Malley, Chamot and Küpper, 1989; Rost and Ross, 1991; Moreira, 1996; Vandergrift, 1997; Goh, 2000; Shirono, 2003; Ueda, 2005; Graham, Santos and Vanderplank, 2008; Vandergrift and Tafaghodtari, 2010). However, unlike advanced listeners, intermediate listeners may not have attained the skill level to effectively apply the results of these studies, which do not specifically focus on intermediate listeners. Thus, studies that directly focus on effective instructional strategies for intermediate listeners are necessary.

Second, the majority of EFL learners in Japan are at the intermediate level, which I have realised through personal experience. For instance, since 2011 at the beginning of every academic year, I administer the listening parts of the TOEIC® to my students in order to survey their level of listening comprehension. The results show that the population of intermediate learners comprised 91% (148 of 163 students) in 2011, 90% (116 of 129 students) in 2012, 99% (115 of 116 students) in 2013 and 99% (115 of 116 students) in 2014 (Figure 1.4). From a macro perspective, I also examined the population of intermediate learners in the TOEIC® official report. Figure 1.5 shows that this phenomenon occurs not only at the university I teach at but also at the majority of universities in Japan. For example, in 2011, the average TOEIC® listening score of university students in Japan was 304.

Figure 1.4. Proportions of intermediate listeners in the author's classes from 2011 to 2014.

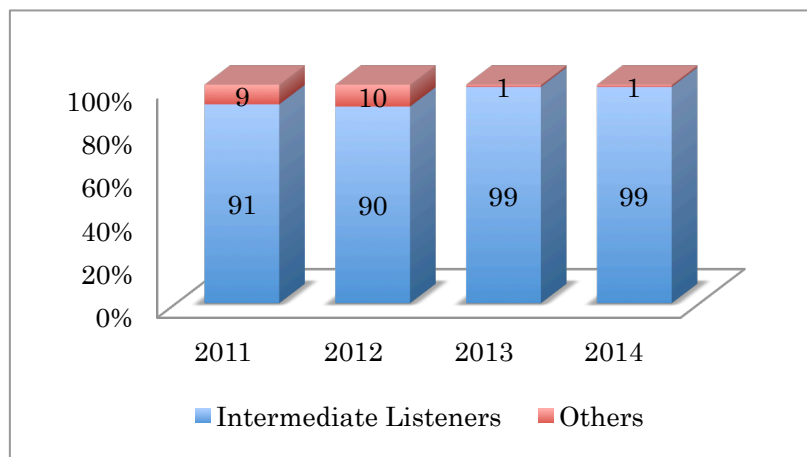
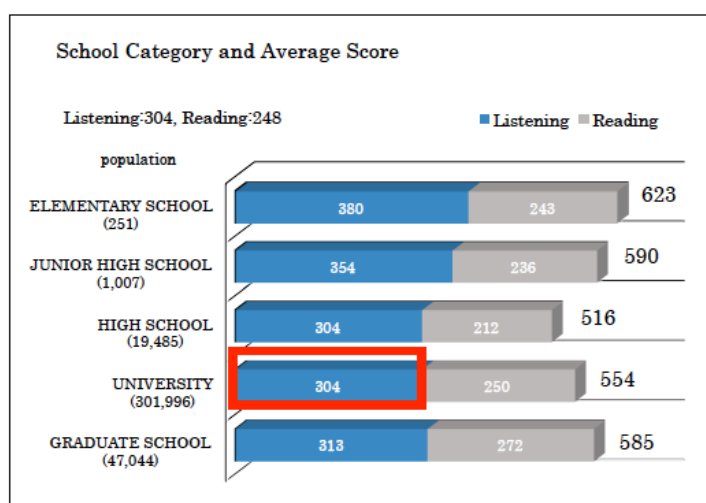
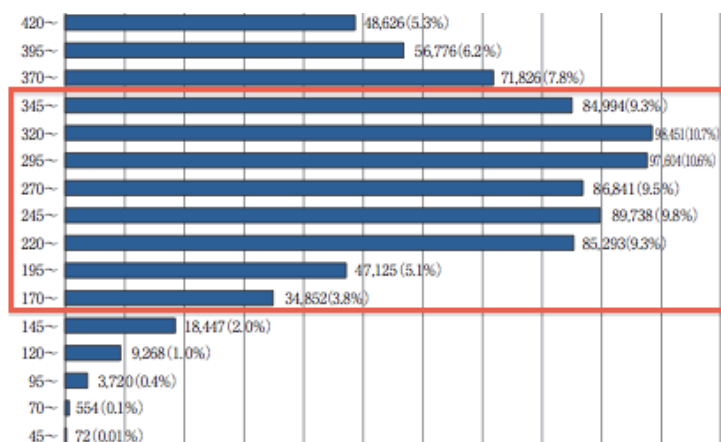


Figure 1.5. Average score of Japanese university students on the listening parts of the TOEIC® in 2011.



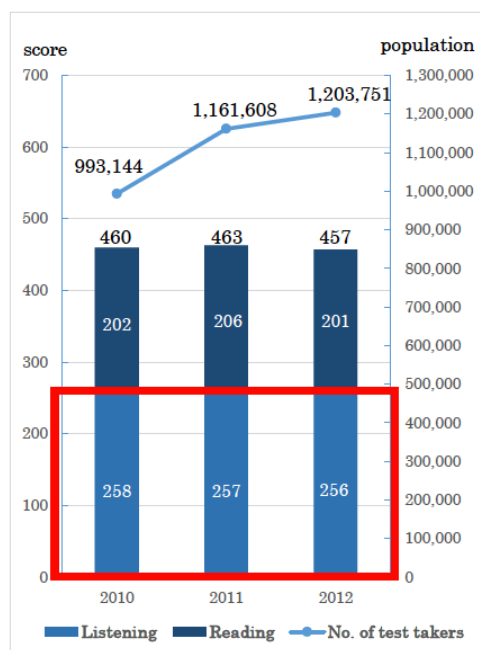
In addition, this phenomenon is observed not only among Japanese university students but also amongst all Japanese learners of English, as evidenced in Figure 1.6. A total of 68.1% of test takers were categorised as intermediate learners on the listening section.

Figure 1.6. Score ranges of the listening parts of the TOEIC® in Japan in 2011.



This phenomenon regarding the majority of the Japanese learners of English being at the intermediate level was not an isolated occurrence in 2011. As shown in Figure 1.7, the average TOEIC® listening scores in 2010, 2011 and 2012 were 258, 257 and 256, respectively, each of which falls within the 166–330 range, or the intermediate level.

Figure 1.7. Average scores of Japanese learners of English on the listening parts of the TOEIC® in 2010, 2011 and 2012.



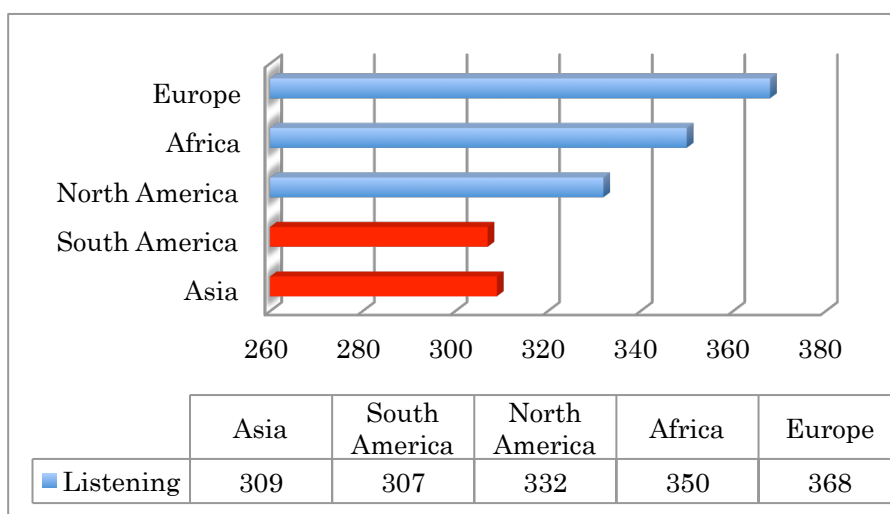
Third, the characteristic that the majority of English learners are categorised as intermediate in listening is not only observed in Japan but also in other countries throughout Asia and South America. According to the TOEIC® worldwide report of 2012, the average listening scores of Korea, Turkey, Taiwan, Japan, Hong Kong, Thailand, Macao, Vietnam, Indonesia, Columbia, Peru, Brazil, Mexico, Chile and Ecuador fall in the intermediate level (Table 1.1 and Figure 1.8).

Table 1.1

Excerpt of Average Listening Scores on the TOEIC® in Asia and South America in 2012

| Asia | | South America | |
|-----------|-----|---------------|-----|
| Korea | 342 | Columbia | 317 |
| Turkey | 306 | Peru | 311 |
| Taiwan | 295 | Brazil | 308 |
| Japan | 284 | Mexico | 308 |
| Hong Kong | 281 | Chile | 306 |
| Thailand | 280 | Ecuador | 282 |
| Macao | 266 | | |
| Vietnam | 245 | | |
| Indonesia | 195 | | |

Figure 1.8. Average scores of the listening parts of the TOEIC® per region in 2012.



Therefore, the results of this study can be highly practical and beneficial for many intermediate learners of English not only in Japan but also in Asia and South America. Based on the aforementioned reasons, this study explores effective teaching methods in EFL listening for intermediate learners primarily in Asia and South America.

1.4 Overview of the Chapters

This dissertation consists of six chapters. Following this introductory chapter, Chapter 2 reviews previous studies on EFL or English as a second language (ESL) listening strategies and describes what has been clarified and argued in the field of EFL listening strategies. This is followed by the justification for this study.

In Chapter 3, the details of Experiment I (conducted from April to July 2012) are described along with the research hypotheses. In Experiment I, the participants were selected in Week 1; thereafter, they were required to perform two different types of training (i.e. dictation training and listening strategy training) in their usual weekly class of 90 minutes for 13 weeks. This was followed by the listening parts of the TOEIC® in Week 15 to evaluate the effects of such training. The results are discussed based on the data obtained from statistical analyses.

Chapter 4 presents the details of Experiment II (conducted from April to July 2013) along with the research hypotheses. In Experiment II, the participants were selected in Week 1; thereafter, they were required to perform a combined training of dictation and listening strategies training in their usual weekly class of 90 minutes for 13 weeks. This was followed by the listening parts of the TOEIC® in Week 15 to observe the effects of the combined training. The participants were also asked to answer the Metacognitive Awareness Listening Questionnaire (MALQ) in Weeks 1 and 15. The results are discussed based on the data obtained from statistical analyses.

Chapter 5 provides the details of Experiment III (conducted from September 2013 to January 2014) along with the research hypotheses. In Experiment III, the participants were selected in Week 1; thereafter, they were required to perform two different types of training (i.e. dictation training and listening strategy training) in their usual weekly class

for 90 minutes for 13 weeks. This was followed by the listening parts of the TOEIC® in Week 15 to evaluate the effects of such training. The results are discussed based on the data obtained from statistical analyses. The difference between Experiments I and III is that in the latter experiment, the participants were asked to answer the MALQ in Weeks 1 and 15.

Finally, Chapter 6 presents a summary of all the experiments and their results. It also states the implications of this study, followed by suggestions for future research within the framework of both applied linguistics and cognitive psychology.

Chapter Two: Literature Review

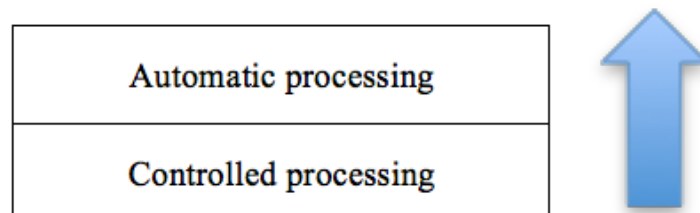
The purpose of this chapter is twofold. First, it reviews the literature about ESL/EFL listening strategies and presents the research clarifications. Second, it describes the existing and continuing arguments.

2.1 What has Become Clear

2.1.1 Controlled and automatic human information processing.

Schneider and Shiffrin (1977) propose that learning includes two types of cognitive processing, i.e. controlled and automatic human information processing. Controlled processing involves a sequence of cognitive activities under active control which draw the conscious attention of the subject. Conversely, automatic processing involves a sequence of cognitive activities that automatically occur without active control and generally without conscious attention. This theory is supported by numerous studies (Lynch, 1998; Goh, 2000; Buck, 2001; Anderson, 2010). Buck (2001) adeptly illustrates both types of processing by comparing them to the scenario of learning to drive a car. In this regard, initially, the entire learning process is controlled, thus requiring conscious attention to every action. After more experience, certain parts of the process become relatively automatic and are performed subconsciously. Eventually, the entire process becomes automatic to the extent that, under normal circumstances, one has the ability to drive a car well and without much thought. Figure 2.1 demonstrates the hierarchical model of controlled and automatic human information processing, following Schneider and Shiffrin (1977).

Figure 2.1. Hierarchical model of controlled and automatic human information processing in Schneider and Shiffrin (1977).



Based on this theory, dictation in listening is categorised as controlled processing (bottom-up processing) since it involves phonemic decoding, which requires conscious attention to phonemes, the smallest segments of sound (Ladefoged, 1982). In contrast, from a listening strategy perspective, the identification of individual words is mainly regarded as automatic processing (top-down processing), because it can only be possible after phonemic decoding occurs automatically without active control and conscious attention. Thus, the less automatic an activity becomes, the more time and cognitive energy it requires. In this regard, when learners take more time in phonemic decoding, their overall comprehension suffers. This situation is similar to the idiom of missing the forest for the trees. The following section introduces a theory used in the field of language learning which includes a similar concept.

2.1.2 Cognitive psychology theory.

Anderson (2010) claims that language learning involves certain steps and proposes a cognitive framework of language comprehension based on *perception*, *parsing* and *utilisation*. Although these three phases are interrelated, recursive and possibly concurrent, they differ from one another. At the lowest cognitive level of listening, perception is the decoding of acoustic input that involves extracting phonemes from a continuous stream of speech.

With regard to the first stage, Anderson (2010) argues that there are at least two problems in speech perception or recognition, i.e. segmentation and co-articulation. The first problem, segmentation, occurs when the phonemes need to be identified, but

unlike printed text, speech is not broken into discrete units. Speech is a continuous stream of sounds with no noticeable word boundaries. Thus, any new learner of English normally experiences this problem. Anderson defines *phonemes* as the minimal units of speech that can result in a difference in the spoken message (p. 51). Words are divided into two categories, i.e. content and function words. Nouns, verbs, adjectives, adverbs and demonstrative pronouns are categorised as content words (Gimson, 1980, p. 256); they convey relevant information unlike function words such as prepositions, conjunctions and determiners. Thus, function words are not generally stressed in listening. Furthermore, the segmentation problem and unstressed words are firmly related. Examples of the segmentation problem include assimilation, contraction, deletion, elision, liaison/linking and reduction (Yoshida, 2002, p. 32).

According to Ladefoged (1982, p. 99), assimilation occurs when one sound is changed into another because of the influence of a neighbouring sound (e.g. ‘Red Cross’ can be heard as /*reg kros*/ and ‘hot pie’ as /*hop pai*/).

Contraction is defined as a vowel-less weak form by Knowles (1987, p. 146). Examples of contractions in sentences, especially in rapid speech, include ‘going to’ which becomes ‘gonna’, as in ‘I’m *gonna* do it tomorrow’; ‘got to’, which becomes ‘gotta’, as in ‘I’ve *gotta* go’ and ‘I would’, which becomes ‘I’d’, as in ‘*I’d* say so’.

Deletion is the removal of a part of the pronunciation. For example, in rapid speech, ‘because’ becomes ‘cuz’, as in ‘I’m studying English *cuz* I’m going abroad’, and ‘them’ becomes ‘em’, as in ‘Why don’t you go with *em*?’

Rost and Wilson (2013, p. 305) use ‘elided’ to describe elision, which is defined as the omission of sounds in rapid connected speech. They also state that this is usually the result of one word ‘sliding’ into another, and the sound omitted is usually an initial or final sound in a word (e.g. ‘soft pillow’ can be heard as /*sof pilow*/ and ‘old man’ as /*oul man*/).

According to Cutler (2012), liaison is ‘a final sound pronounced only when the following word begins with a vowel...it interacts with segmentation of the speech stream’ (p. 206). Examples include ‘I’ll need to think about it’, ‘The sheep licked up the milk’ and ‘Not at all’.

Finally, as an example of reduction, which reduces the number of vowels that occur in unaccented syllables (Knowles, 1987, p. 97), Yoshida (2002) introduces a sentence such as ‘You dropped your handkerchief’ in which the word ‘your’ is not stressed (p. 32). This phenomenon occurs because the word ‘your’ is a function word and is unstressed.

The second problem in speech perception involves a phenomenon known as co-articulation (Liberman, 1970). Ladefoged (1982, p. 52) defines co-articulation as the overlapping of adjacent articulations; that is, as the vocal tract is producing one sound, it moves towards the shape for the following phoneme. For example, the sound of /b/ itself and the /b/ in ‘bag’ are different. Thus, when pronouncing /b/ in ‘bag’, the vocal tract is already moving towards the next sound /a/. In addition, when pronouncing /a/ in ‘bag’, the root of our tongue is raised to produce the /g/. These segmentation problems pose complications for any learner of English, since an independent phenomenon of segmentation does not usually occur in a single sentence. Rather multiple phenomena of segmentation might occur in just a single sentence. Moreover, these difficulties exist only in perception, the lowest cognitive level of listening. Anderson (2010, p. 52) describes that speech perception poses information-processing demands that are, in many ways, greater than what is involved in other types of auditory perception.

Many Japanese learners of English encounter these segmentation problems. Ikemura (2003) indicates that the auditory recognition of words is one of the major problems at the speech perception level for Japanese learners of English. This is because reading and writing are generally emphasised at schools in Japan; this is evidenced by the fact that it was only since 2006 when a listening comprehension test was introduced in the national examination of Japanese universities.

Next, the second stage in Anderson’s cognitive psychology theory (2010) is parsing. In parsing, words are transformed into a mental representation of the combined meaning of the words. This occurs when a listener segments an utterance according to syntactic structures or meaning cues. According to Anderson (2010), people use the syntactic cues of word order and inflection to interpret a sentence (p.

366). Thus, when a sentence is presented both *with* and *without* a major constituent boundary, it is more difficult to comprehend the latter form. For example, Graff and Torrey (1966) present the importance of identifying constituent structure as follows:

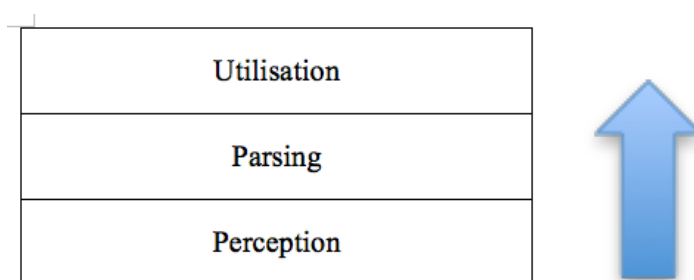
| Form A | Form B |
|------------------------------|--------------------------------------|
| During World War II | During World War |
| even fantastic schemes | II even fantastic |
| received consideration | schemes received |
| if they gave promise | consideration if they gave |
| of shortcoming the conflict. | promise of shortcoming the conflict. |

In Form A, each line corresponds to a major constituent boundary unlike the lines in Form B. In the study by Graff and Torrey (1966), the participants presented with Form A (with its correct syntactic structures) showed better comprehension of the passages. This finding proves that the identification of constituent structure is vital to comprehension. When one reads passages, it is natural to pause at the boundaries between clauses. These passages or segments with correct syntactic structures are then recombined to generate a meaningful representation of the original sequence. The importance of ‘parsing a sentence’ or constituent structure is also confirmed by Jarvella (1971), Caplan (1972) and Aaronson and Scarborough (1977). As for the characteristic of parsing, Anderson (2010, p. 362) describes that people process the meaning of a sentence one phrase at a time and maintain access to a phrase only while processing its meaning. He refers to this principle as ‘immediacy of interpretation’. In other words, people, when processing a sentence, attempt to extract meaning out of each word as it arrives, and they do not wait until the end of a sentence or even the end of a phrase to decide how to interrupt a word.

The third and final stage is utilisation. In this stage, it is sometimes necessary for a listener to make different types of inferences to complete an interpretation of an utterance, especially since the actual meaning of an utterance is not always the same as what is stated. That is, to completely understand a sentence, a listener sometimes needs

to make inferences and connections so that s/he can make the sentence more meaningful. In addition, mental representation is also required to comprehend the speaker's actual meaning. For example, in England, a sentence such as 'Were you born in a barn?' does not actually enquire whether the listener was born in a barn. Instead, it infers that if a person was born in a barn, then s/he is unaware of the custom of closing a door after entering/exiting a building. Thus, the actual and ironical meaning of the sentence is 'Shut the door!' Successful comprehension requires a finishing touch, called utilisation, after the perception and parsing stages. Figure 2.2 demonstrates the hierarchical model of Anderson's cognitive psychology theory (2010).

Figure 2.2. Hierarchical model of Anderson's cognitive psychology theory (2010).



2.1.3 Mental process in listening comprehension and cognitive psychology theory.

Based on Anderson's theory,¹ O'Malley et al. (1989) conducted a milestone study on listening strategy with 11 Hispanic intermediate students. They revealed that the mental processes of the students in listening comprehension actually parallel Anderson's (2010) cognitive psychology theory in four ways: 1) the students were listening for larger chunks, shifting their attention to individual words only when there was a breakdown in comprehension; 2) they utilised both top-down and bottom-up processing strategies, whereas ineffective listeners repeatedly attempted to determine the meanings of individual words; 3) they were adept at constructing meaningful sentences from the input received, even though the meaning slightly differed from that

¹ The first edition was published in 1980.

of the actual text and 4) they applied their knowledge in three areas, i.e. world knowledge, personal knowledge and self-questioning.

The theories of Schneider and Shiffrin (1977) and Anderson (2010) have commonalities in that both involve gradual steps in human information processing as well as language learning. In the next section, whether listening strategies improve learners' listening comprehension is argued.

2.1.4 Differences in the listening comprehension strategies by proficiency levels.

In this section, clarifications in terms of listening strategies will be discussed according to several prominent studies. Although there were some early studies of listening strategies conducted in the 1970s, such as Brown (1977) and Flavell (1979), one of the earliest studies of EFL/ESL listening strategies is probably the study by DeFilippis (1980), who investigates listening strategies in French by focussing on 26 second-language listeners that are equally divided into two groups (i.e. 13 skilled and 13 less-skilled). Using the listening parts of a standardised test,² he compares the listening strategies of both groups and observes major differences in the listening strategies of skilled and less-skilled listeners. For example, skilled listeners report an automatic flow of the auditory stimulus, and they apply keywords, inferences and grammar strategies, whereas less-skilled listeners use keywords and translation strategies as well as contextual inferences. He also reports that skilled listeners utilise five times more visualisation, three times more French–English cognates and two times more role identification compared to their less-skilled counterparts. His study is followed by numerous researchers in the 1980s such as Murphy (1985), Chamot (1987), Murphy (1987), O'Malley (1987), Rubin (1988), Rubin, Quinn and Enos (1988) and O'Malley, Chamot and Küpper (1989).

Adding to the findings of DeFilippis (1980), Goss (1982) reports that competent listeners are capable of using many strategies and knowing when to use them. Murphy (1985) also presents a different feature between more- and less-proficient listeners. The former tends to use a strategy called 'wide distribution' (an open and flexible use

² The Modern Language Association Cooperative Foreign Language Test

of strategies), whereas the latter frequently use a ‘text heavy’ strategy (which depends on the text and the consistent paraphrasing).

Furthermore, O’Malley et al. (1989) observe that effective listeners utilise both top-down and bottom-up processing strategies, whereas ineffective listeners become embedded in determining the meanings of individual words (p. 434). They also report that effective listeners notice when their attention falters and they make a deliberate effort to refocus on the listening task, whereas less-effective listeners encounter an unfamiliar word and make no effort to continue listening. Although Anderson’s (2010) three-stage model is based on first language comprehension, his cognitive framework is extremely useful for understanding EFL/ESL listeners’ difficulties since it can pinpoint where comprehension breaks down in cognitive processing. For example, less-effective listeners make no effort to continue listening because they have not fully acquired perceptual processing, which is the ability to decode acoustic information. Other significant differences between effective and ineffective listeners are also observed with regard to self-monitoring (or checking one’s listening comprehension), elaboration (or correlating new information with prior knowledge or other ideas) and inference (or using information in a text to guess the meaning or complete the missing ideas) (O’Malley et al., 1989, p. 427).

The study by Ho (2006, p. 71) is consistent with the study by DeFilippis (1980) in which low-proficiency listeners significantly use the translation strategy more often than high-proficiency ones. Graham, Santos and Vanderplank (2008) also claim that strategy development seems to be related to proficiency levels. Their results show a high degree of stability of strategy use over six months, especially between the high and low scorers. They state that a certain pattern exists regarding strategy development. Inference and reliance on prior knowledge gradually declines (perhaps as learners’ linguistic base increases), whereas the use of metacognitive strategies increases. However, the latter may be limited to more ‘capable’ learners and linked to the availability of processing capacity, which, in turn, may be related to linguistic knowledge.

Although both DeFilippis (1980) and O'Malley, Chamot and Küpper (1989) utilise different terms such as 'automatic flow' of the auditory stimulus, contextual inferencing strategy, grammar strategy, keyword strategy, translation strategy and top-down/bottom-up processing strategies, their research results point to one direction: metacognitive knowledge and its usage is the key to become a successful listener.

Flavell (1979, p. 906) defines metacognitive knowledge as 'that segment of stored world knowledge that has to do with people as cognitive creatures and with their diverse cognitive tasks, goals, actions, and experiences'. Metacognitive knowledge consists of three categories, i.e. person knowledge, task knowledge and strategy knowledge. Vandergrift, Goh, Mareschal and Tafaghodtari (2006, pp. 433–434) describe them as follows:

- i) Person knowledge: judgments about one's learning abilities and knowledge about internal and external factors, such as age, aptitude, gender and learning style, that affect the success or failure in one's learning.
- ii) Task knowledge: knowledge about the purpose, demands and nature of learning tasks. It also includes knowledge of the procedures involved in accomplishing these tasks.
- iii) Strategy knowledge: knowledge about strategies that may be effective in achieving learning goals.

There is a common consensus among researchers in learning that metacognition plays a key role. Numerous researchers, such as Palmer and Goetz (1988), Victori and Lockhart (1995), Winne (1995), Schoonen, Hulstijn and Bossers (1998), Boekaerts, Pintrich and Zeidner (2000), Zimmerman and Schunk (2001), Mokhtari and Reichard (2002), Bolitho et al. (2003) and Eilam and Aharon (2003), support that there is extensive evidence that learners' metacognition can directly affect the process and the outcome of their learning. Similarly, in the field of listening strategy, Goh (2002) introduces a concrete metacognitive knowledge about listening (Table 2.1).

Table 2.1

Metacognitive Knowledge about Listening (Vandergrift, Goh, Mareschal and Tafaghodtari, 2006)

| Metacognitive knowledge | | Examples from listening |
|-------------------------|--|---|
| Person knowledge | Knowledge about how factors such as age, aptitude, gender and learning style can influence language learning. It also includes beliefs about oneself as a learner. | <ul style="list-style-type: none"> •Self-concepts and self-efficiency about listening •Specific listening problems, causes and possible solutions |
| Task knowledge | Knowledge about the purpose, the demands and the nature of learning tasks. It also includes knowledge of the procedures involved in accomplishing these tasks. | <ul style="list-style-type: none"> •Mental, affective and social process involved in listening •Skills (e.g. listening for details, gist) needed for completing listening tasks •Factors that influence listening (e.g. text, speaker) •Ways of improving listening outside class |
| Strategy knowledge | Knowledge about strategies that are likely to be effective in achieving learning goals | <ul style="list-style-type: none"> •General and specific strategies to facilitate comprehension and cope with difficulties •Strategies appropriate for specific types of listening •Ineffective strategies |

Vandergrift, Goh, Mareschal and Tafaghodtari (2006, p. 435) claim that learners with high degrees of metacognitive awareness are better at processing, storing new information, finding the best ways to practice and reinforcing what they have learnt and that metacognitive abilities are a mental characteristic shared by successful learners. Goh (1997, 2002) and Vandergrift (2003) present numerous studies about learners' metacognitive knowledge in EFL/ESL listening with various procedures such as diaries, interviews and questionnaires. Results of these studies have shown that language learners possess knowledge about the listening process, albeit to varying degrees and that this knowledge appears to be linked to listening abilities (Vandergrift, Goh, Mareschal and Tafaghodtari, 2006, p. 436).

Chamot (1995, p. 18) describes that the failure of less-effective listeners to use appropriate strategies for the different phases of listening is due to limited metacognitive knowledge about selecting appropriate strategies for the task. Vandergrift (1997) also reports clear differences in the listening strategies of 21 French listeners (i.e. 10 successful and 11 unsuccessful) based on four variables, i.e. level of language proficiency, gender, listening ability and learning style. He also reports that the use of metacognitive strategies such as comprehension monitoring,

problem identification and selective attention seem to be the key factors that distinguish the successful listeners from the less successful ones. However, the difference for gender was minimal, and the difference for learning style was inconclusive.

Goh (2000) also supports the importance of a cognitive framework in understanding learners' listening difficulties, because it specifies the point at which comprehension breaks down during cognitive processing. In turn, this knowledge makes it possible to trace the source of learners' listening difficulties and equips teachers with the skills to guide them towards overcoming such obstacles. She claims that understanding why some of the problems occur will naturally place teachers in a better position to guide learners in ways of coping with or overcoming some of their listening difficulties (p. 57).

Berne (2004) summarises the differences between more- and less-proficient listeners,³ as shown in Table 2.2.

Table 2.2

Differences between More- and Less-Proficient Listeners (Berne, 2004, p. 525)

| More-Proficient Listeners | Less-Proficient Listeners |
|--|---|
| use strategies more often | process input word by word |
| use a wide range of strategies | rely heavily on translation/key words as strategies |
| use strategies interactively | are negatively affected by linguistic and attentional constraints |
| are concerned with the overall rhetorical organisation of text | are concerned with definitions/pronunciation of words |
| are better able to: | make fewer inferences/elaborations |
| attend to larger chunks of input | do not verify their assumptions |
| monitor/redirect attention | do not relate what they hear to previous experiences |
| grasp overall meaning of input | |
| relate what they hear to previous experiences | |
| guess meanings of words | |
| use existing linguistics knowledge to aid comprehension | |

³ The descriptive and theoretical studies of Mendelsohn (1994, 1995), Vandergrift (1996, 1997 and 1999) and Field (1998) are excluded since none of these researchers empirically examined the effectiveness of their proposed approaches, as Berne (2004, p. 526) indicates.

Ho (2006, p. 69) observes that high-proficiency listeners employ 10 metacognitive strategies more frequently than the less proficient ones and that high-proficiency listeners are able to use the following strategies more frequently than their low-proficiency counterparts, i.e. self-management, self-monitoring, refocusing and self-evaluation. Again, the results are consistent with the findings of O'Malley, Chamot and Küpper (1989). In their study, they similarly assert that effective students are better at monitoring their attention than the less effective ones.

Vandergrift, Goh, Mareschal and Tafaghodtari (2006) conduct a survey regarding metacognitive awareness in listening by administering the MALQ. They establish the following five factors based on the responses of 966 participants: 1) problem solving (guessing as well as monitoring the guesses), 2) planning and evaluation (preparing to listen and assessing success), 3) mental translation (translation from English to first language (L1) when listening), 4) person knowledge (confidence or anxiety and self-perception as a listener) and 5) directed attention (ways of concentrating on certain aspects of a task). These factors, which accounted for approximately 13% of the validity in the listeners' performance, suggest that approximately 90% of success in listening is based on additional factors. This also indicates the complexity of listening comprehension in English. Lynch (2009, pp. 82–83) claims that this finding is the most tangible outcome from two decades of research regarding metacognitive strategies in listening.

Baleghizadeh and Rahimi (2011) also confirm the relationship between metacognitive strategy use and listening test performance through their study of 82 Iranian EFL university students based on three instruments, i.e. the MALQ,⁴ the Academic Motivation Scale and the listening parts of the Test of English as a Foreign Language® (TOEFL®). In addition, they found a statistically significant and positive correlation between metacognitive strategy use and listening performance. Metacognitive knowledge is firmly linked to listening ability (p. 66).

⁴ The questionnaire was designed by Vandergrift, Goh, Mareschal and Tafaghodtari (2006).

In the study of Graham, Santos and Vanderplank (2011), they investigate the development of the listening proficiency and strategic behaviour of 15 lower-intermediate learners of French in England for six months with two methods, i.e. recall protocols and strategy elicitation. First, the participants listened to two different audio recordings on the same topic and were asked to write in English everything they had understood. Then, they listened to different four texts and had to answer multiple-choice questions in English for strategy elicitation to capture participants' usual way of listening. They were requested to verbalise how they were about comprehending the text and answering the questions as fully as possible. The six months study confirms that the use of metacognitive strategies increases with higher listening proficiency and that both inferencing and reliance on prior knowledge appear to become less prominent as learners' listening proficiency increases. These results match the studies of Graham et al. (2008), Vogley (1995) and Vandergrift (1997, 1998).

Hamamoto et al.'s (2013) study on listening strategy with 441 participants (169 high-level listeners, 152 intermediate listeners and 120 low-level listeners) shows that there is a clear difference in listening strategy use based on listening ability and proficiency level. The high-level listeners prefer the use of metacognitive strategies involving selective attention, advance organisation and self-management as well as cognitive strategies such as top-down inferencing, whereas the low-level listeners use only a limited number of listening strategies such as bottom-up cognitive strategies and inferencing. The intermediate listeners show tendencies similar to the high-level listeners in the use of advanced organisation and self-management of metacognitive strategies, whereas they were similar to the low-level listeners in inferencing.

With many other studies such as Henrichsen (1984), Murphy (1985), O'Malley (1987), Rubin, Quinn and Enos (1988), O'Malley, Chamot and Küpper (1989), Vann and Abraham (1990), Nagano (1991), Rost and Ross (1991), Oxford (1993), Rubin (1994), Buck (1995), Chamot (1995), Vogely (1995), Moreira (1996), Chao (1997), Park (1997), Chien and Wei (1998), Goh (1998), Peters (1999), Ozeki (2000), Goh (2002), Shirono (2003), Wang (2002), Vandergrift (2003), Chang and Read (2006), Ho

(2006), Graham, Santos and Vanderplank (2008, 2011), Chang (2009), Cross (2010), Baleghizadeh and Rahimi (2011) and Ueda (2013), it can be concluded that the differences in EFL/ESL listening strategies depend on listening abilities and proficiency and that both metacognitive knowledge and its usage are the key to become a successful listener.

However, this raises the following question: If listening strategies and metacognitive strategies used by more-proficient listeners are taught to less-proficient listeners, then would they improve their listening comprehension? This issue will be discussed in the following section.

2.2 Previous Research Arguments

2.2.1 Teachability and effectiveness of explicit strategies instruction.

As described earlier, it has become clear that there are differences in listening strategy use based on listening ability and proficiency level. For example, high-level listeners seem to use more metacognitive strategies more often, while low-level listeners are apparently able to use only a limited number of listening strategies. In regard to the aforementioned question (If listening strategies and metacognitive strategies used by more-proficient listeners are taught to less-proficient listeners, then would they improve their listening comprehension?), some studies have responded with a 'yes' (Rubin, 1994; Cross, 2009; Graham, Santos and Vanderplank, 2011), whereas others are 'sceptical' (Field, 2008; Lynch, 2009).

Rost and Ross (1991) claim that teaching listening strategies is effective. They conducted research on listening strategies with 72 Japanese listeners (i.e. 40 high-proficiency listeners and 32 low-proficiency listeners). The results indicate that strategies used by the high-proficiency listeners could be successfully taught to low-proficiency listeners (p. 236).

Rost and Wilson (2013, p. 244) also state that it is advantageous to teach listening strategies either directly (i.e. naming and demonstrating the strategy) or indirectly (i.e. coaching students on the ways to improve their listening without naming them). Many other researchers such as Rubin and Thompson (1992, 1993),

Thompson and Rubin (1996), Mendelsohn (1994, 1995) and Buck (1995) support that explicit strategies are teachable and effective.

However, the teachability and the effectiveness of explicit strategies instruction were first questioned by Tudor (1996). He argues that ‘it would be misleading to assume that these strategies can be neatly pedagogised and “taught” to learners in a straightforward manner’ (p. 39). Field (1998) also claims that it has not been conclusively demonstrated that this type of strategy training is effective and that attempts to teach strategies individually based on the analysis–synthesis principle have not necessarily led to greater overall listening competence. Field (1998, p. 115) questions the findings of Rubin (1994) and Chamot (1995) in which only two out of their 12 studies showed that improvement had occurred. Two years later, Field (2000, p. 32) raised the following question: Can we actually teach the strategies that a learner needs in order to handle gaps in understanding? He claims that the research evidence on listening is less than conclusive and if strategies, such as monitoring one’s own understanding, identifying keywords and predicting text context, are taught separately, then learners may show improvement in their handling of the individual strategy but not necessarily improve overall as listeners. Interestingly, he indicates that no matter how good learners become at using a certain strategy, they will have difficulty combining it with other strategies and using it *appropriately*⁵ to meet the demands of a particular listening task.

Ozeki (2000) examines the effectiveness of learning strategies that Japanese female college students frequently used for listening tasks and observes the following:

- i) Students do not often utilise listening strategies themselves.
- ii) Students rarely use metacognitive strategies such as planning, directed attention, selective attention or self-evaluation.
- iii) Students are frequently distracted by unknown words and they lose focus.

⁵ The emphasis was made by Field (2000, p. 32).

- iv) Students are not used to selective attention, pre-reading true and false questions and choosing the keywords in questions before actually listening to the material.
- v) Students seldom use the self-evaluating strategy unless the teacher includes it as a classroom activity (pp. 95–96).

As Oxford (1990) signifies, Ozeki (2000) claims that students who believe that the teacher is the authoritative source of knowledge lack the initiative to learn on their own, and that they rarely use metacognitive strategies, which can enable them to plan, monitor and evaluate their learning.

Berne (2004, p. 526) suggests the following: Listening instruction must be differentiated by level. Field (1998) also argues that strategy training may not benefit learners who are initially weak-strategy users. Thus, it may not be appropriate to teach the same types of strategies to less- and more-proficient listeners since they have different needs and knowledge bases.

Although Graham, Santos and Vanderplank (2008) claim that strategy development is related to proficiency issues, their results also show a high degree of stability in strategy use. Analyses of their commentaries show that students remained fairly consistent in their strategy use over a six-month period, thus leading the researchers to conclude that listening strategy use is relatively stable and closely tied to proficiency level (p. 66).

Other researchers, such as Rees-Miller (1993), Mendelsohn (1994), Tudor (1996), Field (2008) and Lynch (2009) claim that there is insufficient evidence about the effects of instructing listening strategies, whereas Thompson and Rubin (1996), Park (1997) and Vandergrift (1999), Carrier (2003), Graham and Macaro (2008), Cross (2009) and Suzuki (2009) still support that explicit strategies are teachable and effective.

The next section discusses one way to approach and tackle this question of whether listening strategies improve learners' EFL/ESL listening comprehension.

2.2.2 Lack of a standardised test to measure participants' proficiency and compare results.

This section explores the importance of standardised language proficiency tests, which are still the subject of wide-ranging debate among researchers. In this study, standardised tests are defined as any language proficiency tests that are reliable, international, popular, relatively easy to access and capable of comparing/converting other tests. Such tests are crucial for two reasons, i.e. to define participants' proficiency levels *before* an experiment and evaluate the effect of an experiment objectively and scientifically. The majority of previous studies on listening strategy have compared more- and less-successful listeners. This is because, as Wu (1998) indicates, the preferred method in the field of testing assessment is to compare the top and bottom groups, ranging from 25% to 33% of the samples. In addition, the gap between the two groups is prominent, and the differences are easy to compare. Therefore, it is quite natural to compare these two groups.

However, these studies contained significant variations and ambiguities and employed only a limited number of standardised tests for classification purposes. Few standardised tests were used to determine the proficiency level of the participants *before* experiments were conducted. In addition, researchers' classifications of learners as more- or less-proficient listeners vary significantly across studies and, as mentioned above, the lack of a standardised measure of listening proficiency can diminish the overall generalisability of the findings since it cannot ensure that each study measures the same parameters. The studies that do not utilise a standardised test to measure participants' proficiency and compare the results can be divided into four types: 1) a study without any tests, 2) a study with a test which does not measure listening comprehension but other skills such as reading and mathematical skills, 3) a study with a local/minor test and 4) a study with a standardised test but no description/definition regarding the participants' classification.

For example, no standardised test was used in the following studies: Fujiwara (1990), Bacon (1992a, 1992b), Laviosa (1992), Goh (1997, 2000), Vandergrift (2003), Zhang and Goh (2006), Graham, Santos and Vanderplank (2008, 2011), Graham and

Macaro (2008), Cross (2009, 2010) and Vandergrift and Tafaghodtari (2010). Rubin, Quinn and Enos (1988) employ the California Assessment Program in their study. However, it is a test of reading, writing and basic mathematical skills, but not a test to assess listening comprehension. Thomson and Rubin (1996) use the speaking ability section from the American Council on The Teaching of Foreign Languages (ACTFL). Vogely (1995), Ozeki (2000), Shirono (2003), Carrier (2003) and Suzuki (2009) use some tests, but they are not standardised tests. Thus, it is almost impossible to scientifically and objectively compare the participants' comprehension levels and research results. Chang (2008) uses the TOEIC® to define the participants' proficiency levels but did not mention the basis of the definitions.

Without the use of a standardised test, those categorised as more-successful listeners in one study might be considered as intermediate in another, whilst those categorised as intermediate in one study might be classified as less successful in another (Table 2.3).

Table 2.3

Comparison of Some Standardised Test Scores/Grades⁶

| TOEFL® | TOEFL®iBT | IELTS | Cambridge | TOEIC® | EIKEN |
|--------|-----------|---------|----------------|---------|------------------------|
| 677 | 120 | 9.0 | CPE | 990 | |
| 650 | 115 | 7.5–8.5 | | 890 | |
| 600 | 100 | 6.0–7.0 | CAE | 660–810 | Grade 1 |
| 550 | 80 | | | | |
| 500 | 61 | 5.5 | FCE | 590 | Grade Pre-1 |
| 470 | 52 | 5.0 | | 450–520 | |
| | | 4.5 | | | |
| 450 | 45 | 3.5–4.0 | PET | 310–380 | Grade Pre-2 to Grade 2 |
| | | 2.5–3.0 | KET | 220 | Grade 3 |
| | | 1.0–2.0 | Young Learners | | Grade 4 to 5 |

⁶ The TOEFL® iBT test measures the ability to use and understand English at the university level, i.e. listening, reading, speaking and writing skills for academic tasks. The International English Language Testing System (IELTS) is designed to assess the language ability of candidates who want to study or work where English is the primary language of communication. The IELTS is accepted by thousands of organisations in more than 135 countries. Cambridge = Cambridge English Language Assessment, CPE = Certificate in Proficiency in English, CAE = Certificate in Advanced English, FCE = First Certificate in English, PET = Preliminary English Test, KET = Key English Test and EIKEN = a test in practical English proficiency, which is Japan's most widely recognised English language assessment.

For example, although O'Malley et al.'s study (1989) is one of the first experimental studies on language learning strategies instruction that compared more- and less-effective listeners, the number of participants therein is only 11, and no standardised test is used to define their competence in English *prior* to the experiment. In addition, the participants' proficiency levels are defined by a mere school district placement test. There are additional studies in which tests have not been used to assess the proficiency level of the participants *before* the experiment and even if a test has been used, in most cases, it is very minor or local to provide objective information about participants' comprehension levels.

To encourage the use of standardised tests, they must be easily accessible outside the designated district and be either low cost or free. Moreover, the scores of standardised tests must be convertible to those of international tests such as the TOEFL® or TOEIC®. If participants' comprehension levels *before* an experiment are not determined objectively through standardised tests, then the results of the study cannot be considered as an objective. Furthermore, even when employing a standardised test, Rubin (1994) proposes that the division of groups or participants should be clearly described. 'Although DeFilippis (1980) used a standard instrument, the rationale for selecting the point where she divided the group is not clear' (p. 212). O'Malley and Chamot (1990, p.11) define successful listeners as 'those who report the greatest frequency, variety and sophistication of language learning strategies'. However, the range of successful learners varies depending on the instructor, and participants can be categorised differently across studies. Therefore, it is essential that every study should utilise an independent measure of success.

The second important reason for employing standardised tests is that it would be difficult to compare the results with those of other studies without such tests and regardless of how many studies are conducted, EFL/ESL listening would not progress meaningfully. Rubin (1994) expresses that 'most of the research results are based on listening comprehension measures that have not been standardised, making it difficult to compare results' (p. 199) and 'most studies use either teacher judgment, course level or performance on a non-standard test' (p. 206). In addition, she states that studies that

do not utilise standardised tests cannot provide firm conclusions, and comparisons can be problematic for determining proficiency. Rubin's point is supported by Mendelsohn (1995) who stated that '...there is a need for *diagnostic tests*⁷ to assess learners' proficiency levels' (p. 137). Furthermore, Berne (1993, 2004) addresses the importance of defining the categorisation of participants:

The lack of a common, standardized measure of listening proficiency across these studies is problematic in that it may diminish the generalizability of the findings.... Thus, we cannot be sure that each of these studies is measuring the same thing when assessing listening proficiency. In addition, listening comprehension performance may vary according to the task used to assess it.

(Berne, 1993)

Therefore, in order to enhance the generalizability of their findings, researchers may want to consider adopting a common set of well-tested, objective criteria for assessing listening proficiency...

(Berne, 2004, p. 523)

As introduced above, a standardised test is essential for enhancing the credibility of a study's findings. In this study, the listening parts of the TOEIC® are adopted as an objective measure for assessing the participants' listening proficiency before/after the experiments as well as the experimental results.

2.2.3 Lack of studies about the intermediate level.

Although there has been progress in the field of EFL/ESL listening strategy since 1980, many issues still remain unresolved. One of the reasons is that the majority of the studies have focussed on the differences between more- and less-successful listeners (DeFilippis, 1980; Murphy, 1987; O'Malley, Chamot and Küpper, 1989; Rost

⁷ The emphasis was made by Mendelsohn (1995).

and Ross, 1991; Moreira, 1996; Vandergrift, 1997; Goh, 2000; Shirono, 2003; Graham, Santos and Vanderplank, 2008; Vandergrift and Tafaghodtari, 2010). However, when examining the majority of EFL/ESL learners in listening, especially in Asia and South America, they fall into the intermediate level, as described in Chapter 1. There are some EFL/ESL listening strategy studies that have focussed on intermediate learners, but the findings have been inconclusive. For example, Murphy (1985) studies the ESL listening strategies of more- and less-proficient intermediate learners based on their oral and written responses to listening selections. He concludes that listening is an interpretive language process in which various strategies are interwoven and that both textual and non-textual information (combined with the strategies used) determines the listener's interpretation of what s/he hears. To select the participants, he used the Michigan Test of Aural Comprehension, the Listening Proficiency Rating Scale for Adult Migrant Education and the City University of New York Reading Assessment Test (CRAT). However, it is not described how they were classified as intermediate learners. Furthermore, the CRAT is primarily a reading assessment test.

O'Malley (1987) investigates the effects of learning strategies training on ESL learning with 75 intermediate high school students, but they are chosen based on the results of school district placement procedures. Again, it is not described how they are categorised as intermediate learners, and the placement test is not a standardised test. Thus, it may never be clear whether this study actually focussed on intermediate learners.

Vandergrift (1997) focuses on the differences in strategy use among novice and intermediate learners of French using data elicited through think-aloud protocols. He claims that intermediate listeners use a higher percentage of metacognitive strategies than novice listeners. However, only six intermediate listeners are categorised as 'more-successful listeners', while only one listener is categorised as 'less successful'. In addition, it is not explained how they are classified as intermediate learners. Furthermore, the ACTFL oral proficiency interview (OPI) is used to select the participants. Nonetheless, the OPI is not a test to assess a learner's listening proficiency but one's *oral* proficiency. This raises the question of why the official

ACTFL Listening Test for Professionals was not employed since it is a global assessment listening test that can be used for all levels.

Ho (2006) examines the EFL listening strategies of 190 high-intermediate Taiwanese students by using the five levels of the General English Proficiency Test (GEPT), i.e. elementary, intermediate, high-intermediate, advanced and superior. The GEPT is a test of English language proficiency that was commissioned by Taiwan's Ministry of Education in 1999. Although the details are described as to how they are categorised as intermediate learners (e.g. those who ranked in the top 30% are placed in the high-listening proficiency group, whereas the bottom 30% are placed in the low-listening proficiency group), it does not explain whether the test scores are able to be converted into the scores of the TOEIC®, the TOEFL® or other standardised tests.

Chen (2007) investigates the EFL listening strategies of 64 Taiwanese students who were selected according to their scores on the Secondary Level English Proficiency® (SLEP®) test. In this case, 56 participants are ranked as low-intermediate on the listening comprehension section (30th–50th percentile), four as high-intermediate (50th–70th percentile) and four as advanced (70th percentile and higher). The SLEP® test was developed by the Educational Testing Service, and it *was* a standardised multiple-choice test designed to measure both listening and reading comprehension skills of non-native English speakers *until* 2012. As of 30th June 2012, the SLEP® test has been discontinued, and no materials can be obtained. Again, this study does not explain whether the test scores can be converted into those of other standardised tests.

Graham, Santos and Vanderplank (2008, 2011) investigate listening comprehension and strategy use of British lower-intermediate learners of French. They are categorised as lower-intermediate since they are preparing for a lower-intermediate examination—the Advanced Subsidiary examination, which focuses on traditional study skills. Their listening proficiency is assessed using two different audio recordings of comparable difficulty on the topic of holidays. Again, it does not explain whether these test scores can be converted into those of other standardised tests.

Chang (2008) studies the strategies of EFL students and how they adjusted these strategies in response to various listening tasks. She recruited 22 Taiwanese students (beginner and low-intermediate) based on their TOEIC® scores. However, it does not describe how they are classified as intermediate. Similarly, Chang (2009) examines 75 Chinese EFL learners' test-taking strategies and their relationship with listening performance using a 40-item listening test. The participants are classified according to their scores on the listening test. The highest possible score on the listening test is 40, and those who score between 21 and 29 are categorised as intermediate. However, since the test is not a standardised listening test, there is no way to compare these findings with other research results objectively.

Finally, Chang and Read (2006) investigate the effects of four types of listening support, i.e. previewing the test questions, repetition of the input, providing background knowledge about the topic and vocabulary instruction. They clarify the participants' levels by using the mean scores of the listening parts of the TOEIC®. For example, those who receive scores between 38.67 and 40.40 (out of 100) are categorised as intermediate. This score range, equivalent to 235 to 245 (out of 495) in the listening parts of the TOEIC®, is consistent with the definition of intermediate listeners in the present study. Their findings show that the most effective type of support was providing information about the topic. This is followed sequentially by repetition of the input, the fact that the learners' level of listening proficiency has a significant interaction effect (particularly in the case of question preview) and that vocabulary instruction is the least useful form of support, regardless of proficiency level.

Based on the aforementioned evidence, limited studies have objectively focussed on intermediate learners. Berne (2004, p. 526) indicates that listening instruction must be differentiated by level and that it may be inappropriate to teach the same strategies to more- and less-proficient listeners since they have different needs and knowledge bases. Therefore, additional studies regarding the types of more effective teaching methods for intermediate learners are required and essential in the field of ESL/EFL listening strategies. Hence, the purpose of the present study is to discover these types

of teaching methods for intermediate learners and how to implement them pedagogically. As Mendelsohn (1995) suggests, the task of language teachers is to teach students 'how to listen' by using strategies that will lead to better comprehension rather than merely giving them an opportunity to listen (p. 133).

Chapter Three: Experiment I—Dictation Training and Listening Strategy Training

3.1 Hypotheses

This study concerns the effective teaching methods for intermediate listeners. To investigate this issue, the effectiveness of two different teaching methods are first examined in Experiment I.

As stated in the previous chapter, there are two types of human information processing, i.e. controlled and automatic human information processing. The former involves a sequence of cognitive activities under active control, whereas the latter involves a sequence of cognitive activities that occurs automatically without the necessity of active control (Schneider and Shiffrin, 1977; Shiffrin and Schneider, 1977).

Similarly, in a cognitive framework of language comprehension, there are multiple levels, as Anderson (2010) proposes: perception, parsing and utilisation, with perception being the lowest. *Perception* or speech recognition is the encoding of the acoustic message, and it involves segmenting phonemes from the continuous speech stream (p. 52). During this phase in listening, one focuses closely on input, and the sounds are retained in echoic memory (Goh, 2000, p. 57). In *parsing*, words are transformed into a mental representation of the combined meaning of the words. This occurs when an utterance is segmented according to syntactic structures or meaning cues. These segments are then recombined to generate a meaningful representation of the original sequence. This mental representation, related to existing knowledge, is stored in a long-term memory as proportions or schemata during the third phase, i.e. *utilisation*. At this level, listeners may draw different types of inferences to complete the interpretation and make it more personally meaningful (p. 57).

During the initial stage of foreign language learning, learners must consciously focus on new elements, such as different phonemes and words from their first language, until these elements become more familiar to them. These two theories claim that there are gradual steps on both human information processing and language learning.

Although many researchers report that teaching various types of listening strategies are useful, these listening strategies might be very complicated for intermediate listeners since they may still be in the level of controlled processing and perception. Therefore, Experiment I addresses the following question: Out of the two types of listening training (i.e. dictation training and listening strategy training), which one would be more effective for intermediate listeners? Based on the two aforementioned theories and this research question, the following two hypotheses are formulated.

H-1 For intermediate listeners, dictation training is more effective than listening strategy training.

As stated earlier, Schneider and Shiffrin (1977) propose two types of cognitive processing, i.e. controlled and automatic human information processing. Dictation and identification of individual words are considered to be controlled processing (bottom-up processing) since they are firmly related to phonemic decoding. In this study, dictation refers to the act of listening to a sentence or a very short passage in English and writing it down. Since they listen only to a sentence or a very short passage, the relevance of their grammatical knowledge or background context is minimal. Listeners utilise mainly acoustic information to interpret spoken words and phrases.

Conversely, employing listening strategies is regarded as automatic processing (top-down processing), because it is difficult to achieve the required capacity for employing listening strategies unless the identification of individual words becomes automatic. Therefore, intermediate listeners in Experiment I may find dictation training more adequate since there are gradual steps in both human information processing and language learning.

According to Anderson's (2010) cognitive psychology theory, parsing is the second stage after perception in which 'words are transformed into a mental representation of the combined meaning of the words'. In addition, parsing only occurs

when a listener segments an utterance according to syntactic structures or meaning cues. Thus, Experiment I postulates that dictation training is more effective than listening strategy training for intermediate listeners.

H-2 For low-intermediate listeners, dictation training is more effective.

In Experiment I, intermediate listeners are divided into the following two groups:

- i) Low-intermediate listeners: those who scored between 166 and 249 on the listening parts of the TOEIC® in Week 1.
- ii) Upper-intermediate listeners: those who scored between 250 and 330 on the listening parts of the TOEIC® in Week 1.

For low-intermediate listeners, dictation training might be much more effective since they have not reached the level where perception and parsing occur automatically. In addition, they need active control and conscious attention for perception, whereas upper-intermediate listeners might be in the early stages of becoming skilled listeners. Thus, they may not find basic training on perception, such as dictation, beneficial.

3.2 Method

3.2.1 Participants.

The participants in Experiment I consisted of 108 first-year students (in the Faculty of Economics) at a Japanese private university who were administered the listening parts of the TOEIC® in April 2012. Only those who scored between 166 and 330 were selected as the participants in Experiment I. In this study, the TOEIC® was employed to classify the participants' proficiency levels, but their levels could be converted into other standardised tests such as the EIKEN, IELTS and TOEFL®⁸ (Table 3.1).

⁸ PBT = paper-based test

CBT = computer-based test

TOEIC® score \times 0.348 + 296 = TOEFL® PBT score

Table 3.1

Conversion Table of the TOEIC® Scores into Those of Other Standardised Tests

| EIKEN | IELTS | TOEIC® | TOEFL® iBT | TOEFL® CBT | TOEFL® PBT |
|-------------|---------|--------|------------|------------|------------|
| Grade 1 | 7.0–7.5 | | 120 | 300 | 677 |
| | | 990 | 111 | 273 | 641 |
| | | 810 | 91 | 233 | 578 |
| Grade Pre-1 | 5.0–6.0 | 740 | 82 | 217 | 554 |
| Grade 2 | 4.0–4.5 | 520 | 53 | 153 | 477 |
| Grade Pre-2 | 3.5–4.0 | 400 | 40 | 121 | 435 |
| Grade 3 | 3.0 | 365 | 38 | 113 | 423 |
| Grade 4 | 2.0–2.5 | 260 | 28 | 87 | 386 |
| Grade 5 | 1.5–2.0 | | | | |

None of the participants' major subject was English, and the classes were part of the regular English curriculum. The participants were divided into three groups, i.e. 10 in the control group (CG), which was part of the general English class; 52 in the dictation training group (DTG), with half of them belonging to the EFL listening class and the other half belonging to the EFL reading class and 46 in the listening strategy training group (LSTG), which was part of the EFL reading class. All the lessons were presented in English as per the policy of the faculty. Initially, there were more participants, but only those who attended all 15 classes between April and July 2012 were selected for Experiment I. Table 3.2 summarises the means, standard deviations (SDs) and relative values of these three groups in Week 1.

Table 3.2

Numbers, Means and SDs of the CG, DTG and LSTG in Week 1 of Experiment I

| Groups | <i>N</i> | <i>Mean</i> | <i>SD</i> |
|--------|----------|-------------|-----------|
| CG | 10 | 214.50 | 41.66 |
| DTG | 52 | 230.19 | 28.90 |
| LSTG | 46 | 241.30 | 32.41 |

A one-way analysis of variance (ANOVA) was conducted for their scores of the listening parts of the TOEIC®, and the results show that there was significance

amongst these three groups ($F(2, 105) = 3.474, p < 0.05$). However, using Ryan's method for multiple comparisons, no significance among these three groups was observed.

Table 3.3

Results of Ryan's Method on the Three Groups before Experiment I

| | | | | | | |
|---|----------|----------------------|--------|----------|----------|-------------|
| | CG | DTG | LSTG | | | |
| mean : | 214.50 | 230.19 | 241.30 | | | |
| n : | 10 | 52 | 46 | | | |
| <hr/> | | | | | | |
| pair | <i>r</i> | <i>nominal level</i> | | <i>t</i> | <i>p</i> | <i>sig.</i> |
| <hr/> | | | | | | |
| LSTG - CG | 3 | 0.02 | | 2.42 | 0.02 | n.s. |
| LSTG - DTG | 2 | 0.03 | | 1.73 | 0.09 | n.s. |
| DTG - CG | 2 | 0.03 | | 1.43 | 0.15 | n.s. |
| <hr/> | | | | | | |
| <i>MSe</i> = 1004.69, <i>df</i> = 105, <i>significance level</i> = 0.05 | | | | | | |

3.2.2 Materials.

For the DTG, materials were designed based on a textbook by Rost and Stratton (2001). They consisted of various patterns of reductions and contractions (for more details, see Appendix B). For the LSTG, materials were designed by the present author to aid in the acquisition of the various types of listening strategies (for more details, see Appendix C).

3.2.3 Procedure.

In Week 1 of the first term in 2012, 108 participants were selected based on their TOEIC® listening scores. From Weeks 2 to 14, both the DTG and LSTG participants were trained for 30 minutes⁹ (with instructions in Japanese) as part of the 90-minute regular class. The procedure of the dictation training included the following three steps:

⁹ Due to the inflexible class syllabus, only 30 minutes were allowed for the experiment.

- Step 1: The DTG participants were first informed about the purpose and subject of the training, after which they listened to the relevant parts of the CD (attached to the textbook) only once. Whilst listening, they dictated some words/phrases/short sentences on the provided handouts, which I had created based on the textbook's exercise page. Thereafter, the answers were provided.
- Step 2: The participants viewed the answers whilst listening to the CD for a second time to combine the words/phrases/short sentences that they were unable to dictate *with* the acoustic information.
- Step 3: The participants listened to the CD a third time *without* looking at the answers to comprehend the words/phrases or short sentences that they were unable to dictate purely through the acoustic information.

The LSTG participants were first instructed on the logical aspects of the relevant listening strategies for that lesson. Then, they performed listening tasks that involved applying the instructed listening strategies, after which they were provided with the answers and pertinent feedback.

In Week 2, the concepts of content and function words were introduced: what they are and what types of words they comprise (see Week 2 on p. 184 in Appendix C for details). The data for my study about the MALQ (see 4.4.4 on p.81 in Chapter 4 and 5.4.5 on p.123 in Chapter 5 for details) show that many Japanese learners of English tend to stop listening when faced with a difficulty in understanding spoken English. By explaining that catching only content words is sufficient for understanding meaning, students learnt that it is not necessary to listen to every single word and that it is vital to keep listening even if they miss some words. Next, Exercise 1 introduced five new words (see Week 2 on p. 184 in Appendix C for details). The participants were instructed that the definitions for these words were in the CD, and they were to listen to the CD and fill in the blanks. The CD was played

three times, following which the answers were shown with an overhead camera (OHC). The participants were then shown the definition of each word with only the definition's content words (i.e. function words were hidden) and asked whether they could understand them. They were also asked whether they could understand the definitions with only their function words (i.e. content words were hidden). Through this exercise, the participants realised that they did not have to listen to every single word for effective comprehension.

In Week 3, both working memory and note taking were introduced (see Week 3 on p.185 in Appendix C for details). First, three mobile numbers were read out by the author, and the participants were asked whether they could remember any of them. Through this exercise, the participants learnt how limited the capacity of working memory is, and how quickly we forget what we hear. They also learnt that note taking and listening skills are firmly interrelated, since it is impossible to *look* back in listening as one can in reading. Next, the participants were taught how to take notes whilst listening using marks, abbreviations, numbers, etc.

In Week 4, participants were introduced to inference. They learnt that all necessary information is not always stated, so listeners must sometimes infer the speaker's intended meaning from the given information. In listening such given information could include the pitch and tone of the speaker's voice, grammar, vocabulary and background knowledge. Next, five questions were presented, and the script was read out by the author five times (see Week 4 on p.186 in Appendix C for details). The answers were then shown with an OHC and explained. For example, based on the following sentences and words, it is possible to infer that Tommy is in a bathroom.

Tommy was lying down looking at a reading book.

The room was full of steam.

soap

a splash

For those who do not know the shape of a western-style bathtub, a picture was shown so that the participants could understand that one could actually lie down in a bathtub.

In Week 5, inference was further explored along with redundancy. The participants were instructed that it is possible to infer what was said through the active use of grammatical knowledge, vocabulary, background knowledge, etc. Then, Sentences 1, 2 and 3 in Exercise 1 were given to the participants on a handout (see Week 5 on p.187 in Appendix C for details). Without listening to the CD, they were asked to choose or write the correct answers. Next, the answers were shown with an OHC and explained. Finally, the CD was played once.

Redundancy was also introduced in Week 5. As previously noted, it is impossible to *look* back in listening like reading. The participants were taught that any speaker who knows the limitations of listening will relate important information slowly, repeatedly and loudly, and sometimes rephrase it to ensure that the information is understandable to the listener. After a short explanation of these ideas, the CD was played three times for Exercise 2, in which the participants were to fill in the blanks on an exercise sheet again. Then, the answers were shown with an OHC and explained.

In Week 6, discourse markers were introduced. First, the concept of discourse markers was explained along with how to use them to predict how the topic of the discourse will proceed. Next, the CD was played, and for Exercise 1, the participants were asked to write down three discourse markers that they had heard. Then, the answers were shown with an OHC and explained.

Following this, the participants listened to a short lecture about addictive substances and were asked to name three addictive substances and five examples of the first addictive substance (see Exercise 2 of Week 6 on pp. 188-189 in Appendix C for details). The CD was played once. Then, the answers were shown with an OHC and explained using the highlighted words and phrases (see the details in script of Exercise 2 of Week 6 in Appendix C).

In Week 7, the importance of background knowledge was presented. The author read out the script for Exercise 1 once, and the participants were asked to answer the question. Since almost no student could answer it, a picture of an ice cream van was shown, and the function of an ice cream van was explained (see Week 7 on p.190 in Appendix C for details). The manner in which they arrive in residential areas, playing cheerful music to attract children's attention, was also explained. Finally, the script was read out again, and the answer was explained.

The importance of adjustment was also introduced in Week 7 (see Week 7 on p.190 in Appendix C for details). The data for my study about the MALQ (see 4.4.4 on p.81 in Chapter 4 and 5.4.5 on p.123 in Chapter 5 for details) prove that not all learners of English can quickly adjust their interpretations whilst listening, even if they realise they had not understood something correctly. However, it is vital to adjust one's interpretation quickly in such situations. After this short instruction, the author read out the script ① of Exercise 2 (see Exercise 2 of Week 7 on p.191 in Appendix C for details). Then, the participants were asked to choose an answer from the multiple choices in ①. Next, the author read out the script ②. The participants were then asked to choose an answer from the multiple choices in ②. They were freely allowed to change their answer from their previous choice. The same procedure was repeated till ⑤. The answer was then shown with an OHC and explained.

In Week 8, inference was presented again. First, the participants were divided roughly into two groups, i.e. Group A and B. Group A was given a handout entitled 'A prisoner plans his escape', and Group B was given another handout entitled 'A wrestler in a tight corner'. The participants were instructed not to show their handouts to anybody. Next, a list of words, which were highlighted or boxed (see details in the script for Week 8 on p.192 in Appendix C), was given to ease the vocabulary problem. The participants could check their definitions with their dictionaries if anything was unclear. The script of a short story was then read out three times by the author, and the participants were asked to write a summary of the short story. Some of the participants in both groups were asked to present their

summaries. Despite having listened to the same story the same number of times, their summaries were quite different between Group A and B. Finally, it was revealed that they were actually given the same story with two different titles, and the participants realised how a title can influence one's comprehension and even the definitions of the same words.

In Week 9, the importance of knowledge in vocabulary, visual aids/information and background knowledge was introduced. No handouts were given at this stage. First, the script was read out once by the author, and the participants were asked to roughly state its subject matter. Most of them could not do so. Next, they were given highlighted words, and they checked their definitions with their dictionaries, and the script was read out by the author one more (see the script of Week 9 on p.192 in Appendix C for details). Again, the participants were asked to state its subject matter. Then, a handout with a sketch (shown in Week 9 on p. 192 in Appendix C) was provided. The script was read out once more by the author, and the participants were asked to state its subject matter. Finally, a concept from the script, a mechanism of septal defect, was roughly explained. The script was then read out once again by the author, and the participants were asked to state its subject matter. Through these gradual steps, the participants experienced the importance of knowledge in vocabulary, visual aids/information and background knowledge, since they came to understand the context better each time they were provided with additional definitions, visual aids and background knowledge.

Week 10 focussed on scanning. Scanning is among the vital listening strategies for obtaining specific information. The participants were instructed on the importance of screening for what should be focussed on *prior to* listening. As a concrete procedure, they learnt to read the questions and multiple choice items before listening and to highlight or underline the content words (see the details in Week 10 on pp.193-194 in Appendix C). After this instruction, words were highlighted and shown with an OHP. Next, the participants listened to the CD once and answered the questions. Then, the answers were shown with an OHC and explained.

In Week 11, the participants received training in skimming. Like scanning, skimming is amongst the vital listening strategies for obtaining a rough idea of the topic. A handout was distributed to the participants without any explanation, and they were questioned about what they were going to do. Since most of the participants had taken the TOEIC® before this training, they could easily guess with a glance. The concept of skimming was then introduced. The CD was played once, and the answer was shown with an OHC and explained (see Week 11 on p.195 in Appendix C for details).

In Week 12, listening literacy was explained. Many learners of English in Japan typically trust the content of what they listen to in English. This is because English is a foreign language in Japan, so the content of much of what learners listen to in the English classroom has been revised and screened by both the lecturers and the textbook companies. Thus, learners usually do not have to doubt whether the content they are listening to is accurate. However, this is not always the case in reality. First, a handout was given to each participant without an explanation of what they were going to learn that day. The CD was played once, and the participants were asked to choose the answer. Most of them chose an answer, although there was no correct answer among the multiple choices (see Week 12 on p.196 in Appendix C for details). They were then asked to reveal their answers. The participants then learnt that there was actually no answer; thus, it is important to confirm what they listen to.

In Week 13, scanning instruction continued. A review of scanning from Week 10 was conducted, and the CD was played once. Then, the answers were shown with an OHC and explained (see Week 13 on p.197 in Appendix C for details).

In Week 14, scanning was further introduced. A review of scanning in Weeks 10 and 13 was conducted first, and the participants were asked to highlight the content words before listening. The CD was played once, and the answers were shown with an OHC and explained. For example, the three multiple choices in yellow are categorised as places, those in green as topics and the boxed ones as speakers/persons (see Exercise 1 of Week 14 on p.198 in Appendix C for details).

Then, the participants realised that recognising these categories before listening made choosing the correct answer much easier. Thus, they learnt the vital importance of scanning the given information as much as possible before listening.

In Week 15, the participants answered the listening parts of the TOEIC®. Although this test was identical to that of Week 1, the participants were not provided with the answers of the initial test and were not informed that the same test would be used in Week 15. This guaranteed the test's validity and allowed us to compare the scores obtained in Weeks 1 and 15.

3.3 Results

The effectiveness of the two types of teaching methods (i.e. dictation training and listening strategy training) for intermediate listeners in EFL listening were investigated. The data concerning the differences for the three groups (i.e. the CG, DTG and LSTG) between Weeks 1 and 15 on the listening parts of the TOEIC® are presented, which is followed by an analysis and a discussion of the data. After the discussion of the effectiveness of these two teaching methods, more detailed observations that focus on both low- and upper-intermediate listeners are made.

First, a two-way ANOVA was employed with two factors, i.e. 'teaching methods' (for the CG, DTG and LSTG) and 'before and after Experiment I'. Figure 3.1 presents the relative values of the CG, DTG and LSTG scores by comparing Weeks 1 and 15. A quick look at Figure 3.1 shows sharp rises in both the DTG and LSTG.

Figure 3.1. Relative values of the CG, DTG and LSTG scores by comparing Weeks 1 and 15 of Experiment I.

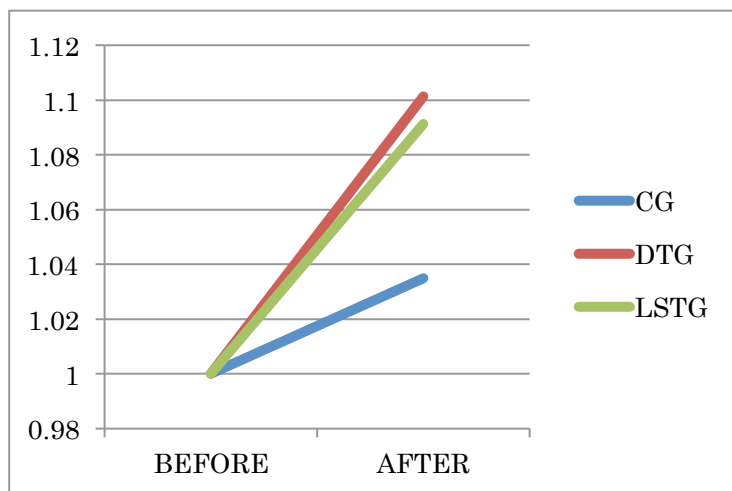


Table 3.4 summarises the means, SDs and relative values of these three groups in Weeks 1 and 15.

Table 3.4

Numbers, Means, SDs, Relative Values and Means of Difference of the CG, DTG and LSTG in Weeks 1 and 15 of Experiment I

| | Week 1 | | | Week 15 | | | |
|------|----------|-------------|-----------|-------------|-----------|-----------------------|---------------------------|
| | <i>N</i> | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> | <i>Relative Value</i> | <i>Mean of difference</i> |
| CG | 10 | 214.50 | 41.66 | 220.00 | 48.59 | 1.03 | 5.50 |
| DTG | 52 | 230.19 | 28.90 | 253.46 | 37.02 | 1.10 | 23.27 |
| LSTG | 46 | 241.30 | 32.41 | 263.26 | 45.19 | 1.09 | 21.96 |

Table 3.5 shows the results of the two-way ANOVA and Ryan's method conducted in accordance with the null hypothesis (Table 3.6). The findings show that dictation training is more effective than listening strategy training and that both training methods are significantly effective for intermediate listeners.

Table 3.5

Results of the Two-way ANOVA in Experiment I

| Source | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> |
|---------------------|-----------|-----------|-----------|----------|-----------|
| A: Teaching Methods | 27532.55 | 2 | 13766.27 | 6.52 | 0.00 *** |
| Error[S(A)] | 221809.79 | 105 | 2112.47 | | |
| B: Before & After | 9126.42 | 1 | 9126.42 | 14.36 | 0.00 **** |
| AB | 2086.57 | 2 | 1043.28 | 1.64 | 0.20 |
| Error[BS(A)] | 66720.32 | 105 | 635.43 | | |

+ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .005$, **** $p < .001$

Table 3.6

Results of Ryan's Method in Experiment I

| | | | | | |
|----------|----------|----------------------|----------|----------|-------------|
| | | CG | DTG | LSTG | |
| mean : | | 217.25 | 241.83 | 252.28 | |
| n : | | 20 | 104 | 92 | |
| <hr/> | | | | | |
| pair | <i>r</i> | <i>nominal level</i> | <i>t</i> | <i>p</i> | <i>sig.</i> |
| <hr/> | | | | | |
| LSTG–CG | 3 | 0.02 | 3.09 | 0.00 | s. |
| LSTG–DTG | 2 | 0.03 | 1.59 | 0.11 | n.s. |
| DTG–CG | 2 | 0.03 | 2.19 | 0.03 | s. |
| <hr/> | | | | | |

$MSe = 2112.47$, $df = 105$, *significance level* = 0.05

The effect size of Factor A (teaching methods), Factor B (before and after the experiment) and the interaction between Factors A and B are medium, small and none, respectively (Table 3.7).

Table 3.7

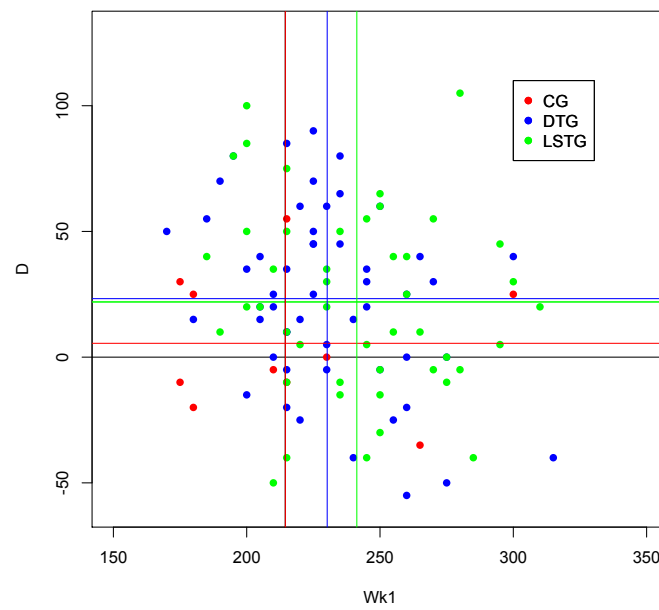
Effect Sizes in Experiment I

| | |
|--|------|
| η^2 in Factor A (Teaching Methods) | 0.41 |
| η^2 in Factor B (Before and After) | 0.14 |
| η^2 in Interaction of Factors A and B | 0.03 |

Effect Size (r): small = 0.10, medium = 0.30 and large = 0.50

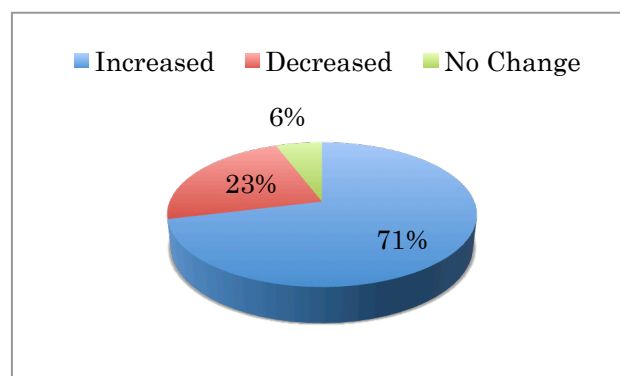
A quick look at Figure 3.2 shows that there are no regular patterns.

Figure 3.2. Scatter plot of Experiment I.



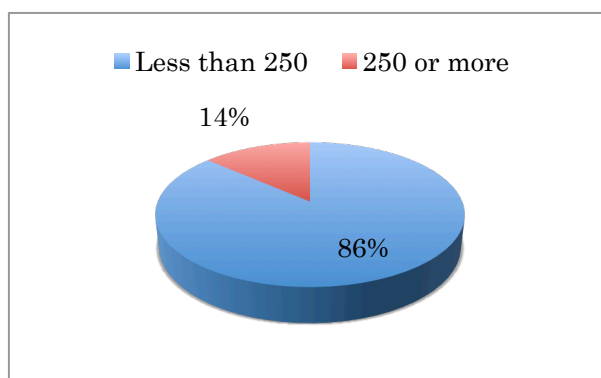
In the DTG, there were 52 participants of which 37 (71%) increased their scores, 12 (23%) decreased their scores and three (6%) showed no change in Week 15 (Figure 3.3).

Figure 3.3. Percentage of the DTG participants' score change in Week 15 of Experiment I.



In the DTG, 37 of the 52 participants increased their scores in Week 15 and 32 of these 37 participants (86%) scored less than 250, whereas five (14%) scored 250 or more in Week 1 (Figure 3.4).

Figure 3.4. Score proportion in Week 1 of the DTG participants whose scores increased in Week 15 of Experiment I.



Another two-way ANOVA was conducted for further investigation on the effect of dictation training between low- and upper-intermediate listeners based on their scores of the listening parts of the TOEIC® in Week 1. There are 39 upper- and 13 low-intermediate listeners in the DTG. The results show that there was significance in the interaction between these two groups at the 1% level (Table 3.8).

Table 3.8

Results of the Two-way ANOVA on the Effect of Dictation Training between Low- and Upper-Intermediate Listeners in Experiment I

| Source | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> |
|-------------------------------|-----------|-----------|-----------|----------|-----------|
| A: More & Less than 250[S(A)] | 25308.01 | 1 | 25308.01 | 23.03 | 0.00 **** |
| Error[S(A)] | 54944.87 | 50 | 1098.90 | | |
| B: Before & After | 4692.63 | 1 | 4692.63 | 8.52 | 0.01 ** |
| AB | 4692.63 | 1 | 4692.63 | 8.52 | 0.01 ** |
| Error[BS(A)] | 27529.49 | 50 | 550.59 | | |

+*p* < .10, **p* < .05, ***p* < .01, ****p* < .005, *****p* < .001

Thus, means for the interaction between ‘low- /upper-intermediate listeners’ and ‘before/after the experiment’ as well as the simple main effect of the interaction between Factors A and B were calculated. The results show that there was significance on the effect of dictation training for low-intermediate listeners at the 0.1% level (Tables 3.9 and 3.10).

Table 3.9

Means of the Interaction between Factors A (Low- and Upper-Intermediate Listeners) and B (before/after the Experiment) in the DTG of Experiment I

| | | |
|---|--------|--------|
| [Factor A = 1] (Upper-Intermediate Listeners) | | |
| B -> | 1 | 2 |
| mean : | 268.85 | 268.85 |
| n : | 13 | 13 |
| [Factor A = 2] (Low-Intermediate Listeners) | | |
| B -> | 1 | 2 |
| mean : | 217.31 | 248.33 |
| n : | 39 | 39 |

Table 3.10

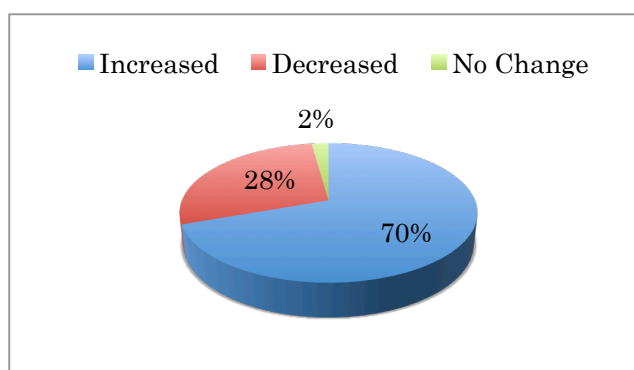
Simple Main Effect Test of Dictation Training between Low- and Upper-Intermediate Listeners in Experiment I

| Effect | SS | df | MS | F | p |
|--------|----------|-----|----------|-------|-----------|
| A(b1) | 25898.08 | 1 | 25898.08 | 31.40 | 0.00 **** |
| A(b2) | 4102.56 | 1 | 4102.56 | 4.97 | 0.03* |
| Error | 100.00 | 825 | | | |
| B(a1) | 0.00 | 1 | 0.00 | 0.00 | 1.00 |
| B(a2) | 9385.26 | 1 | 9385.26 | 17.05 | 0.00 **** |
| Error | 50.00 | 551 | | | |

+ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .005$, **** $p < .001$

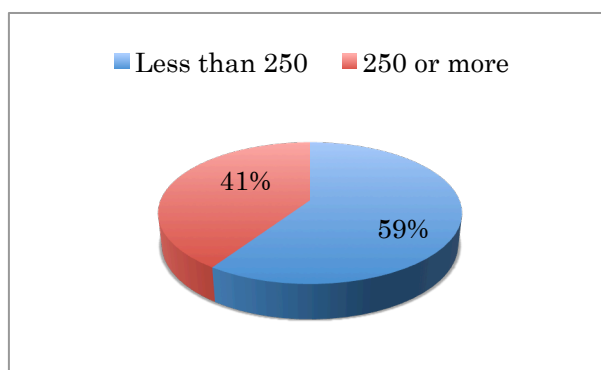
In contrast, in the LSTG, there were 46 participants of which 32 (70%) increased their scores, 13 participants (28%) decreased their scores and one participant (2%) showed no change in Week 15 (Figure 3.5).

Figure 3.5. Percentage of the LSTG participants' score change in Week 15 of Experiment I.



In the LSTG, 32 of the 46 participants increased their scores in Week 15, as mentioned earlier (Figure 3.5), and 19 of these 32 participants (59%) were low-intermediate listeners, whilst 13 participants (41%) were upper-intermediate listeners (Figure 3.6).

Figure 3.6. Score proportion in Week 1 of the LSTG participants whose scores increased in Week 15 of Experiment I.



Another two-way ANOVA was conducted for further investigation on the effect of listening strategy training between low- and upper-intermediate listeners based on their scores on the listening parts of the TOEIC® in Week 1. There are 25 upper- and 21 low-intermediate listeners in the LSTG. However, there was no significance on the interaction of ‘the scores in Week 1’ and ‘before/after the experiment’ (Table 3.11).

Table 3.11

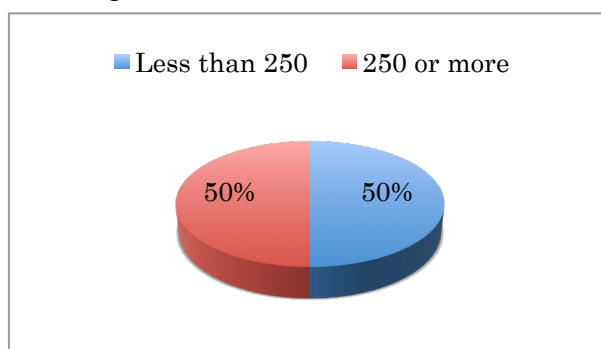
Results of the Two-way ANOVA on the Effect of Listening Strategy Training between Low- and Upper-Intermediate Listeners in Experiment I

| Source | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> |
|-------------------------------|-----------|-----------|-----------|----------|-----------|
| A: More & Less than 250[S(A)] | 59370.65 | 1 | 59370.65 | 53.67 | 0.00 **** |
| Error[S(A)] | 48675.00 | 44 | 1106.25 | | |
| B: Before & After | 10772.18 | 1 | 10772.18 | 15.30 | 0.00 **** |
| AB | 163.48 | 1 | 163.48 | 0.23 | 0.63 |
| Error[BS(A)] | 30973.48 | 44 | 703.94 | | |

+*p* < .10, **p* < .05, ***p* < .01, ****p* < .005, *****p* < .001

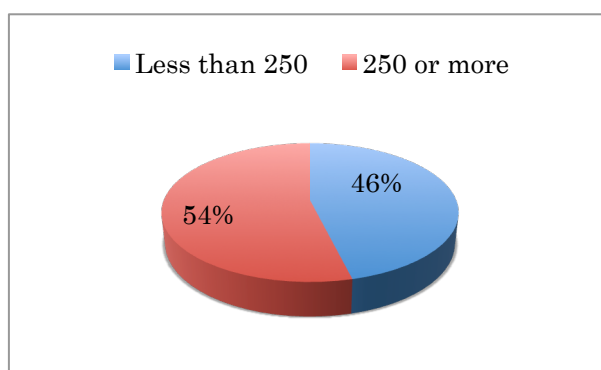
Although the majority of the participants in both the DTG (71%) and LSTG (70%) improved their scores in Week 15 (Figures 3.3 and 3.5), it was also observed that many participants in both groups decreased their scores in Week 15. For example, in the DTG, 12 participants decreased their scores in Week 15, and six of these 12 participants (50%) were low-intermediate listeners (Figure 3.7).

Figure 3.7. Score proportion in Week 1 of the DTG participants whose scores decreased in Week 15 of Experiment I.



On the other hand, in the LSTG, 13 participants decreased their scores in Week 15, and six of these 13 participants (46%) were low-intermediate listeners, whereas seven of these 13 participants (54%) were upper-intermediate listeners (Figure 3.8).

Figure 3.8. Score proportion in Week 1 of the LSTG participants whose scores decreased in Week 15 of Experiment I.



3.4 Discussion

The results illustrated in the aforementioned figures and tables are discussed in the following order:

1. Pre- and post-data for the CG, DTG and LSTG
2. Two-way ANOVA, multiple comparison, effect size and scatter plot
3. The DTG and LSTG participants whose scores increased in Week 15
4. The DTG and LSTG participants whose scores decreased in Week 15

3.4.1 Discussion about the pre- and post-data for the CG, DTG and LSTG.

Although the participants of the CG only received regular lessons for 13 weeks, there was some improvement in listening comprehension (Figure 3.1). This confirms that listening comprehension could possibly improve without any particular training, though the level of improvement is not prominent and the process is significantly time consuming. Conversely, both the DTG and LSTG showed sharp increases, thus demonstrating that both dictation training and listening strategy training are effective

for intermediate listeners under certain conditions (in this case, 30 minutes a week for 13 weeks).

As shown above in Table 3.4, in Week 1, the mean scores of the CG, DTG and LSTG were 214.50, 230.19 and 241.30, respectively, whereas in Week 15, the mean scores were 220.00, 253.46 and 263.26, respectively. To compare these data as the relative values, the mean scores of each group in Week 1 were treated as 1.00 and compared with those in Week 15. The relative values of the CG, DTG and LSTG were 1.03, 1.10 and 1.09, respectively. The LSTG had the highest mean score in Week 1, but the most prominent improvement was observed in the DTG. This indicates that dictation training may be more suitable than listening strategy training for intermediate learners. If so, this assumption does not contradict the theories of both Schneider and Shiffrin (1977) and Anderson (2010). There are gradual steps in both human information processing and language learning. Nation and Newton (2009) also support the importance of bottom-up processes such as dictation training in listening: ‘learners need to be proficient with these bottom-up processes and...learners can benefit from being taught how to listen’ (p. 41). The following section analyses the data from a different perspective.

3.4.2 Discussion about the two-way ANOVA, multiple comparison, effect size and scatter plot.

A two-way ANOVA was conducted on two factors (i.e. teaching methods and before/after the experiment) and significance was observed in both these factors, as shown in Table 3.5. There was significance in ‘teaching methods’ at the 0.5% level and ‘before and after the experiment’ at the 0.1% level. Thus, Ryan’s method, which is one of the multiple comparison methods, was utilised for further analysis. The results reveal significance between the CG and DTG as well as between the CG and LSTG, though no significance was found between the DTG and LSTG (Table 3.6). Note that listening strategy training is *also* significantly effective after dictation training for intermediate listeners. The results of Experiment I are supported by other researchers such as Graham et al. (2008), Vogley (1995), Vandergrift (1997; 1998) and

Baleghizadeh and Rahimi (2011) who claim that strategy development seems to be related to proficiency issues.

The effect size of Experiment I also supports the finding that both teaching methods (i.e. dictation training and listening strategy training) are significantly effective for intermediate listeners. When deciding whether an experiment is significant, a p value is usually employed at the 5% level. However, the larger the sample size, the smaller the p value, which suggests that p value changes depend on sample size, and it provides no substantial information regarding whether a difference exists. Mizumoto and Takeuchi (2011) claim that a p value should not be the only data used for significance but the mean, SD and effect size should also be reported (p. 49). Other researchers claim that regardless of significance, effect size should be reported, since there are both cases of ‘significance with a small effect size’ and ‘no significance with a large effect size’ (Kline, 2004; American Psychology Association, 2009; Field, 2009). Therefore, effect size, which does not change depending on the sample size, is used in this study. Furthermore, effect size is categorised into three groups (i.e. small, medium and large), and the numerical value varies depending on the type of statistical analysis. According to Mizumoto and Takeuchi (2011, p. 51), the numerical values of effect size include: 0.10 (small), 0.30 (medium) and 0.50 (large) for both a one- and two-way ANOVA. In Experiment I, the effect size of the teaching methods was 0.41 (i.e. between medium and large), which signifies that both dictation training and listening strategy training are significantly effective (Table 3.7).

The effect of dictation training, especially for less-proficient listeners, is supported by numerous researchers such as Oller (1971), Kakehi et al. (1981), Suenobu et al. (1982), Morris (1983), Itakura et al. (1985), Ito (1990), Nishino (1992), Fujinaga (2002), Wilson (2003), Watanabe (2009) and Satori (2010). Yonezaki (2014) emphasises the effectiveness of dictation, especially for Japanese learners, as follows: Most Japanese learners of English have problems in perception, which is vital for bottom-up processing, and due to such problems, they are unable to activate syntactic knowledge and background knowledge (p. 2). Conversely, there are some ambiguities in the research results. For example, Nishino’s study (1992) with 84 university

students report that vocabulary is critical and that background knowledge and speech perception are good predictors of listening comprehension. However, no standardised test was used to determine the comprehension level of the participants prior to the experiment. Thus, the results are inconclusive.

Furthermore, Watanabe (2009) investigates the effects of dictation practice on the TOEIC® listening parts with 82 Japanese college students and found that a larger quantity of dictation tends to have a greater effect than a smaller amount. However, both the pre- and post-scores of the participants are not shown. Therefore, it is unclear for which comprehension level dictation practice was proved effective. In addition, she does not describe how the participants were assessed on dictation. As Buck (2001, p. 75) indicates, there are numerous ways to score dictations. Hughes (1989) also suggests that scoring for low-ability test takers can be extremely difficult when they make many mistakes since it is not always clear which parts of the texts their responses are referring to. Without mentioning the comprehension level of the participants and how they are assessed on dictation, these research results remain ambiguous.

Since listening strategy training is also effective, it could be considered that intermediate listeners are capable of employing listening strategies to some extent even though their perception level has not been fully automatised. Buck (2001) states that listening comprehension is the result of an interaction between numerous information sources, such as acoustic input, different types of linguistic knowledge, details of the context and general world knowledge, and listeners use whatever information they have available to help them interpret what the speaker is saying (p. 3). Therefore, they can maintain a certain capacity for some instructed listening strategies. This assumption is supported by the effect size of Factor B ('before and after the experiment'), which is 0.14 (between small and medium). These results indicate that there is effectiveness in both 'teaching methods' and 'before and after the experiment'.

Next, a closer examination of the scatter plot reveals that there is no regular pattern and that even some CG participants increased their scores, whereas many DTG and LSTG participants decreased their scores in Week 15 (Figure 3.2). Based on these

findings, it is assumed that the score range between 166 and 330 in the listening parts of the TOEIC® as ‘intermediate’ is possibly very wide to induce any type of pattern or tendency. It is noticeable that the elements and factors related to improve listening comprehension do not simply rely on the scores of the listening parts of the TOEIC®. Thus, for further analysis, the score range of 166–330 was sub-divided into two ranges, i.e. 166–249 as low-intermediate and 250–330 as upper-intermediate.

3.4.3 Discussion about the DTG and LSTG participants whose scores increased in Week 15.

First, let us observe those participants in the DTG who increased their scores in Week 15. As shown in Figure 3.3, 37 out of 52 participants (71%) in the DTG increased their scores in Week 15, and amongst them, 86% (32 out of 37) were low-intermediate listeners (Figure 3.4). Then, for a further analysis, a two-way ANOVA was conducted on two factors, i.e. ‘more/less than 250 in Week 1’ and ‘before/after the experiment’. The results show that there was significance in the interaction between these two factors at the 1% level, as shown in Table 3.8. The simple main effect test about the effect of dictation training also shows significance between the 13 upper- and 39 low-intermediate listeners based on their scores of the listening parts of the TOEIC® in Week 1 (Table 3.9). These results indicate that dictation training is significantly effective, especially for low-intermediate listeners at the 0.1% level (Table 3.10).

Similarly, the same feature is also observed in the LSTG. As shown in Figure 3.5, 32 out of 46 participants (70%) in the LSTG increased their scores in Week 15, and amongst them, 59% (19 out of 32) were low-intermediate listeners (Figure 3.6). Again, a two-way ANOVA was conducted for further analysis on two factors, i.e. ‘more/less than 250 in Week 1’ and ‘before/after the experiment’.

However, no significance was observed in the interaction between these two elements on listening strategy training. The possible reason for this is that the TOEIC® listening score of 250 might be a borderline of perception, following Anderson’s (2010) theory. When a participant’s score is less than 250 in the listening parts of the

TOEIC®, these low-intermediate listeners will most probably remain at the lowest level, i.e. perception, according to Anderson's theory (2010) and also persist in controlled processing, following the theory of Schneider and Shiffrin (1977). Thus, specific training, such as listening strategy training (which requires more capacity for automatic processing), is not as effective as dictation training, which focuses on phonetic level. To employ instructed listening strategy effectively, these participants need to reach the level where perception is fully automatised. This assumption concedes with the theories of Schneider and Shiffrin (1977) and Anderson (2010).

As shown in Figure 3.4, 14% (5 out of 37) of the DTG upper-intermediate participants might have overcome the level of perception. Thus, basic phonetic perception training, such as dictation training, might be less effective for those who have passed the level of perception. This assumption is also supported by the data of the LSTG. When comparing the score portions in Week 1 of both the DTG and LSTG participants whose scores increased in Week 15, 86% (32 out of 37) of the DTG increased their scores, whereas only 59% (19 out of 32) of the LSTG increased their scores (Figure 3.6). This result might be considered as evidence of what Schneider and Shiffrin (1977) and Anderson (2010) claim in their theories: Human information processing and language acquisition involve gradual steps. Moreover, according to Schneider and Shiffrin's (1977) theory, low-intermediate listeners might not have passed the stage of controlled processing. As per Anderson's (2010) theory, they might remain at the lowest level, i.e. perception.

Finally, unless phonetic perception is automatically processed, there is almost no capacity to activate adequate listening strategies for listening tasks. As a result, low-intermediate listeners still considerably remain in controlled processing, and they still have to primarily focus on incoming phonetic information during the perception stage. Therefore, the greater the capacity used for perception and parsing in a single listening activity, the less capacity is available for comprehension itself. As previously discussed in the theory of Anderson (2010), when perception requires more time and cognitive burden, comprehension suffers. Considering the use of listening strategies compared to dictation in terms of information processing, perception must be

automatically processed so that there is a greater capacity to activate adequate listening strategies that depend on particular listening tasks. Therefore, listening strategy training might not be as effective as dictation training for low-intermediate listeners. These results indicate the complexity of the elements and factors related to improving EFL/ESL listening comprehension.

3.4.4 Discussion about the DTG and LSTG participants whose scores decreased in Week 15.

In Experiment I, both dictation training and listening strategy training were significantly effective for intermediate listeners under a certain condition in which training was provided 30 minutes a week for 13 weeks. Whilst the majority of the participants in both groups increased their scores in Week 15, many participants in both groups also decreased their scores in Week 15.

First, let us observe the DTG. As shown in Figure 3.3, 23% (12 out of 52) of the DTG participants decreased their scores in Week 15, and amongst them, 50% (6 out of 12) were upper-intermediate listeners. A comparison of Figures 3.4 and 3.7 suggests that when receiving a 30-minute dictation training once a week for 13 weeks, upper-intermediate listeners are more likely to decrease their scores. One possible reason for this could be explained with the score of 250 in the listening parts of the TOEIC®. Those participants who achieved TOEIC® listening scores of 250 or more in Week 1 might have overcome the level of perception, and this assumption is also supported by the various data of the DTG. For example, in the DTG, 6% of the participants (3 out of 52) showed no change in their scores in Weeks 1 and 15 (Figure 3.3). In fact, their scores were 210, 260 and 275 (Appendix D). Apart from one participant, the other two scores were more than 250. For upper-intermediate listeners, basic phonetic perception training, such as dictation training, might be less effective since the majority of them have already passed the level of perception. Thus, dictation training might be less effective for upper-intermediate listeners. This assumption and the results are consistent with the theories of Schneider and Shiffrin (1977) and Anderson (2010).

On the other hand, for the LSTG, Figure 3.5 shows that 28% (13 out of 46) of the LSTG participants decreased their scores in Week 15, and amongst them, 54% (seven out of 13) were upper-intermediate listeners (Figure 3.8). In both the DTG (50%) and LSTG (54%), approximately half of those who decreased their scores in Week 15 were upper-intermediate listeners (Figures 3.7 and 3.8). A comparison of Figures 3.6 and 3.8 implies that when receiving a 30-minute listening strategy training once a week for 13 weeks, upper-intermediate listeners are more likely to decrease their scores. As proven so far, if those participants who achieved TOEIC® listening scores of 250 or more in Week 1 might have overcome the level of perception, then theoretically speaking, listening strategy training could be specifically effective for upper-intermediate listeners. Although listening strategy training was significantly effective for the intermediate listeners in this study, its significance was not observed between the low- and upper-intermediate listeners, which is not consistent with the theories of Schneider and Shiffrin (1977) and Anderson (2010).

One possible reason for this is that there is a limitation to assuming and explaining this result based only on the TOEIC® listening score of 250. The complexity of the elements and factors related to improving EFL/ESL listening comprehension must be clarified through a deeper investigation. Therefore, the MALQ is employed for further analysis of the elements in Experiments II and III.

3.5 Summary

- S-1 Both dictation training and listening strategy training are significantly effective for intermediate listeners.
- S-2 Dictation training is significantly effective, especially for low-intermediate listeners.

A total of 108 Japanese learners of English participated in Experiment I. Only those who scored between 166 and 330 in the listening parts of the TOEIC® in Week 1 were selected after which they were divided into three groups, i.e. the CG (10), DTG

(52) and LSTG (46). During Weeks 2 and 14, the CG participants had no training other than their usual 90-minute class each week. The DTG participants received dictation training for 30 minutes in their usual 90-minute class each week, whereas the LSTG participants were taught the various types of listening strategies for 30 minutes in their 90-minute class each week. In Week 15, all the participants took the same listening parts of the TOEIC® as in Week 1.

The results show that 71% of the DTG participants and 70% of the LSTG participants increased their scores in Week 15 and that significance was observed in their increases of both the DTG and LSTG with a two-way ANOVA. Based on the idea that the score range from 166 to 330 in the listening parts of the TOEIC® is probably very broad to obtain a concrete result, the DTG and LSTG participants were further divided into two groups, i.e. low-intermediate listeners (who scored less than 250 in the listening parts of the TOEIC® in Week 1) and upper-intermediate listeners (who scored 250 or more in the listening parts of the TOEIC® in Week 1). In addition, the results of a two-way ANOVA show that, in the DTG, there was significant effectiveness of dictation training, especially for low-intermediate listeners. However, no significance was obtained between ‘low- and upper-intermediate listeners’ and ‘listening strategy training’ in the LSTG.

Chapter Four: Experiment II—Combined Training with the MALQ

4.1 Hypotheses

As stated in Chapter 3, both dictation training and listening strategy training were significantly effective for the Japanese EFL intermediate listeners in Experiment I. In addition, dictation training was significantly effective specifically for the lower-intermediate listeners who scored less than 250 in the listening parts of the TOEIC® in Week 1. When the results of Experiment I were presented at the 48th Annual Meeting of the British Association of Applied Linguistics in Southampton, England in 2012, Professor Suzanne Graham from Reading University suggested investigating the synergistic effect of both dictation training and listening strategy training. What is assumed, based on the theories of Schneider and Shiffrin (1977) and Anderson (2010), is that there are gradual steps in both human information processing and language acquisition. Due to the limited capability of information processing and language acquisition at the level of intermediate listeners, it does not allow them to select the best listening strategy or automatically combine multiple listening strategies whilst simultaneously dealing with perception. In fact, applying both approaches simultaneously would be extremely demanding for intermediate listeners since basic skills, such as perception, have not fully reached the automatic processing. Therefore, Experiment II posits the following hypothesis:

- H-1 For intermediate listeners, the combined training of dictation and listening strategy is not effective for improving EFL listening comprehension.

Next, as stated in Chapter 2, metacognitive knowledge and its usage is the key to becoming a successful listener. In Experiment II, the MALQ was used to investigate how the metacognitive awareness of the participants changes before and after the experiment. Although significance in the effectiveness of dictation training and listening strategy training was obtained in Experiment I, these two types of training were provided separately for two different groups of listeners.

In Experiment II, both dictation training and listening strategy training were combined and instructed to one group. As stated earlier, combined training can be too much information for intermediate listeners to process since they do not have enough capacity for the usage of metacognitive awareness; they could neither plan, monitor nor evaluate their comprehension sufficiently. Even though they could become aware of the importance of metacognitive awareness in EFL listening and acquire a certain degree of metacognitive knowledge through this combined training, they would not fully employ it whilst listening since basic skills, such as perception and parsing, have not reached the automatic processing.

4.2 Method

4.2.1 Participants.

The participants in Experiment II consisted of 57 first-year students (in the Faculty of Economics) at a Japanese private university who obtained the TOEIC® listening scores between 166 and 330 in April 2013. The same listening parts of the TOEIC® as in Experiment I were used to select the participants of Experiment II. The participants received four 90-minute English lessons per week in reading, writing, listening and computer-assisted language learning. Initially, there were more participants, but only those who attended all 15 classes between April and July 2013 were chosen for Experiment II. The participants were divided into two groups, i.e. 28 in the CG, with half of them belonging to the EFL reading class and the other half belonging to another EFL reading class and 29 in the dictation and listening strategy training group (D+LSTG), with half of them belonging to the general EFL class and the other half belonging to the English presentation class. All the lessons were presented in English as per the policy of the faculty. All the classes were part of the regular English curriculum, and none of the participants' major subject was English. Table 4.1 summarises the means, SDs and relative values of these two groups in Week 1.

Table 4.1

Numbers, Means and SDs of the CG and D+LSTG in Week 1 of Experiment II

| Group | <i>N</i> | <i>Mean</i> | <i>SD</i> |
|--------|----------|-------------|-----------|
| CG | 28 | 246.96 | 32.58 |
| D+LSTG | 29 | 257.24 | 39.29 |

4.2.2 Materials.

With the same materials as Experiment I, the MALQ was used for further analysis in Experiment II in addition to the scores of the listening parts of the TOEIC®. As introduced in Chapter 2, the MALQ is a questionnaire with 21 questions designed by Vandergrift, Goh, Mareschal and Tafaghodtari in 2006 for researchers and instructors to assess the extent to which language learners are aware of and can regulate the process of second language (L2) listening comprehension. It is also intended to serve as a self-assessment instrument in which learners can evaluate their awareness of the listening process and reflect on their strategy use when listening to L2 texts (p. 432). The 21 questions were categorised into five groups (Table 4.2):

- 1) Problem solving (guessing as well as monitoring these guesses)
- 2) Planning/evaluation (preparing to listen and assessing success)
- 3) Mental translation (translation from English to L1 when listening)
- 4) Person knowledge (confidence or anxiety and self-perception as a listener)
- 5) Directed attention (ways of concentrating on certain aspects of a task)

Table 4.2

Categories of Each Question in the MALQ

| Question No. | Categories | Question No. | Categories |
|--------------|---------------------|--------------|---------------------|
| 1 | Planning/evaluation | 11 | Mental translation |
| 2 | Directed attention | 12 | Directed attention |
| 3 | Person knowledge | 13 | Problem-solving |
| 4 | Mental translation | 14 | Planning/evaluation |
| 5 | Problem-solving | 15 | Person knowledge |
| 6 | Directed attention | 16 | Directed attention |
| 7 | Problem-solving | 17 | Problem-solving |
| 8 | Person knowledge | 18 | Mental translation |
| 9 | Problem-solving | 19 | Problem-solving |
| 10 | Planning/evaluation | 20 | Planning/evaluation |
| | | 21 | Planning/evaluation |

To prevent the participants from realising the purpose of each question, none of these categories are printed in the MALQ. The original MALQ is written in English, but the Japanese translation was added underneath each question to avoid any misunderstandings. Each question includes six scales (Table 4.3): 1 = Strongly disagree, 2 = Disagree, 3 = Slightly disagree, 4 = Partly agree, 5 = Agree and 6 = Strongly agree. For a full reference of the MALQ, see Appendix F.

Table 4.3

Excerpt of the MALQ

| | Strongly disagree 全く違う | Disagree 反対 | Slightly disagree どちらかという と反対 | Partly agree どちらか という と賛成 | Agree 賛成 | Strongly agree 全くその 通り |
|---|----------------------------------|-----------------------|--|---|--------------------|-------------------------------------|
| | 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. 聞く前に、どのようにして聞くのか頭の中でプランを立てる。 | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. I focus harder on the text when I have trouble understanding. わからなくなった時は、内容により集中する。 | 1 | 2 | 3 | 4 | 5 | 6 |
| ~~~~~ | | | | | | |
| 20. As I listen, I periodically ask myself if I am satisfied with my level of comprehension. リスニングの最中に、定期的に理解できているか自己チェックを入れる。 | 1 | 2 | 3 | 4 | 5 | 6 |
| 21. I have a goal in mind as I listen. 目的意識を持って聞いている。 | 1 | 2 | 3 | 4 | 5 | 6 |

4.2.3 Procedure.

The same materials and procedures in Experiment I were used for Experiment II. For the CG, the listening parts of the TOEIC® and MALQ were administered in Week 1 to select the participants and determine their metacognitive awareness in EFL listening before the experiment. The participants in the CG received lessons based on the class textbook from Weeks 2 to 14. Furthermore, for credibility, the same listening parts of the TOEIC® and MALQ were administered in Week 15. However, the answers of the initial test were not provided, and none of the participants were informed of this procedure at all.

For the D+LSTG, the same listening parts of the TOEIC® were also administered in Week 1 to select the participants for Experiment II. From Weeks 2 to 14, a combined 60-minute training (both dictation training and listening strategy training for 30 minutes each, with instructions in Japanese) with the same materials from Experiment I was conducted during the 90-minute lessons and for the remaining 30 minutes, they received lessons based on the class textbook for 13 weeks. In Experiment II, dictation training was provided prior to listening strategy training and following procedure (the same as Experiment I) was employed:

- Step 1: The D+LSTG participants were first informed about the purpose and subject of the training after which they listened to the relevant parts of the CD (attached to the textbook) only once. Whilst listening, they dictated some words/phrases/short sentences on the provided handouts, which I had created based on the textbook's exercise page. Then, the answers were provided.
- Step 2: The participants viewed the answers whilst listening to the CD for a second time to combine the written words/phrases/short sentences that they could not dictate *with* the acoustic information.

Step 3: The participants listened to the CD a third time *without* looking at the answers to comprehend the words/phrases/short sentences that they were unable to dictate purely through the acoustic information.

Next, listening strategy training was provided. The participants were first instructed on the logical aspects of the relevant listening strategies for that lesson. Then, they performed listening tasks that involved applying the presented listening strategies, after which they were provided with the answers and pertinent feedback.

In Week 15, the participants answered both the listening parts of the TOEIC® and MALQ. Although this test was identical to that of Week 1, the participants were not provided with the answers of the initial test and were not informed that the same test would be used in Week 15. This guaranteed the test's validity and allowed a comparison of the scores obtained in Weeks 1 and 15.

4.3 Results

The effectiveness of the combined teaching method of dictation training and listening strategy training for intermediate listeners in EFL listening was investigated. The data concerning the differences for the two groups (i.e. CG and D+LSTG) between Weeks 1 and 15 on the listening parts of the TOEIC® are presented, which is followed by an analysis and discussion of the data. After the discussion of the effectiveness of the combined teaching method, more detailed observations that focus on both low- and upper-intermediate listeners and the differences in the MALQ before and after the experiment are discussed.

First, a two-way ANOVA was employed with two factors, i.e. 'teaching methods' (for the CG and D+ LSTG) and 'before and after Experiment II'. Figure 4.1 presents the relative values of the CG and D+LSTG scores by comparing Weeks 1 and 15. Table 4.4 summarises the means, SDs and relative values of these two groups in Weeks 1 and 15. A quick look at Figure 4.1 shows almost an identical sharp rise in both the CG and D+LSTG.

Figure 4.1. Relative values of the CG and D+LSTG scores by comparing Weeks 1 and 15 of Experiment II.

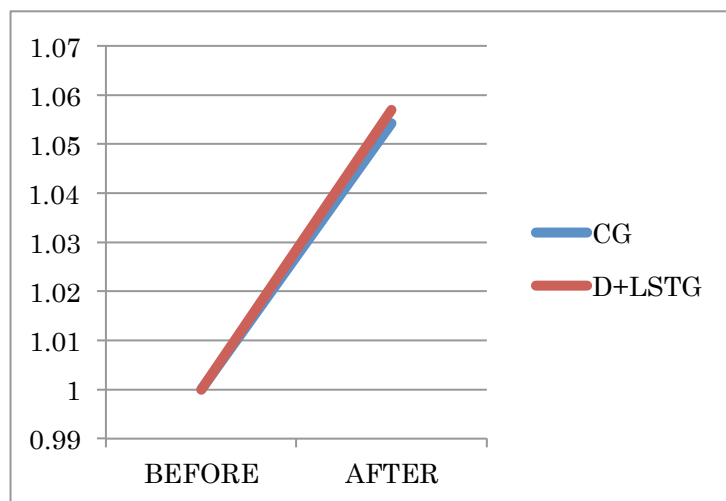


Table 4.4

Numbers, Means, SDs, Relative Values and Means of Difference of the CG and D+LSTG in Weeks 1 and 15 of Experiment II

| | Week 1 | | | Week 15 | | | |
|--------|----------|-------------|-----------|-------------|-----------|-----------------------|---------------------------|
| | <i>N</i> | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> | <i>Relative Value</i> | <i>Mean of difference</i> |
| CG | 28 | 246.96 | 32.58 | 260.36 | 39.49 | 1.05 | 13.40 |
| D+LSTG | 29 | 257.24 | 39.29 | 271.90 | 39.94 | 1.06 | 14.66 |

Table 4.5 shows the results of a two-way ANOVA conducted in accordance with the null hypothesis. The findings show that the combined teaching method is not significantly effective for intermediate listeners.

Table 4.5

Results of the Two-way ANOVA in Experiment II

| Source | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> |
|--------------------|-----------|-----------|-----------|----------|----------|
| A: Teaching Method | 3390.17 | 1 | 3390.17 | 1.41 | 0.24 |
| Error[S(A)] | 132688.78 | 55 | 2412.52 | | |
| B: Before & After | 5603.46 | 1 | 5603.46 | 11.87 | 0.00*** |
| AB | 11.35 | 1 | 11.35 | 0.02 | 0.88 |
| Error[BS(A)] | 25974.62 | 55 | 472.27 | | |

+ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .005$, **** $p < .001$

The effect size of Factor A (teaching method), Factor B (before/after) and the interaction between Factors A and B in Experiment II are small, small and none, respectively (Table 4.6).

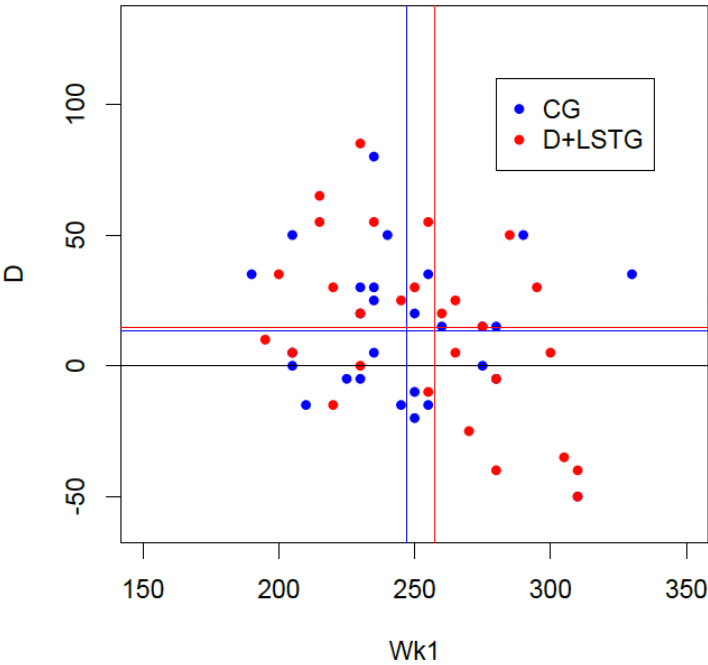
Table 4.6
Effect Sizes in Experiment II

| | |
|--|------|
| η^2 in Factor A (Teaching Method) | 0.13 |
| η^2 in Factor B (Before and After) | 0.22 |
| η^2 in Interaction of Factors A and B | 0.00 |

Effect Size (r): small = 0.10, medium = 0.30 and large = 0.50

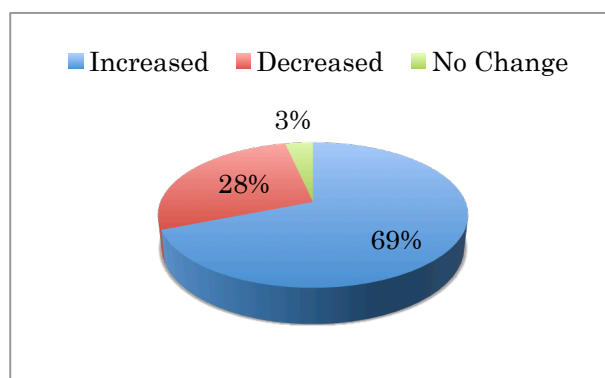
A quick look at Figure 4.2 shows that there are no regular patterns.

Figure 4.2. Scatter plot of Experiment II.



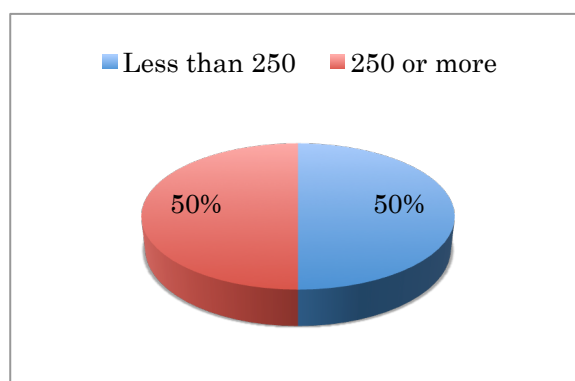
In the D+LSTG, there were 29 participants of which 20 (69%) increased their scores, eight (28%) decreased their scores and one (3%) showed no change in Week 15 (Figure 4.3).

Figure 4.3. Percentage of the D+LSTG participants' score change in Week 15 of Experiment II.



In the D+LSTG, 20 of the 29 participants increased their scores in Week 15, and 10 of these 20 participants (50%) were low-intermediate listeners (Figure 4.4).

Figure 4.4. Score proportion in Week 1 of the D+LSTG participants whose scores increased in Week 15 of Experiment II.



In the D+LSTG, eight participants (28%) decreased their scores in Week 15, and only one of these eight participants (12%) was a low-intermediate listener. The other seven participants (88%) were upper-intermediate listeners (Figure 4.5).

Figure 4.5. Score proportion in Week 1 of the D+LSTG participants whose scores decreased in Week 15 of Experiment II.

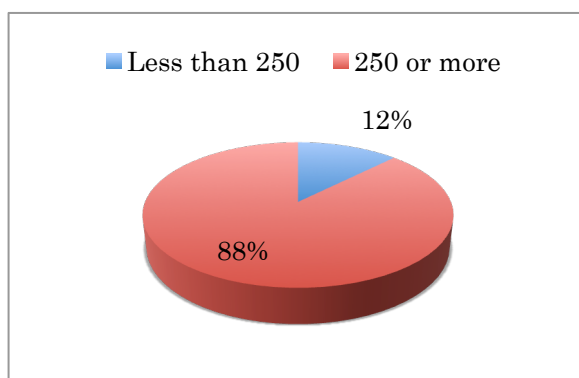


Figure 4.6 shows the pre- and post-mean scores of the CG on the MLAQ in Experiment II.

Figure 4.6. Pre- and post-mean scores of the CG on the MALQ in Experiment II.

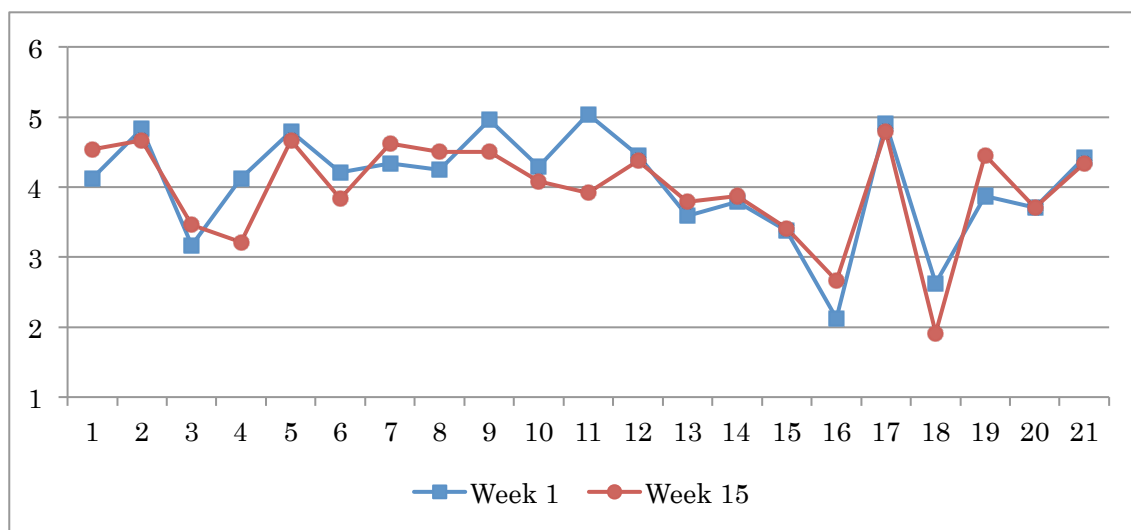


Table 4.7 shows a summary of the changes regarding the metacognitive awareness of the CG participants before and after the experiment. A closer look at the table shows that Nos. 15 and 20 show no change, the mean scale scores of Nos. 1, 3, 7, 8, 13, 14, 16 and 19 increased and that the others decreased after the experiment.

Table 4.7

Pre- and Post-Mean Scores of the CG on the MALQ in Experiment II

| CG | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|-------|-----|------|-----|------|------|------|-----|-----|------|------|------|------|-----|-----|-----|-----|------|------|-----|-----|------|
| Wk 1 | 4.1 | 4.8 | 3.2 | 4.1 | 4.8 | 4.2 | 4.3 | 4.3 | 5 | 4.3 | 5 | 4.5 | 3.6 | 3.8 | 3.4 | 2.1 | 4.9 | 2.6 | 3.9 | 3.7 | 4.4 |
| Wk 15 | 4.5 | 4.7 | 3.5 | 3.2 | 4.7 | 3.8 | 4.6 | 4.5 | 4.5 | 4.1 | 3.9 | 4.4 | 3.8 | 3.9 | 3.4 | 2.7 | 4.8 | 1.9 | 4.5 | 3.7 | 4.3 |
| D | 0.4 | -0.1 | 0.3 | -0.9 | -0.1 | -0.4 | 0.3 | 0.2 | -0.5 | -0.2 | -1.1 | -0.1 | 0.2 | 0.1 | 0 | 0.6 | -0.1 | -0.7 | 0.6 | 0 | -0.1 |

Figure 4.7 presents the pre- and post-mean scores of the D+LSTG on the MALQ in Experiment II.

Figure 4.7. Pre- and post-mean scores of the D+LSTG on the MALQ in Experiment II.

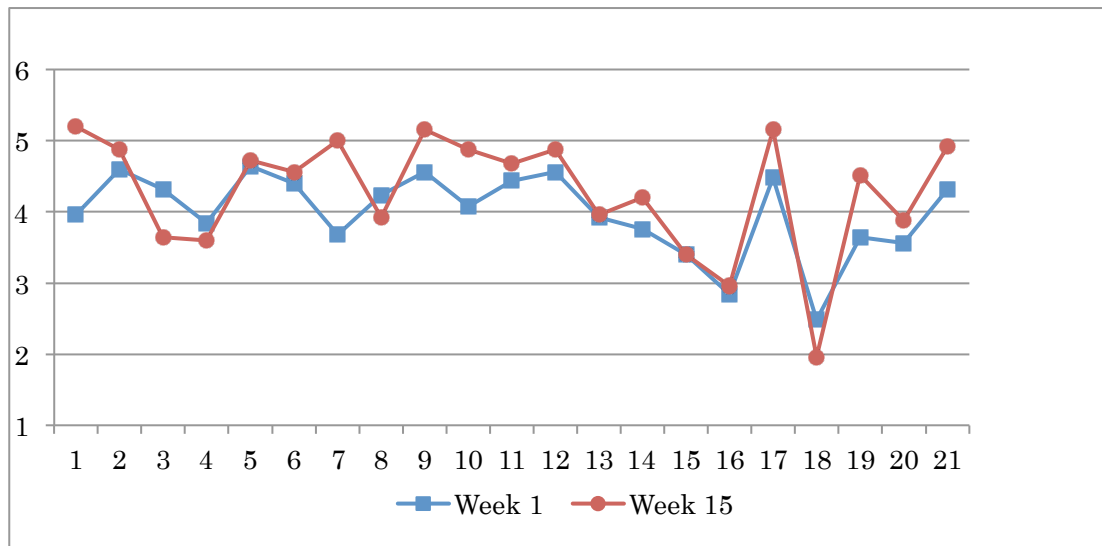


Table 4.8 shows a summary of the changes regarding the metacognitive awareness of the D+LSTG participants before and after the experiment. A closer look at the table shows that No. 15 show no change, the mean scale scores of Nos. 3, 4, 8 and 18 decreased and that the others increased after the experiment.

Table 4.8

Pre- and Post-Mean Scores of the D+LSTG on the MALQ in Experiment II

| D+LSTG | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|--------|-----|-----|------|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
| Wk 1 | 4 | 4.6 | 4.3 | 3.8 | 4.6 | 4.4 | 3.7 | 4.2 | 4.6 | 4.1 | 4.4 | 4.6 | 3.9 | 3.8 | 3.4 | 2.8 | 4.5 | 2.5 | 3.6 | 3.6 | 4.3 |
| Wk 15 | 5.2 | 4.9 | 3.6 | 3.6 | 4.7 | 4.6 | 5 | 3.9 | 5.2 | 4.9 | 4.7 | 4.9 | 4 | 4.2 | 3.4 | 3 | 5.2 | 2 | 4.5 | 3.9 | 4.9 |
| D | 1.2 | 0.3 | -0.7 | -0.2 | 0.1 | 0.2 | 1.3 | -0.3 | 0.6 | 0.8 | 0.3 | 0.3 | 0.1 | 0.4 | 0 | 0.2 | 0.7 | -0.5 | 0.9 | 0.3 | 0.6 |

Next, for further analysis on metacognitive awareness before and after the experiment, the D+LSTG participants were divided into two categories, i.e. the top 11 participants who increased their scores and the bottom eight participants who decreased their scores in Week 15. For more details of these participants, see Tables 4.9 and 4.10.

Table 4.9

Scores of the Top 11 D+LSTG Participants whose Scores Increased in Week 15 of Experiment II

| Participants | Week 1 | Week 15 | Difference | Rank |
|--------------|--------|---------|------------|------|
| 1 | 230 | 315 | 85 | 1 |
| 2 | 215 | 280 | 65 | 2 |
| 3 | 255 | 310 | 55 | 3 |
| 4 | 235 | 290 | 55 | 3 |
| 5 | 285 | 335 | 50 | 5 |
| 6 | 200 | 235 | 35 | 6 |
| 7 | 250 | 280 | 30 | 7 |
| 8 | 295 | 325 | 30 | 7 |
| 9 | 360 | 385 | 25 | 9 |
| 10 | 265 | 290 | 25 | 9 |
| 11 | 245 | 270 | 25 | 9 |

Table 4.10

Scores of the Bottom Eight D+LSTG Participants whose Scores Decreased in Week 15 of Experiment II

| Participants | Week 1 | Week 15 | Difference | Rank |
|--------------|--------|---------|------------|------|
| 1 | 310 | 260 | -50 | 1 |
| 2 | 280 | 240 | -40 | 2 |
| 3 | 310 | 270 | -40 | 2 |
| 4 | 305 | 270 | -35 | 4 |
| 5 | 270 | 245 | -25 | 5 |
| 6 | 220 | 205 | -15 | 6 |
| 7 | 255 | 245 | -10 | 7 |
| 8 | 280 | 275 | -5 | 8 |

Figure 4.8 presents the pre- and post-mean scores of the top 11 D+LSTG participants on the MALQ in Experiment II.

Figure 4.8. Pre- and post-mean scores of the top 11 D+LSTG participants on the MALQ in Experiment II.

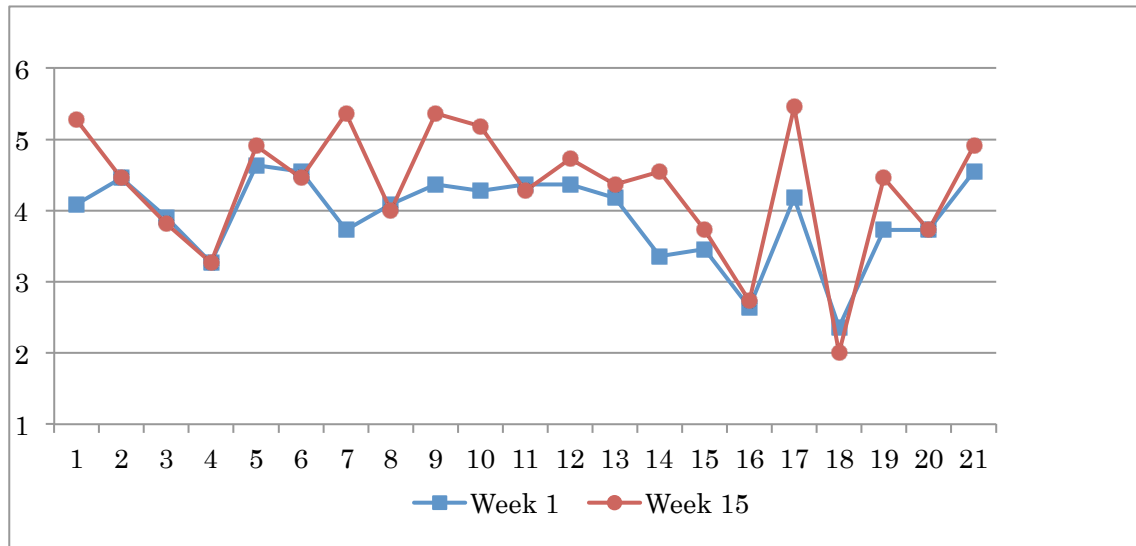


Table 4.11 shows a summary of the changes regarding the metacognitive awareness of the top 11 D+LSTG participants before and after the experiment. A closer look at the table shows that Nos. 2, 4, 6 and 20 showed no change, and the mean scale scores of Nos. 3, 8, 11 and 18 decreased, whereas the others increased after the experiment.

Table 4.11

Pre- and Post-Mean Scores of the Top 11 D+LSTG Participants whose Scores Increased on the MALQ in Experiment II

| D+LSTG Top 11 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|---------------|-----|-----|------|-----|-----|-----|-----|------|-----|-----|------|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
| Wk 1 | 4.1 | 4.5 | 3.9 | 3.3 | 4.6 | 4.5 | 3.7 | 4.1 | 4.4 | 4.3 | 4.4 | 4.4 | 4.2 | 3.4 | 3.5 | 2.6 | 4.2 | 2.4 | 3.7 | 3.7 | 4.5 |
| Wk 15 | 5.3 | 4.5 | 3.8 | 3.3 | 4.9 | 4.5 | 5.4 | 4 | 5.4 | 5.2 | 4.3 | 4.7 | 4.4 | 4.5 | 3.7 | 2.7 | 5.5 | 2 | 4.5 | 3.7 | 4.9 |
| D | 1.2 | 0 | -0.1 | 0 | 0.3 | 0 | 1.7 | -0.1 | 1.0 | 0.9 | -0.1 | 0.3 | 0.2 | 1.1 | 0.2 | 0.1 | 1.3 | -0.4 | 0.8 | 0 | 0.4 |

Next, Figure 4.9 presents the pre- and post-mean scores of the bottom eight D+LSTG participants on the MLAQ in Experiment II.

Figure 4.9. Pre- and post-mean scores of the bottom eight D+LSTG participants on the MLAQ in Experiment II.

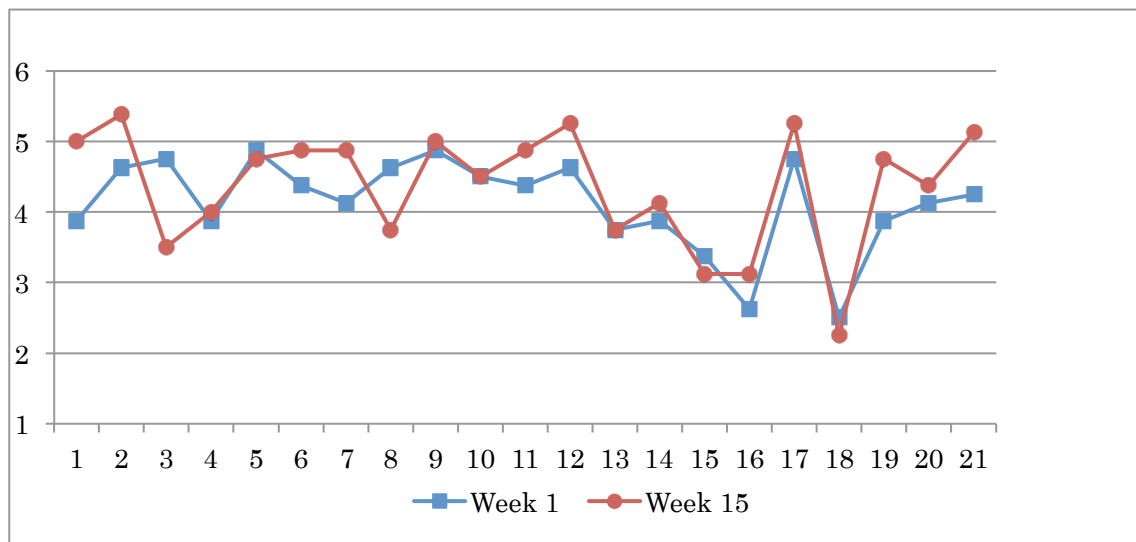


Table 4.12 presents a summary of the changes regarding the metacognitive awareness of the bottom eight D+LSTG participants before and after the experiment. A closer look at the table shows that Nos. 10 and 13 showed no change, and the mean scale scores of Nos. 3, 5, 8, 15 and 18 decreased, whereas the others increased after the experiment.

Table 4.12

Pre- and Post-Mean Scores of the Bottom Eight D+LSTG Participants whose Scores Decreased on the MALQ in Experiment II

| D+LSTG Bottom 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|--------------------|-----|-----|------|-----|------|-----|-----|------|-----|-----|-----|-----|-----|-----|------|-----|-----|------|-----|-----|-----|
| Wk 1 | 3.9 | 4.6 | 4.8 | 3.9 | 4.9 | 4.4 | 4.1 | 4.6 | 4.9 | 4.5 | 4.4 | 4.6 | 3.8 | 3.9 | 3.4 | 2.6 | 4.8 | 2.5 | 3.9 | 4.1 | 4.3 |
| Wk 15 | 5 | 5.4 | 3.5 | 4 | 4.8 | 4.9 | 4.9 | 3.8 | 5 | 4.5 | 4.9 | 5.3 | 3.8 | 4.1 | 3.1 | 3.1 | 5.3 | 2.3 | 4.8 | 4.4 | 5.1 |
| D | 1.1 | 0.8 | -1.3 | 0.1 | -0.1 | 0.5 | 0.8 | -0.8 | 0.1 | 0 | 0.5 | 0.7 | 0 | 0.2 | -0.3 | 0.5 | 0.5 | -0.2 | 0.9 | 0.3 | 0.8 |

Table 4.13 displays a summary of the changes regarding metacognitive awareness in the CG and D+LSTG. The D+LSTG are further divided into two groups.

Table 4.13

Summary of the MALQ before and after Experiment II

| Item No. | Categories | CG | D+LSTG | Top 11 | Bottom 8 |
|----------|---------------------|----|--------|--------|----------|
| 1 | Planning/evaluation | △ | ○ | ○ | ○ |
| 2 | Directed attention | ↓ | △ | — | △ |
| 3 | Person knowledge | △ | ↓ | ↓ | ↓↓ |
| 4 | Mental translation | ↓ | ↓ | — | △ |
| 5 | Problem-solving | ↓ | △ | △ | ↓ |
| 6 | Directed attention | ↓ | △ | — | △ |
| 7 | Problem-solving | △ | ○ | ○ | △ |
| 8 | Person knowledge | △ | ↓ | ↓ | ↓ |
| 9 | Problem-solving | ↓ | △ | ○ | △ |
| 10 | Planning/evaluation | ↓ | △ | △ | — |
| 11 | Mental translation | ↓↓ | △ | ↓ | △ |
| 12 | Directed attention | ↓ | △ | △ | △ |
| 13 | Problem-solving | △ | △ | △ | — |
| 14 | Planning/evaluation | △ | △ | ○ | △ |
| 15 | Person knowledge | — | — | △ | ↓ |
| 16 | Directed attention | △ | △ | △ | △ |
| 17 | Problem-solving | ↓ | △ | ○ | △ |
| 18 | Mental translation | ↓ | ↓ | ↓ | ↓ |
| 19 | Problem-solving | △ | △ | △ | △ |
| 20 | Planning/evaluation | — | △ | — | △ |
| 21 | Planning/evaluation | ↓ | △ | △ | △ |

○: Increased more than 1.0

△: Increased less than 1.0

—: No change

↓: Decreased less than 1.0

↓↓: Decreased over 1.0

4.4 Discussion

The results depicted in figures and tables are discussed in the following order:

1. Pre- and post-data for the CG and D+LSTG
2. Two-way ANOVA, effect size and scatter plot
3. The D+LSTG participants whose scores increased and decreased in Week 15
4. The MALQ

4.4.1 Discussion about the pre- and post-data for the CG and D+LSTG.

Although the participants of the CG only received regular lessons for 13 weeks, there was an improvement in listening comprehension in English. The TOEIC® listening scores in Week 15 reflected almost identical increases when compared with the scores of the D+LSTG participants (Figure 4.1). In fact, they actually improved as much as the D+LSTG participants who received dictation training and listening strategy training for 60 minutes a week for 13 weeks.

At this point, let us observe more concrete data. As shown in Table 4.4, the mean scores of the CG and D+LSTG were 246.96 and 257.24, respectively, in Week 1, whilst their mean scores in Week 15 were 260.36 and 271.90, respectively. To compare these data as the relative values, the mean scores of each group in Week 1 were treated as 1.00 and compared with those in Week 15. The relative values of the CG and D+LSTG were 1.05 and 1.06, respectively. This demonstrates that the combined training was not effective for intermediate listeners, though both types of training were effective when they were separately applied, as proven in Chapter 3. Thus, it is assumed that the intermediate learners in Experiment II may not have fully passed the level of perception or controlled processing, as stipulated in both Anderson's (2010) and Schneider and Shiffrin's (1977) theories. Although there is no difference between the CG and D+LSTG in Experiment III, the percentage of those who increased their scores in the D+LSTG in Week 15 of Experiment II was 69%, which is a similar percentage to Experiment I. The percentages of those who increased their scores in the DTG and LSTG in Week 15 of Experiment I was 71% and 70%, respectively. The participants in both Experiments I and II might have understood the importance of using the various types of listening strategies *theoretically*. However, since perception was not fully automatised, they probably lacked the capacity to freely deal with listening strategies. As previously observed in regard to listening (based on Anderson's theory), when the capacity used for perception in a single listening activity increases, the available capacity for utilisation decreases. In other words, when perception and parsing require more time and cognitive energy, comprehension is significantly affected. Until intermediate listeners can reach the automatised level

regarding perception and parsing, choosing the appropriate listening strategies based on the task would probably be very demanding. Thus, it can be concluded that the majority of the participants in Experiment II have not reached the level at which a sequence of cognitive activities in English listening comprehension can automatically occur without conscious attention and active control. This result is also consistent with Schneider and Shiffrin's (1977) and Anderson's (2010) theories in which human information processing and language acquisition involve gradual steps.

In the next section, the data is analysed from a different perspective.

4.4.2 Discussion about the two-way ANOVA, effect size and scatter plot.

A two-way ANOVA was conducted on two factors, i.e. 'teaching method' and 'before/after Experiment II'. The results reveal that there was no significance in the teaching method (Table 4.5). Although no significance was observed, this result does not contradict the theories of both Schneider and Shiffrin (1977) and Anderson (2010). As discussed in Experiment I, both dictation training and listening strategy training are significantly effective when they are separately applied. Since the participants in both Experiments I and II had not reached the level of utilisation where perception and parsing automatically occur, it resulted in an almost identical progress of the CG participants. Thus, it is natural to conclude that the participants did not find the combined teaching method beneficial in Experiment II. For them, having dictation training and listening strategy training provided separately was more manageable.

The effect size of Experiment II also supports that the combined training is not effective for intermediate listeners. As introduced in Chapter 3, effect size neither changes nor depends on the sample size. In Experiment II, the effect size of teaching method was 0.13, which means that the effect of the combined teaching method was small (Table 4.6). Furthermore, a closer examination of the scatter plot reveals that there is no regular pattern and that both the CG and D+LSTG participants increased and decreased their scores in Week 15 (Figure 4.2). Based on these findings, it is assumed that the score range from 166 to 330 in the listening parts of the TOEIC® is possibly very wide to induce any type of pattern or tendency. It is noticeable that the

elements and factors related to improving listening comprehension do not simply rely on the scores of the listening parts of the TOEIC®. Therefore, for further analysis, the score range of 166–330 was sub-divided into two ranges, i.e. low-intermediate (166–249) and upper-intermediate (250–330).

4.4.3 Discussion about the D+LSTG participants whose scores increased and decreased in Week 15.

In Experiment II, the combined teaching method was proven ineffective for EFL intermediate listeners under a certain condition of 60 minutes for 13 weeks. In addition, the scatter plot shows no regular pattern. Figure 4.3 shows that 20 of the 29 participants (69%) in the D+LSTG increased their scores, eight (28%) decreased their scores and only one (3%) showed no change in Week 15.

First, let us observe those participants in the D+LSTG who increased their scores in Week 15. Figure 4.4 presents the percentage of the D+LSTG participants whose scores increased in Week 15. Amongst them, half (i.e. 10 out of 20) were low-intermediate listeners. Judging from these data, the scores of the TOEIC® listening parts in Week 1 are not considered as key factors for measuring whether the combined teaching method is effective for EFL intermediate listeners.

Second, let us focus on the results of those participants who decreased their scores in Week 15. Figure 4.5 shows the percentage of the D+LSTG participants whose scores decreased in Week 15. Amongst them, 88% (seven out of eight) were upper-intermediate listeners, and 12% (one out of eight) were low-intermediate listeners. At this point, it is clear that the majority of the D+LSTG participants who scored more than 250 on the TOEIC® listening parts in Week 1 decreased their scores in Week 15. As per Anderson's (2010) theory, the score of 250 in the listening parts of the TOEIC® is again assumed as a border line of perception, as observed in Experiment I. However, listening strategies are very complicated and difficult to acquire compared to perception. Furthermore, it is natural to consider that the ability to use appropriate listening strategies based on a task takes more time than perception. Unless phonetic perception is automatically processed, there is almost no capacity to

activate adequate listening strategies for listening tasks. Thus, combined training is very demanding for intermediate listeners. Again, these results are consistent with Schneider and Shiffrin's (1977) and Anderson's (2010) claim that there are gradual steps in both human information processing and language acquisition.

Although there were a total of 57 participants in Experiment II, when focussing on those whose scores increased in the D+LSTG in Week 15, this number was reduced to 20. For further analysis, they were divided into two groups of low- and upper-intermediate listeners, based on their scores in Week 1, but there were only 10 in each group. Similarly, when focussing on those whose scores decreased in the D+LSTG in Week 15, they were a mere eight participants. For further analysis, when they were divided into two groups of low- and upper-intermediate listeners based on their scores in Week 1, there were only one and seven participants, respectively. These numbers are very small to induce any type of assumption. Therefore, as another element for further analysis, the results of the MALQ are discussed in the next section.

4.4.4 Discussion about the MALQ.

In this section, the results of the MALQ, which was conducted in both groups in Weeks 1 and 15, are analysed and discussed from a different perspective, i.e. metacognitive awareness before and after the experiment. As stated earlier, the MALQ is a questionnaire designed by Vandergrift, Goh, Mareschal and Tafaghodtari (2006) regarding metacognitive awareness in EFL/ESL listening with 21 items, six scales (ranging from 1 to 6)¹⁰ and five factors.

The discussion is made as per these five factors, which are mentioned below, by comparing the differences in the CG and D+LSTG before and after the experiment. Only the items whose difference is 0.5 or more are closely analysed since the difference below 0.5 is considered as nil in this study.

¹⁰ 1 = Strongly disagree, 2 = Disagree, 3 = Slightly agree, 4 = Partly agree, 5 = Agree and 6 = Strongly agree.

- 1) Directed Attention (ways of concentrating on certain aspects of a task)
- 2) Mental Translation (translation from English to L1 when listening)
- 3) Person Knowledge (confidence or anxiety and self-perception as a listener)
- 4) Planning and Evaluation (preparing to listen and assessing success)
- 5) Problem Solving (guessing as well as monitoring these guesses)

First, there are four items that investigate Directed Attention in the MALQ:

No. 2: I focus harder on the text when I have trouble understanding.

No. 6: When my mind wanders, I recover my concentration right away.

No. 12: I try to get back on track when I lose concentration.

No. 16: When I have difficulty understanding what I hear,
I give up and stop listening.

Table 4.14

Differences in the Post-Mean Scores in the CG and D+LSTG about Directed Attention

| Directed Attention | 2 | | 6 | | 12 | | 16 | |
|-----------------------|------|--------|------|--------|------|--------|-----|--------|
| | CG | D+LSTG | CG | D+LSTG | CG | D+LSTG | CG | D+LSTG |
| Wk 1 | 4.8 | 4.6 | 4.2 | 4.4 | 4.5 | 4.6 | 2.1 | 2.8 |
| Wk 15 | 4.7 | 4.9 | 3.8 | 4.6 | 4.4 | 4.9 | 2.7 | 3.0 |
| D | -0.1 | 0.3 | -0.4 | 0.2 | -0.1 | 0.3 | 0.6 | 0.2 |

Scale

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------|----------|-------------------|--------------|-------|----------------|
| Strongly disagree | Disagree | Slightly disagree | Partly agree | Agree | Strongly agree |

Table 4.14 shows that No. 16 in the CG shows a change with 0.6, which does not represent an improvement in Directed Attention since the post-mean score still remains in the range of 2 (Disagree). Instead, it implies that giving up occurs more easily when facing difficulties understanding and listening to English (Figure 4.6 and Tables 4.7 and 4.14). The post-mean scores of the other three items (i.e. Nos. 2, 6 and 12) show

no difference of more than 0.5. Based on these results, it is assumed that Directed Attention does not improve when intermediate listeners receive no special listening training. In addition, they continue having difficulties concentrating and greater tendencies to stop listening when facing difficulties understanding and listening to English.

Now, let us observe the results of the D+LSTG. All the items show an increase of no more than 0.3 (Table 4.14). Again, the results show that the combined training, under the conditions of Experiment II, has no effect for intermediate listeners to improve Directed Attention in metacognition: They also continue having difficulties concentrating and greater tendencies to stop listening when facing difficulties in understanding and listening to English.

Second, in regard to Mental Translation in metacognition, there are three items in the MALQ:

No. 4: I translate in my head as I listen.

No. 11: I translate key words as I listen.

No. 18: I translate word by word, as I listen.¹¹

Table 4.15

Differences in the Post-Mean Scores in the CG and D+LSTG about Mental Translation

| Mental Translation | 4 | | 11 | | 18 | |
|--------------------|------|--------|------|--------|------|--------|
| | CG | D+LSTG | CG | D+LSTG | CG | D+LSTG |
| Wk 1 | 4.1 | 3.8 | 5.0 | 4.4 | 2.6 | 2.5 |
| Wk 15 | 3.2 | 3.6 | 3.9 | 4.7 | 1.9 | 2.0 |
| D | -0.9 | -0.2 | -1.1 | 0.3 | -0.7 | -0.5 |

Scale

| | | | | | |
|-------------------|----------|-------------------|--------------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| Strongly disagree | Disagree | Slightly disagree | Partly agree | Agree | Strongly agree |

¹¹ sic

Table 4.15 shows that all three post-mean scores in the CG decreased by more than 0.5. However, this does not represent the deterioration of Mental Translation. Instead, it is an improvement. For example, let us look at No. 11 (i.e. I translate key words as I listen) whose change is the most prominent. Before the experiment, the mean score of the CG participants was 5.0, which means that they strongly agree to translate key words when listening. However, after the experiment, it changed to 3.9 (Slightly disagree). In addition, the post-mean scores of Nos. 4 and 18 in the CG changed by more than 0.5. As for No. 4, it changed from 4.1 to 3.2 (Slightly disagree) for the item: I translate in my head as I listen. As for No. 18, it changed from 2.6 to 1.9 (Strongly disagree) for the item: I translate word by word, as I listen. Based on these results, it is inferred that intermediate listeners can improve Mental Translation in metacognition even when they receive no special listening training.

Conversely, although No. 18 shows a change of 0.5 from 2.5 to 2.0 in the D+LSTG, the other items do not show any change of more than 0.5 (Table 4.15). These results show that the combined training, under the conditions of Experiment II, has no effect for intermediate listeners, especially in regard to improving Mental Translation in metacognition.

Third, there are three items regarding Person Knowledge in the MALQ:

No. 3: I find that listening is more difficult than reading, speaking, or writing in English.

No. 8: I feel that listening comprehension in English is a challenge for me.

No.15: I don't¹² feel nervous when I listen to English.

¹² sic

Table 4.16

Differences in the Post-Mean Scores in the CG and D+LSTG about Person Knowledge

| Person Knowledge | 3 | | 8 | | 15 | |
|------------------|-----|--------|-----|--------|-----|--------|
| | CG | D+LSTG | CG | D+LSTG | CG | D+LSTG |
| Wk 1 | 3.2 | 4.3 | 4.3 | 4.2 | 3.4 | 3.4 |
| Wk 15 | 3.5 | 3.6 | 4.5 | 3.9 | 3.4 | 3.4 |
| D | 0.3 | -0.7 | 0.2 | -0.3 | 0 | 0 |

Scale

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------|----------|-------------------|--------------|-------|----------------|
| Strongly disagree | Disagree | Slightly disagree | Partly agree | Agree | Strongly agree |

According to Table 4.16, none of the post-mean scores of the CG changed more than 0.5. Based on these results, it is assumed that Person Knowledge in metacognition does not seem to improve when intermediate listeners receive no special listening training: They remain nervous and find listening in English challenging without such training.

Now, let us observe the results of the D+LSTG. Although the post-mean score of No. 3 in the D+LSTG shows a change of 0.7 from 4.3 to 3.6 (Slightly disagree) for the item: I find that listening is more difficult than reading, speaking, or writing in English, No. 15 shows no change, and the post-mean score of No. 8 is no more than 0.5. These results show that the combined training, under the conditions of Experiment II, has no effect for intermediate listeners to improve Person Knowledge in metacognition: They remain nervous and find listening in English challenging.

Fourth, there are five items regarding Planning/Evaluation in the MALQ:

No. 1: Before I start to listen, I have a plan in my head for how I am going to listen.

No.10: Before listening, I think of similar texts that I may have listened to.

No.14: After listening, I think back to how I listened, and about what I might do differently next time.

No. 20: As I listen, I periodically ask myself if I am satisfied with my level of comprehension.

No. 21: I have a goal in mind as I listen.

Table 4.17

Differences in the Post-Mean Scores in the CG and D+LSTG about Planning/Evaluation

| Planning Evaluation | 1 | | 10 | | 14 | | 20 | | 21 | |
|------------------------|-----|--------|------|--------|-----|--------|-----|--------|------|--------|
| | CG | D+LSTG | CG | D+LSTG | CG | D+LSTG | CG | D+LSTG | CG | D+LSTG |
| Wk 1 | 4.1 | 4.0 | 4.3 | 4.1 | 3.8 | 3.8 | 3.7 | 3.6 | 4.4 | 4.3 |
| Wk 15 | 4.5 | 5.2 | 4.1 | 4.9 | 3.9 | 4.2 | 3.7 | 3.9 | 4.3 | 4.9 |
| D | 0.4 | 1.2 | -0.2 | 0.8 | 0.1 | 0.4 | 0 | 0.3 | -0.1 | 0.6 |

Scale

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------|----------|-------------------|--------------|-------|----------------|
| Strongly disagree | Disagree | Slightly disagree | Partly agree | Agree | Strongly agree |

According to Table 4.17, none of the post-mean scores of the CG changed by more than 0.5. These results show that Planning/Evaluation in metacognition does not seem to improve when intermediate listeners receive no special listening training: They neither plan how they listen nor evaluate how they listened.

Now, let us observe the D+LSTG. Based on several items, the combined training, under the conditions of Experiment II, seems to be effective for intermediate listeners to improve Planning/Evaluation in metacognition. For instance, No. 1 shows a prominent improvement from 4.0 to 5.2 (Agree) for the item: Before I start to listen, I have a plan in my head for how I am going to listen. This suggests that the D+LSTG participants agree that they gain the ability to plan how they are going to listen before listening. Although No. 10, with a 0.8 difference, still remains in the range of 4 (Partly agree), it shows a more concrete idea of how they plan and think about similar texts that they may have listened to before listening. In addition, No. 21, with a 0.6 difference, shows an improvement in regard to planning and having a goal in mind when listening. Although Nos. 14 and 20 show no change of more than 0.5, these results show that the combined training, under the conditions of Experiment II, is effective for intermediate listeners to improve planning but not evaluating/monitoring in metacognition.

Finally, there are six items regarding Problem Solving in the MALQ:

- No. 5: I use the words I understand to guess the meaning of the words I don't¹³ understand.
- No. 7: As I listen, I compare what I understand with what I know about the topic.
- No. 9: I use my experience and knowledge to help me understand.
- No. 13: As I listen, I quickly adjust my interpretation if I realise that it is not correct.
- No. 17: I use the general idea of the text to help me guess the meaning of the words that I don't¹⁴ understand.
- No. 19: When I guess the meaning of a word, I think back to everything else that I have heard¹⁵ to see if my guess makes sense.

Table 4.18

Differences in the Post-Mean Scores in the CG and D+LSTG about Problem Solving

| Problem Solving | 5 | | 7 | | 9 | | 13 | | 17 | | 19 | |
|-----------------|------|--------|-----|--------|------|--------|-----|--------|------|--------|-----|--------|
| | CG | D+LSTG | CG | D+LSTG | CG | D+LSTG | CG | D+LSTG | CG | D+LSTG | CG | D+LSTG |
| Wk 1 | 4.8 | 4.6 | 4.3 | 3.7 | 5.0 | 4.6 | 3.6 | 3.9 | 4.9 | 4.5 | 3.9 | 3.6 |
| Wk 15 | 4.7 | 4.7 | 4.6 | 5.0 | 4.5 | 5.2 | 3.8 | 4.0 | 4.8 | 5.2 | 4.5 | 4.5 |
| D | -0.1 | 0.1 | 0.3 | 1.3 | -0.5 | 0.6 | 0.2 | 0.1 | -0.1 | 0.7 | 0.6 | 0.9 |

Scale

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------|----------|-------------------|--------------|-------|----------------|
| Strongly disagree | Disagree | Slightly disagree | Partly agree | Agree | Strongly agree |

A closer look at Table 4.18 reveals that the CG shows no change of more than 0.5 apart from No. 19. The 0.5 change in No. 9 does not indicate an improvement since it changes from 5.0 to 4.5 (Partly agree) for the item: I use my experience and knowledge to help me understand. The change in No. 19 might mean that intermediate listeners possibly gain the ability to guess the meaning of a word and check if their

¹³ sic

¹⁴ sic

¹⁵ sic

guess makes sense at a certain degree even without any special listening training. However, the post-mean score indicates that this suggestion is only partly true. Based on these results, it is concluded that intermediate listeners are unable to improve Problem Solving in metacognition without any particular listening training.

Now, let us analyse the results of the D+LSTG. Table 4.18 shows that the most noticeable improvement was in No. 7 since it changed from 3.7 to 5.0 (Agree) for the item: As I listen, I compare what I understand with what I know about the topic. Both post-mean scores of Nos. 9 and 17 show differences of 0.6 and 0.7, respectively. As for No. 19, although the post-mean scores of both the CG and D+LSTG are the same (i.e. 4.5), the change of the D+LSTG is greater than the one of the CG. In addition, Nos. 5 and 13 show no change of more than 0.5. These results show that the combined listening training, under the conditions of Experiment II, is only somewhat effective for improving Problem Solving in metacognition since Nos. 5 and 13 do not change by more than 0.5.

Thus far, the participants in the CG and D+LSTG have been observed and discussed. Now let us briefly observe the features and changes regarding the metacognitive skills of those in the D+LSTG who increased their scores over 1.0 between the pre- and post-mean scores in the MALQ for further investigation. Figure 4.8, Tables 4.11 and 4.13 show that the top 11 D+LSTG participants made two prominent changes in Planning/Evaluation and three prominent changes in Problem Solving. As for Planning/Evaluation, No. 1 changed from 4.1 (Partly agree) to 5.3 (Agree) for the item: Before I start to listen, I have a plan in my head for how I am going to listen. In addition, No. 14 shows a 1.1 change from 3.4 (Slightly disagree) to 4.5 (Partly agree) for the item: After listening, I think back to how I listened, and about what I might do differently next time. As for the metacognitive skill of Planning/Evaluation, the difference between the D+LSTG participants and the top 11 D+LSTG participants is found in No. 14 or the evaluation of self-comprehension after listening. Thus, the metacognitive skill of thinking back to how one listened and planned to listen differently for the next time could be a vital skill for improving one's listening comprehension.

Prominent changes were also found in Problem Solving. No. 7, which changed from 3.7 (Slightly disagree) to 5.4 (Agree) for the item: As I listen, I compare what I understand with what I know about the topic. No. 9 also changed from 4.4 (Partly agree) to 5.4 (Agree) for the item: I use my experience and knowledge to help me understand. Furthermore, No. 17 changed from 4.2 (Partly agree) to 5.5 (Agree) for the item: I use the general idea of the text to help me guess the meaning of the words that I don't¹⁶ understand. Although the D+LSTG participants also showed an improvement in Nos. 7, 9 and 17 (Table 4.13), the top 11 participants in this group made prominent changes of more than 1.0 in Nos. 9 and 17. Furthermore, these top 11 D+LSTG participants showed more improvement (1.7) than the D+LSTG participants (1.3) in No. 7 (Tables 4.8 and 4.11). Therefore, in addition to the metacognitive skill of Planning/Evaluation, Problem Solving could be another vital skill for improving listening comprehension in EFL. Based on these results, an improvement in Planning/Evaluation and Problem Solving in metacognitive skills can be the key to become a successful listener.

4.5 Summary

- S-1 For intermediate listeners, the combined training of dictation training and listening strategy training is not effective.
- S-2 For intermediate listeners, combined listening training is not effective for improving metacognitive skills in EFL listening such as Directed Attention, Mental Translation and Person knowledge.
- S-3 An improvement in Planning/Evaluation and Problem Solving in metacognitive skills are vital for becoming advanced listeners in EFL listening

¹⁶ sic

A total of 57 Japanese learners of English participated in Experiment II. Only those who scored between 166 and 330 in the listening part of the TOEIC® in Week 1 were selected after which they were divided into two groups, i.e. the CG (28) and the D+LSTG (29). During Weeks 2 and 14, the CG participants had no training other than their usual 90-minute class each week. The D+LSTG participants received combined training of both dictation training and listening strategy training for approximately 30 minutes each in their usual 90-minute class. In Week 15, all the participants took the same listening parts of the TOEIC® as in Week 1.

Although 69% of the D+LSTG participants increased their scores in Week 15, both the CG and D+LSTG showed almost an identical change. The results reveal that the combined training has no significant effect on intermediate listeners. Although the effect was significant for intermediate listeners when these two types of training were separately provided for both groups in Experiment I, this was not the case when the training was combined. This finding indicates that the amount of information provided through combined training can be excessive to put into practice. In addition, significance was not observed in the increases of the D+LSTG with a two-way ANOVA. This result supports both theories of Schneider and Shiffrin (1977) and Anderson (2010) as well as Hypothesis 1.

Finally, it was also found that the combined listening training is hardly effective for improving metacognitive skills. However, based on the features in the MALQ of the top 11 participants who increased their scores in the listening parts of the TOEIC® in Week 15, it can be concluded that an improvement of Planning/Evaluation and Problem Solving is critical to become an advanced EFL listener.

Chapter Five: Experiment III—Dictation Training and Listening Strategy Training with the MALQ

5.1 Hypotheses

Experiment III investigates two aspects in particular: The reliability of the results obtained in Experiment I and the individual influence of dictation training and listening strategy training on metacognitive awareness in EFL listening. As stated in Chapter 3, both dictation training and listening strategy training were significantly effective for Japanese EFL intermediate listeners in Experiment I. In addition, dictation training was significantly effective, especially for lower-intermediate listeners who scored less than 250 in the listening parts of the TOEIC® in Week 1. These results of Experiment I are consistent with the theories of Schneider and Shiffrin (1977) and Anderson (2010) in which there are gradual steps in both human information processing and language comprehension. However, there were only 10 participants in the CG, and the MALQ was not conducted in Experiment I.

As for the synergetic influence of dictation training and listening strategy training on metacognitive awareness in EFL listening, it was observed that, in Experiment II, the combined listening training does not improve some metacognitive skills in EFL listening such as Directed Attention, Mental Translation and Person Knowledge. Nonetheless, since these two types of training were combined and provided to only one group, the influence of each training on metacognitive skills in EFL listening has not been investigated. Based on the theory of Schneider and Shiffrin (1977), dictation in listening is categorised as controlled processing (bottom-up processing) since it involves phonemic decoding, which requires conscious attention to phonemes, the smallest segments of sound (Ladefoged, 1982). In contrast, from a listening strategy perspective, the identification of individual words is mainly regarded as automatic processing (top-down processing), because it can only be possible after phonemic decoding occurs automatically without active control and conscious attention. The less automatic an activity becomes, the more time and cognitive energy it requires. Accordingly, if dictation training was provided more frequently (i.e. more

than once a week, more than 30 minutes and more than 13 weeks), then their phonemic decoding would become much more automatic. However, without being instructed on what metacognitive skills are and their effectiveness in EFL listening, it would be extremely unusual for the participants to begin spontaneously employing listening strategies in EFL, especially since Japanese learners of English are rarely instructed in listening strategies during junior and senior high school. In this regard, the influence of listening strategy training on metacognition in EFL listening is assumed to be greater than that of dictation training especially for upper-intermediate listeners. Therefore, the following hypotheses are posited in Experiment III:

- H-1 For intermediate listeners, both dictation training and listening strategy training are effective with significance.
- H-2 For low-intermediate listeners, dictation training is more effective.
- H-3 For upper-intermediate listeners, listening strategy training is more effective.
- H-4 Intermediate listeners with listening strategy training show a greater change in their metacognitive skills.

5.2 Method

5.2.1 Participants.

The participants in Experiment III consisted of 94 first-year students (in the Faculty of Economics) at a Japanese private university who were administered the listening parts of the TOEIC® in September 2013. Only those who scored between 166 and 330 were selected as the participants in Experiment III, as in Experiments I and II. None of the participants' major subject was English, and the classes were part of the regular English curriculum. The participants were divided into three groups, i.e. 23 in the CG, which was part of the EFL listening class; 34 in the DTG, with half of them belonging to the general English class and the other half belonging to the EFL reading

class and 37 in the LSTG, with half of them belonging to the EFL reading class and the other half belonging to the EFL listening class. All the lessons were presented in English as per the policy of the faculty. Initially there were more participants, but only those who attended all 15 classes between September 2013 and January 2014 were selected for Experiment III. Table 5.1 summarises the means, SDs and relative values of these three groups in Week 1.

Table 5.1

Numbers, Means and SDs of the CG, DTG and LSTG in Week 1 of Experiment III

| Group | <i>N</i> | <i>Mean</i> | <i>SD</i> |
|-------|----------|-------------|-----------|
| CG | 23 | 202.83 | 26.36 |
| DTG | 34 | 241.91 | 39.16 |
| LSTG | 37 | 242.84 | 32.22 |

A one-way ANOVA was conducted for their scores of the listening parts of the TOEIC®, and the results show that there was significance amongst these three groups ($F(2, 91) = 11.99, p < 0.001$). Through Ryan's method, significance amongst these three groups was also observed (Table 5.2). However, there was no significance between the DTG and LSTG. Although significance was observed between the CG and DTG and the CG and LSTG, respectively, only those who scored between 166 and 330 on the listening parts of the TOEIC® in Week 1 were selected for Experiment III.

Table 5.2

Results of Ryan's Method on the Three Groups before Experiment III

| | | | | | |
|--|----------|----------------------|----------|----------|-------------|
| | CG | DTG | LSTG | | |
| mean : | 202.83 | 241.91 | 242.84 | | |
| n : | 23 | 34 | 37 | | |
| <hr/> | | | | | |
| pair | <i>r</i> | <i>nominal level</i> | <i>t</i> | <i>p</i> | <i>sig.</i> |
| <hr/> | | | | | |
| LSTG–CG | 3 | 0.02 | 4.47 | 0.00 | s. |
| LSTG–DTG | 2 | 0.03 | 0.12 | 0.91 | n.s. |
| DTG –CG | 2 | 0.03 | 4.30 | 0.00 | s. |
| <hr/> | | | | | |
| <i>MSe = 1134.82, df = 91, significance level = 0.05</i> | | | | | |

5.2.2 Materials.

Both the MALQ (used in Experiment II) and the same listening parts of the TOEIC® (conducted in Experiments I and II) were administered for all three groups before and after Experiment III. In addition, for the DTG and LSTG, the same teaching materials in Experiment I were used.

5.2.3 Procedure.

For Experiment III, the same procedure used in Experiment I was conducted. In Week 1 of the second term in 2013, 94 participants were selected based on their TOEIC® listening scores. From Weeks 2 to 14, both the DTG and LSTG participants were trained for 30 minutes¹⁷ (with instructions in Japanese) as part of the 90-minute regular class. The procedure of the dictation training was as follows:

- Step 1: The DTG participants were first informed about the purpose and subject of the training, after which they listened to the relevant parts of the CD (attached to the textbook) only once. Whilst listening, they dictated some words/phrases/short sentences on the provided handouts, which I had created based on the textbook's exercise page. Then, the answers were provided.
- Step 2: The participants viewed the answers whilst listening to the CD for a second time to combine the words/phrases/short sentences that they were unable to dictate *with* the acoustic information.
- Step 3: The participants listened to the CD a third time *without* looking at the answers to comprehend the words/phrases or short sentences that they were unable to dictate purely through the acoustic information.

¹⁷ Due to the inflexible class syllabus, only 30 minutes were allowed for the experiment.

The LSTG participants were first instructed on the logical aspects of the relevant listening strategies for that lesson. Then, they performed listening tasks that involved applying the instructed listening strategies, after which they were provided with the answers and pertinent feedback.

In Week 15, the participants answered the listening parts of the TOEIC®. Although this test was identical to that of Week 1, the participants were not provided with the answers of the initial test and were not informed that the same test would be used in Week 15. This guaranteed the test's validity and allowed us to compare the scores obtained in Weeks 1 and 15.

5.3 Results

The effectiveness of the two types of teaching methods (i.e. dictation training and listening strategy training) for intermediate listeners in EFL listening were investigated. The data concerning the differences for the three groups (i.e. the CG, DTG and LSTG) between Weeks 1 and 15 on the listening parts of the TOEIC® are presented, followed by an analysis and a discussion of the data. After the discussion of the effectiveness regarding these two types of teaching methods, more detailed observations that focus on both low- and upper-intermediate listeners are made.

First, a two-way ANOVA was conducted with two factors, i.e. 'teaching methods' (for the CG, DTG and LSTG) and 'before and after Experiment III'. Figure 5.1 presents the relative values of the CG, DTG and LSTG scores by comparing Weeks 1 and 15. Table 5.3 summarises the means, SDs and relative values of these three groups in Weeks 1 and 15. A quick look at Figure 5.1 shows sharp increases in both the DTG and LSTG.

Figure 5.1. Relative values of the CG, DTG and LSTG scores by comparing Weeks 1 and 15 of Experiment III.

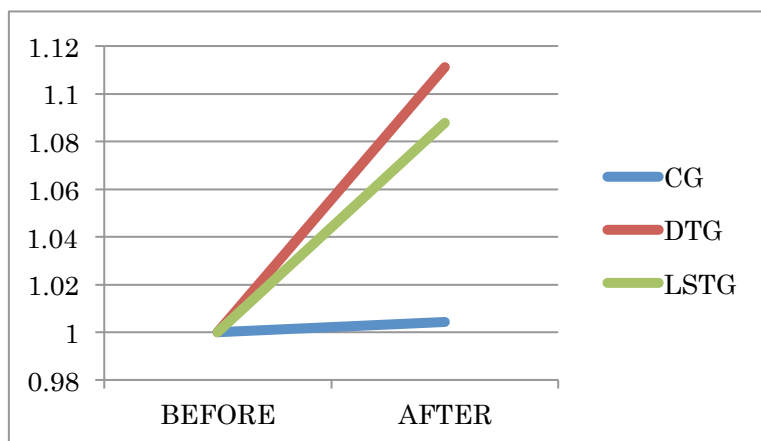


Table 5.3

Numbers, Means, SDs, Relative Values and Means of Differences of the CG, DTG and LSTG in Weeks 1 and 15 of Experiment III

| | Week 1 | | | Week 15 | | | |
|------|----------|-------------|-----------|-------------|-----------|-----------------------|---------------------------|
| | <i>N</i> | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> | <i>Relative Value</i> | <i>Mean of difference</i> |
| CG | 23 | 202.83 | 26.36 | 203.70 | 31.20 | 1.00 | 0.87 |
| DTG | 34 | 241.91 | 39.16 | 268.82 | 47.26 | 1.11 | 26.91 |
| LSTG | 37 | 242.84 | 32.22 | 264.19 | 30.88 | 1.09 | 21.35 |

Table 5.4 presents the results of the two-way ANOVA and Ryan's method, which were conducted in accordance with the null hypothesis (Table 5.5). The findings show that dictation training is more effective than listening strategy training and that both the training methods are significantly effective for intermediate listeners.

Table 5.4

Results of the Two-way ANOVA in Experiment III

| Source | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> |
|---------------------|-----------|-----------|-----------|----------|-----------|
| A: Teaching Methods | 104964.71 | 2 | 52482.36 | 25.50 | 0.00 **** |
| Error[S(A)] | 187325.66 | 91 | 2058.52 | | |
| B: Before & After | 12080.12 | 1 | 12080.12 | 24.22 | 0.00 **** |
| AB | 5647.77 | 2 | 2823.89 | 5.66 | 0.01 *** |
| Error[BS(A)] | 45382.89 | 91 | 498.71 | | |

+ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .005$, **** $p < .001$

Table 5.5

Results of Ryan's Method in Experiment III

| | | | | | |
|----------|----------|----------------------|----------|----------|-------------|
| | CG | | DTG | | LSTG |
| mean : | 203.261 | | 255.368 | | 253.514 |
| n : | 46 | | 68 | | 74 |
| <hr/> | | | | | |
| pair | <i>r</i> | <i>nominal level</i> | <i>t</i> | <i>p</i> | <i>sig.</i> |
| <hr/> | | | | | |
| DTG—CG | 3 | 0.02 | 6.02 | 0.00 | s. |
| DTG—LSTG | 2 | 0.03 | 0.24 | 0.81 | n.s. |
| LSTG—CG | 2 | 0.03 | 5.90 | 0.00 | s. |

 $MSe = 2058.52$, $df = 91$, *significance level* = 0.05

The effect size of Factor A (teaching methods), Factor B (before and after the experiment) and the interaction between Factors A and B are large, small and small, respectively (Table 5.6).

Table 5.6

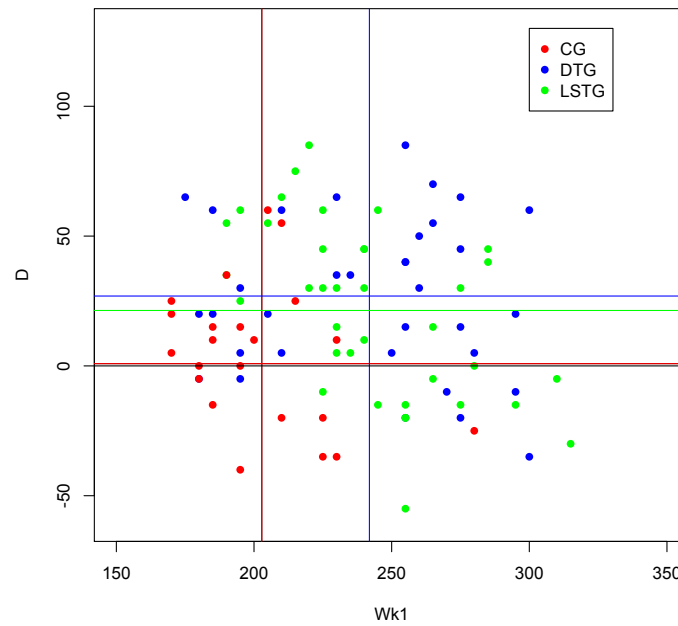
Effect Sizes in Experiment III

| | |
|--|------|
| η^2 in Factor A (Teaching Methods) | 2.31 |
| η^2 in Factor B (Before and After) | 0.27 |
| η^2 in Interaction of Factors A and B | 0.13 |

Effect Size (r): small = 0.10, medium = 0.30 and large = 0.50

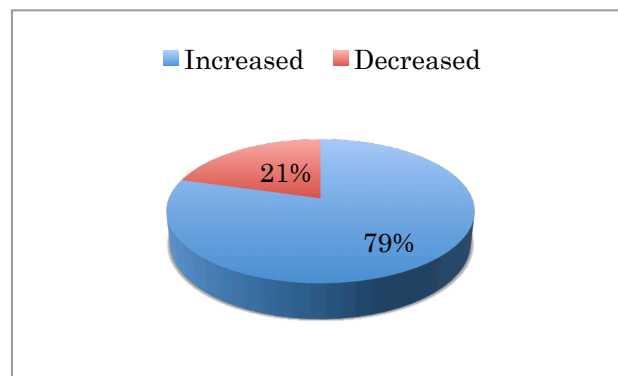
A quick look at Figure 5.2 shows that there are no regular patterns.

Figure 5.2. Scatter plot of Experiment III.



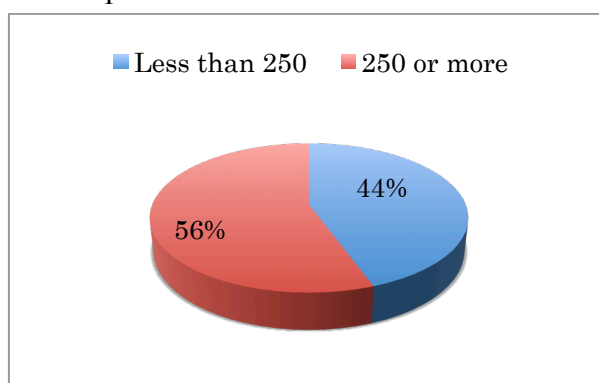
In the DTG, there were 34 participants, i.e. 27 participants (79%) increased their scores and seven participants (21%) decreased their scores in Week 15 (Figure 5.3).

Figure 5.3. Percentage of the DTG participants' score change in Week 15 of Experiment III.



In the DTG, 27 of the 34 participants increased their scores in Week 15, and 12 of these 27 participants (44%) scored less than 250, whereas 15 participants (56%) scored 250 or more in Week 1 (Figure 5.4).

Figure 5.4. Score proportion in Week 1 of the DTG participants whose scores increased in Week 15 of Experiment III.



Another two-way ANOVA was conducted for further investigation on the effect of dictation training between low- and upper-intermediate listeners based on their scores of the listening parts of the TOEIC® in Week 1. There were 14 upper- and 20 low- intermediate listeners in the DTG. The results show that there was no significance in the interaction between these two groups (Table 5.7).

Table 5.7

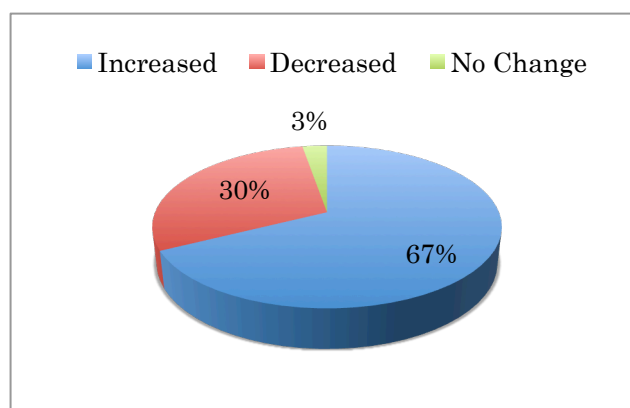
Results of the Two-way ANOVA on the Effect of Dictation Training between Low- and Upper-Intermediate Listeners in Experiment III

| Source | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> |
|-------------------------------|-----------|-----------|-----------|----------|-----------|
| A: More & Less than 250[S(A)] | 76200.01 | 1 | 76200.01 | 74.11 | 0.00 **** |
| Error[S(A)] | 32903.30 | 32 | 1028.23 | | |
| B: Before & After | 12246.48 | 1 | 12246.48 | 25.90 | 0.00 ** |
| AB | 67.06 | 1 | 67.07 | 0.14 | 0.71 |
| Error[BS(A)] | 15133.30 | 32 | 472.92 | | |

+*p* < .10, **p* < .05, ***p* < .01, ****p* < .005, *****p* < .001

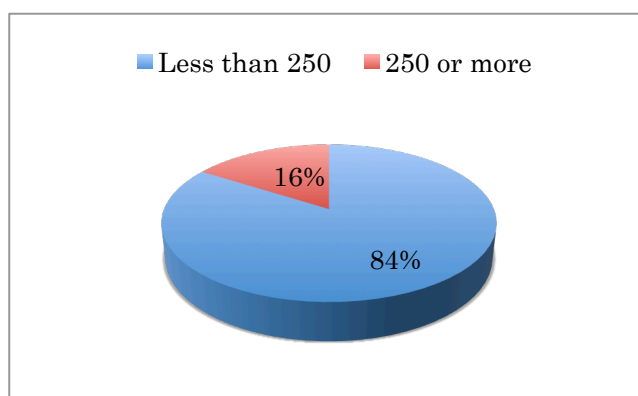
On the contrary, in the LSTG, there were 37 participants of which 25 (67%) increased their scores, 11 participants (30%) decreased their scores and one participant (3%) showed no change in Week 15 (Figure 5.5).

Figure 5.5. Percentage of the LSTG participants' score change in Week 15 of Experiment III.



In the LSTG, 25 of the 37 participants increased their scores in Week 15, as mentioned earlier (Figure 5.5), and 21 of these 25 participants (84%) were low-intermediate listeners, whilst four participants (16%) were upper-intermediate listeners (Figure 5.6).

Figure 5.6. Score proportion in Week 1 of the LSTG participants whose scores increased in Week 15 of Experiment III.



Another two-way ANOVA was conducted for further investigation on the effect of listening strategy training between low- and upper-intermediate listeners based on their scores on the listening parts of the TOEIC® in Week 1. There were 14 upper- and 23 low-intermediate listeners in the LSTG. The results show that there was significance in the interaction between the two groups at the 0.1% level (Table 5.8).

Table 5.8

Results of the Two-way ANOVA on the Effect of Listening Strategy Training between Low- and Upper-Intermediate Listeners in Experiment III

| Source | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> |
|-------------------------------|-----------|-----------|-----------|----------|-----------|
| A: More & Less than 250[S(A)] | 20109.62 | 1 | 20109.62 | 22.10 | 0.00**** |
| Error[S(A)] | 31851.86 | 35 | 910.05 | | |
| B: Before & After | 4724.36 | 1 | 4724.36 | 12.97 | 0.00**** |
| AB | 6994.63 | 1 | 6994.63 | 19.21 | 0.00 **** |
| Error[BS(A)] | 12746.58 | 35 | 364.19 | | |

+ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .005$, **** $p < .001$

Therefore, means for the interaction between ‘low/upper intermediate listeners’ and ‘before/after the experiment’ as well as the simple main effect of the interaction between Factors A and B were calculated. The results show that there was significance on the effect of listening strategy training for upper-intermediate listeners at the 0.1% level (Tables 5.9 and 5.10).

Table 5.9

Means of the Interaction between Factors A (Low- and Upper-Intermediate Listeners) and B (before/after the Experiment) in the LSTG of Experiment III

[Factor A = 1] (Upper-Intermediate Listeners)

| | | |
|--------|--------|--------|
| B -> | 1 | 2 |
| mean : | 276.43 | 272.86 |
| n : | 14 | 14 |

[Factor A = 2] (Low-Intermediate Listeners)

| | | |
|--------|--------|--------|
| B -> | 1 | 2 |
| mean : | 222.39 | 258.91 |
| n : | 23 | 23 |

Table 5.10

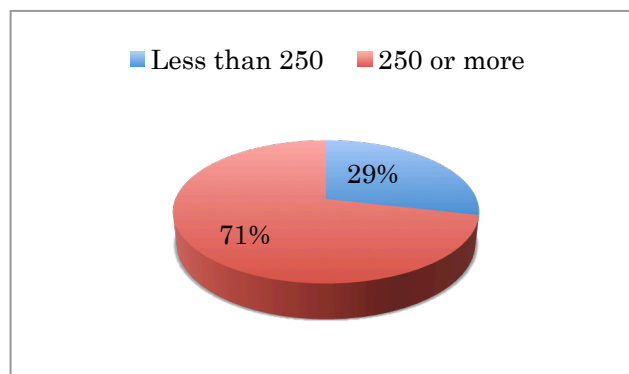
Simple Main Effect Test of Listening Strategy Training between Low- and Upper-Intermediate Listeners in Experiment III

| Effect | SS | df | MS | F | p |
|--------|----------|----|----------|-------|-----------|
| A(b1) | 25412.12 | 1 | 25412.12 | 39.89 | 0.00 **** |
| A(b2) | 1692.14 | 1 | 1692.14 | 2.66 | 0.11 |
| Error | | 70 | 637.12 | | |
| B(a1) | 11607.99 | 1 | 11607.99 | 31.87 | 0.00 **** |
| B(a2) | 111.00 | 1 | 111.00 | 0.31 | 0.58 |
| Error | | 35 | 364.19 | | |

+ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .005$, **** $p < .001$

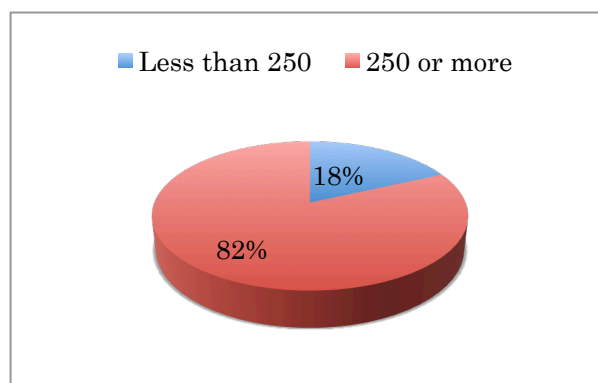
Although the majority of the participants in both the DTG (79%) and LSTG (67%) improved their scores in Week 15 (Figures 5.3 and 5.5), it was also observed that many participants in both groups decreased their scores in Week 15. For example, in the DTG, seven participants decreased their scores in Week 15, and five out of these seven participants (71%) were upper-intermediate listeners (Figure 5.7 below).

Figure 5.7. Score proportion in Week 1 of the DTG participants whose scores decreased in Week 15 of Experiment III.



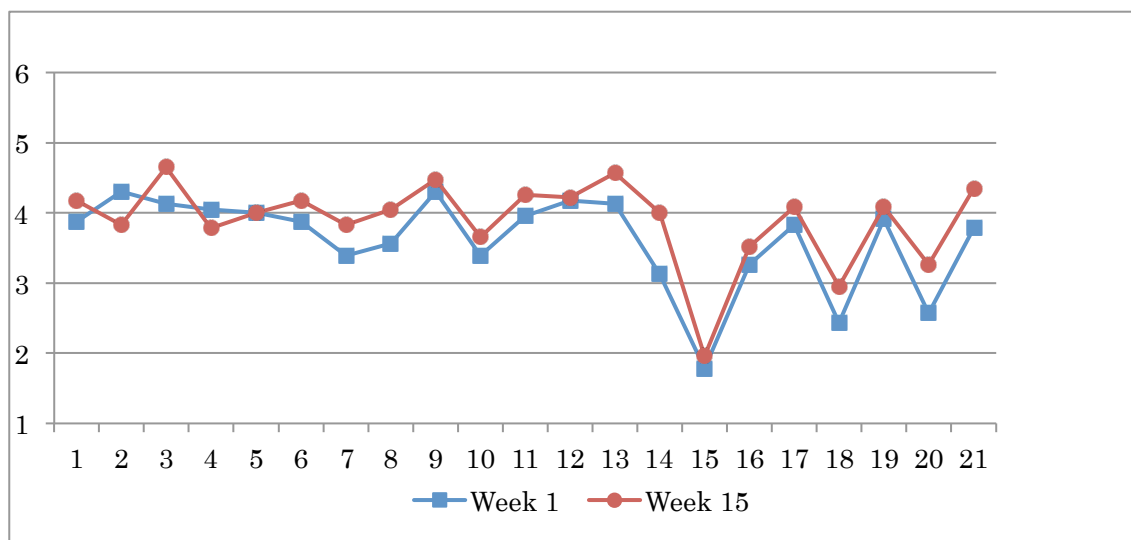
On the other hand, in the LSTG, 11 participants decreased their scores in Week 15, and nine of these 11 participants (82%) were upper-intermediate listeners, whereas two of these 11 participants (18%) were low-intermediate listeners (Figure 5.8).

Figure 5.8. Score proportion in Week 1 of the LSTG participants whose scores decreased in Week 15 of Experiment III.



A quick look at Figure 5.9 shows the pre- and post-mean scores of the CG on the MLAQ in Experiment III.

Figure 5.9. Pre- and post-mean scores of the CG on the MALQ in Experiment III.



According to Table 5.11, Nos. 5 and 12 show no change, the mean scores of Nos. 2 and 4 decreased and the others increased after the experiment.

Table 5.11

Pre- and Post-Mean Scores of the CG on the MALQ in Experiment III

| CG | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|-------|-----|------|-----|------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Wk 1 | 3.9 | 4.3 | 4.1 | 4 | 4 | 3.9 | 3.4 | 3.6 | 4.3 | 3.4 | 4 | 4.2 | 4.1 | 3.1 | 1.8 | 3.3 | 3.8 | 2.4 | 3.9 | 2.6 | 3.8 |
| Wk 15 | 4.2 | 3.8 | 4.7 | 3.8 | 4 | 4.2 | 3.8 | 4 | 4.5 | 3.7 | 4.3 | 4.2 | 4.6 | 4 | 2 | 3.5 | 4.1 | 3 | 4.1 | 3.3 | 4.3 |
| D | 0.3 | -0.5 | 0.6 | -0.2 | 0 | 0.3 | 0.4 | 0.4 | 0.2 | 0.3 | 0.3 | 0 | 0.5 | 0.9 | 0.2 | 0.2 | 0.3 | 0.6 | 0.2 | 0.7 | 0.5 |

Figure 5.10 presents the pre- and post-mean scores of the DTG on the MALQ in Experiment III.

Figure 5.10. Pre- and post-mean scores of the DTG on the MALQ in Experiment III.

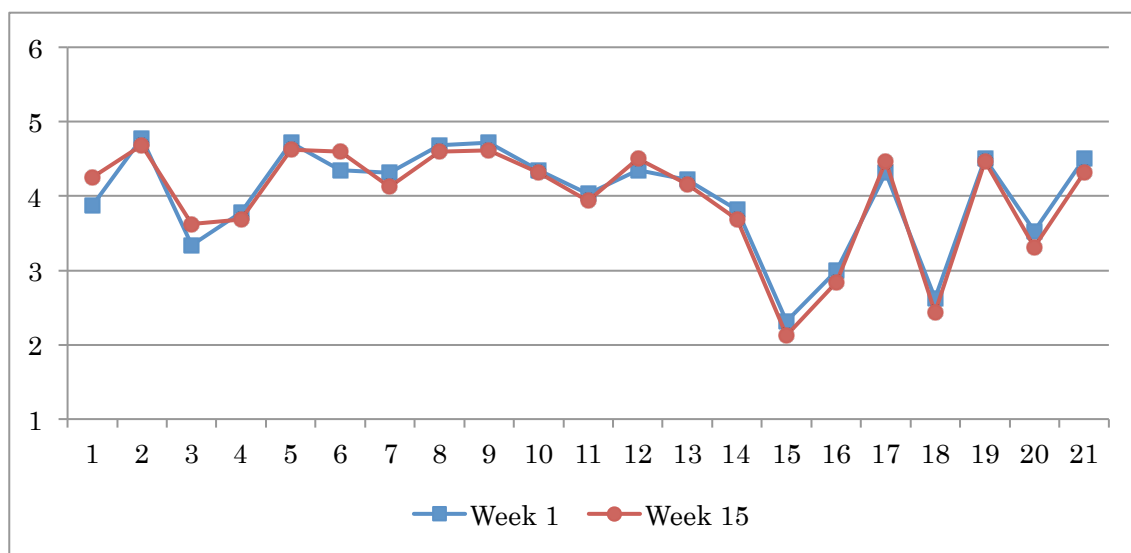


Table 5.12 displays that Nos. 10, 13 and 19 show no change, the mean scores of Nos. 1, 3, 6, 12 and 17 increased and the others decreased after the experiment.

Table 5.12

Pre- and Post-Mean Scores of the DTG on the MALQ in Experiment III

| DTG | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|-------|-----|------|-----|------|------|-----|------|------|------|-----|------|-----|-----|------|------|------|-----|------|-----|------|------|
| Wk 1 | 3.9 | 4.8 | 3.3 | 3.8 | 4.7 | 4.3 | 4.3 | 4.7 | 4.7 | 4.3 | 4 | 4.3 | 4.2 | 3.8 | 2.3 | 3 | 4.3 | 2.6 | 4.5 | 3.5 | 4.5 |
| Wk 15 | 4.3 | 4.7 | 3.6 | 3.7 | 4.6 | 4.6 | 4.1 | 4.6 | 4.6 | 4.3 | 3.9 | 4.5 | 4.2 | 3.7 | 2.1 | 2.8 | 4.5 | 2.4 | 4.5 | 3.3 | 4.3 |
| D | 0.4 | -0.1 | 0.3 | -0.1 | -0.1 | 0.3 | -0.2 | -0.1 | -0.1 | 0 | -0.1 | 0.2 | 0 | -0.1 | -0.2 | -0.2 | 0.2 | -0.2 | 0 | -0.2 | -0.2 |

Figure 5.11 presents the pre- and post-mean scores of the LSTG on the MALQ in Experiment III.

Figure 5.11. Pre- and post-mean scores of the LSTG on the MALQ in Experiment III.

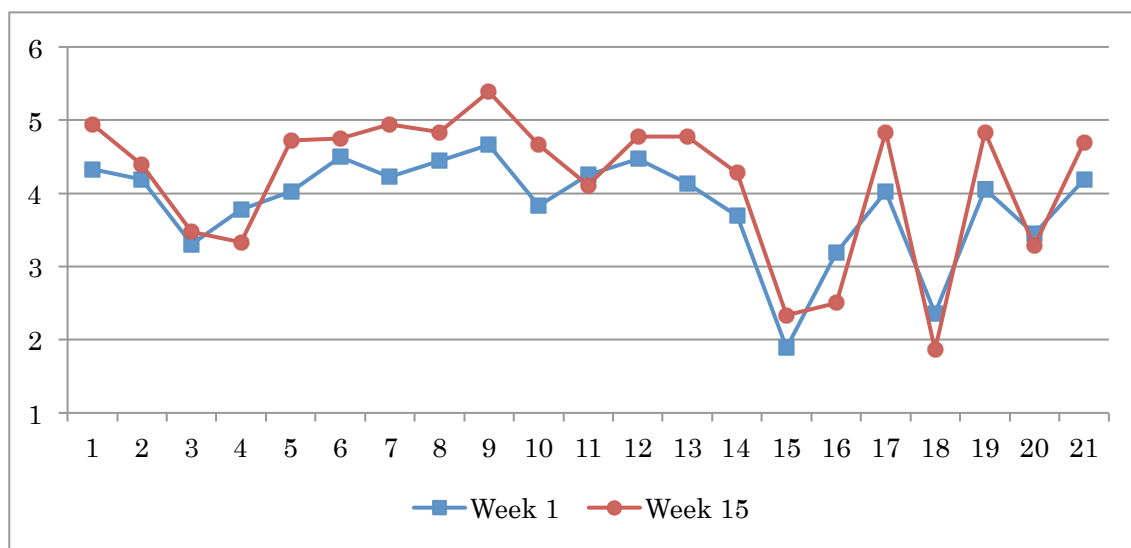


Table 5.13 shows that the mean scores of Nos. 4, 11, 16, 18 and 20 decreased, whereas the others increased after the experiment.

Table 5.13

Pre- and Post-Mean Scores of the LSTG on the MALQ in Experiment III

| LSTG | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|-------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|------|-----|------|-----|
| Wk 1 | 4.3 | 4.2 | 3.3 | 3.8 | 4 | 4.5 | 4.2 | 4.4 | 4.7 | 3.8 | 4.3 | 4.5 | 4.1 | 3.7 | 1.9 | 3.2 | 4 | 2.4 | 4.1 | 3.4 | 4.2 |
| Wk 15 | 4.9 | 4.4 | 3.5 | 3.3 | 4.7 | 4.8 | 4.9 | 4.8 | 5.4 | 4.7 | 4.1 | 4.8 | 4.8 | 4.3 | 2.3 | 2.5 | 4.8 | 1.9 | 4.8 | 3.3 | 4.7 |
| D | 0.6 | 0.2 | 0.2 | -0.5 | 0.7 | 0.3 | 0.7 | 0.4 | 0.7 | 0.9 | -0.2 | 0.3 | 0.7 | 0.6 | 0.4 | -0.7 | 0.8 | -0.5 | 0.8 | -0.1 | 0.5 |

For further analysis on metacognitive awareness before and after the experiment, the DTG participants were divided into two categories, i.e. the top 10 participants who improved their scores and the bottom seven participants who lowered their scores in Week 15. Amongst the top 10 participants, two of the original 10 participants were excluded since there was no MALQ data for these individuals. Therefore, the top 11th and 12th participants were included in the top 10 list. In addition, only seven

participants decreased their scores in the DTG in Week 15. For more details on these participants, see Tables 5.14 and 5.15.

Table 5.14

Scores of the Top 10 DTG Participants whose Scores Increased in Week 15 of Experiment III

| Participants | Week 1 | Week 15 | Differences | Rank |
|--------------|--------|---------|-------------|------|
| 1 | 255 | 340 | 85 | 1 |
| 2 | 265 | 335 | 70 | 2 |
| 3 | 275 | 340 | 65 | 3 |
| 4 | 230 | 295 | 65 | 3 |
| 5 | 175 | 240 | 65 | 3 |
| 6 | 185 | 245 | 60 | 6 |
| 7 | 265 | 320 | 55 | 7 |
| 8 | 260 | 310 | 50 | 8 |
| 9 | 275 | 320 | 45 | 9 |
| 10 | 255 | 295 | 40 | 10 |

Table 5.15

Scores of the Bottom Seven DTG Participants whose Scores Decreased in Week 15 of Experiment III

| Participants | Week 1 | Week 15 | Differences | Rank |
|--------------|--------|---------|-------------|------|
| 1 | 300 | 265 | -35 | 1 |
| 2 | 275 | 255 | -20 | 2 |
| 3 | 255 | 235 | -20 | 2 |
| 4 | 295 | 285 | -10 | 4 |
| 5 | 270 | 260 | -10 | 4 |
| 6 | 195 | 190 | -5 | 7 |
| 7 | 180 | 175 | -5 | 7 |

Figure 5.12 presents the pre- and post-mean scores of the top 10 DTG participants on the MALQ in Experiment III.

Figure 5.12. Pre- and post-mean scores of the top 10 DTG participants on the MALQ in Experiment III.

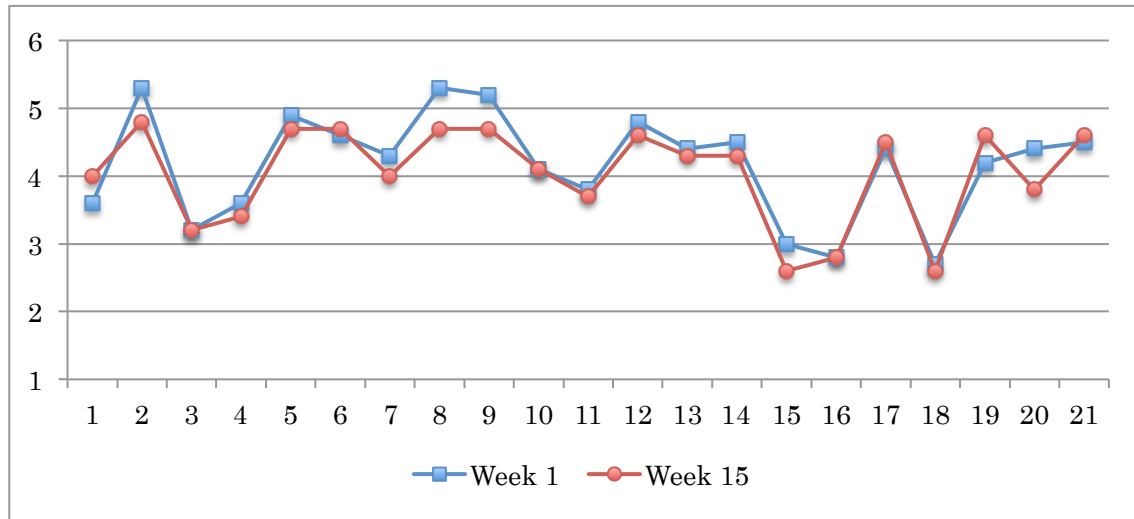


Table 5.16 shows a summary of the changes regarding the metacognitive awareness of the top 10 DTG participants before and after the experiment. According to the table, Nos. 3, 10 and 16 showed no change, the mean scores of Nos. 1, 6, 17, 19 and 21 increased and the others decreased after the experiment.

Table 5.16

Pre- and Post-Mean Scores of the Top 10 DTG Participants whose Scores Increased on the MALQ in Experiment III

| DTG Top 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|------------|-----|------|-----|------|------|-----|------|------|------|-----|------|------|------|------|------|-----|-----|------|-----|------|-----|
| Wk 1 | 3.6 | 5.3 | 3.2 | 3.6 | 4.9 | 4.6 | 4.3 | 5.3 | 5.2 | 4.1 | 3.8 | 4.8 | 4.4 | 4.5 | 3 | 2.8 | 4.4 | 2.7 | 4.2 | 4.4 | 4.5 |
| Wk 15 | 4 | 4.8 | 3.2 | 3.4 | 4.7 | 4.7 | 4 | 4.7 | 4.7 | 4.1 | 3.7 | 4.6 | 4.3 | 4.3 | 2.6 | 2.8 | 4.5 | 2.6 | 4.6 | 3.8 | 4.6 |
| D | 0.4 | -0.5 | 0 | -0.2 | -0.2 | 0.1 | -0.3 | -0.6 | -0.5 | 0 | -0.1 | -0.2 | -0.1 | -0.2 | -0.4 | 0 | 0.1 | -0.1 | 0.4 | -0.6 | 0.1 |

Next, Figure 5.13 presents the pre- and post-mean scores of the bottom seven DTG participants on the MALQ in the in Experiment III.

Figure 5.13. Pre- and post-mean scores of the bottom seven DTG participants on the MALQ in Experiment III.

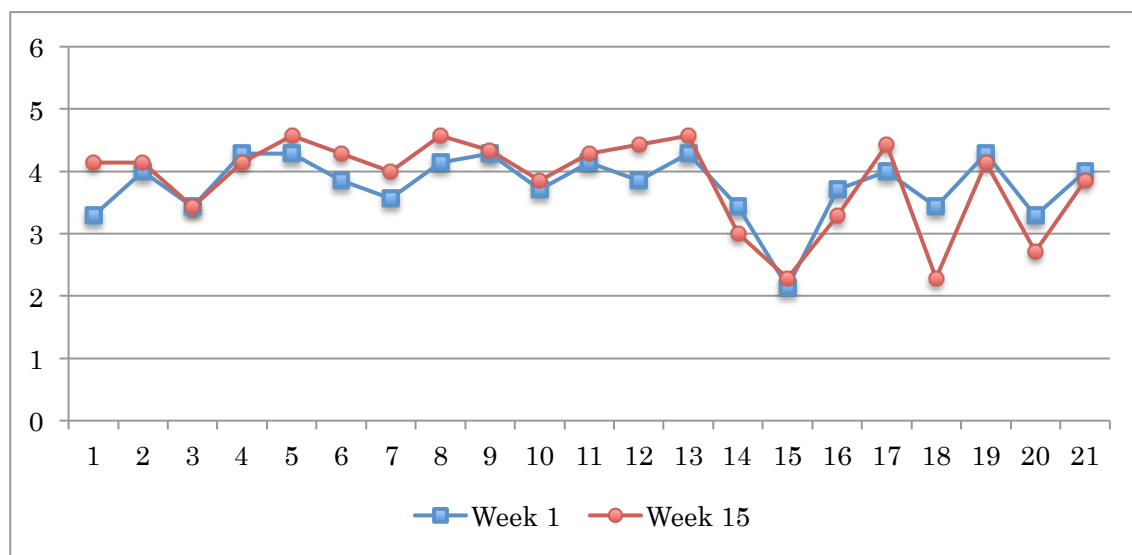


Table 5.17 shows a summary of the changes regarding the metacognitive awareness of the bottom seven DTG participants before and after the experiment. According to the table, Nos. 3 and 9 showed no change, the mean scores of Nos. 4, 14, 16, 18, 19, 20 and 21 decreased and the others increased after the experiment.

Table 5.17

Pre- and Post-Mean Scores of the Bottom Seven DTG Participants whose Scores Decreased on the MALQ in Experiment III

| DTG Bottom 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|--------------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|------|-----|------|------|------|------|
| Wk 1 | 3.3 | 4 | 3.4 | 4.3 | 4.3 | 3.9 | 3.6 | 4.1 | 4.3 | 3.7 | 4.1 | 3.9 | 4.3 | 3.4 | 2.1 | 3.7 | 4 | 3.4 | 4.3 | 3.3 | 4 |
| Wk 15 | 4.1 | 4.1 | 3.4 | 4.1 | 4.6 | 4.3 | 4 | 4.6 | 4.3 | 3.9 | 4.3 | 4.4 | 4.6 | 3 | 2.3 | 3.3 | 4.4 | 2.3 | 4.1 | 2.7 | 3.9 |
| D | 0.8 | 0.1 | 0 | -0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0 | 0.2 | 0.2 | 0.5 | 0.3 | -0.4 | 0.2 | -0.4 | 0.4 | -1.1 | -0.2 | -0.6 | -0.1 |

Regarding the LSTG, for further analysis on metacognitive awareness before and after the experiment, the participants were divided into two categories, i.e. the top

12 participants who improved their scores and the bottom 10 participants who lowered the scores in Week 15. Amongst the bottom 10 participants, one participant was excluded since there was no MALQ data for this individual. Therefore, the bottom 11th participant was included in the bottom 10 list. For more details on these participants, see Tables 5.18 and 5.19.

Table 5.18

Scores of the Top 12 LSTG Participants whose Scores Increased in Week 15 of Experiment III

| Participants | Week 1 | Week 15 | Differences | Rank |
|--------------|--------|---------|-------------|------|
| 1 | 220 | 305 | 85 | 1 |
| 2 | 215 | 290 | 75 | 2 |
| 3 | 210 | 275 | 65 | 3 |
| 4 | 245 | 305 | 60 | 4 |
| 5 | 225 | 285 | 60 | 4 |
| 6 | 195 | 255 | 60 | 4 |
| 7 | 205 | 260 | 55 | 7 |
| 8 | 190 | 245 | 55 | 7 |
| 9 | 285 | 330 | 45 | 9 |
| 10 | 240 | 285 | 45 | 9 |
| 11 | 240 | 285 | 45 | 9 |
| 12 | 225 | 270 | 45 | 9 |

Table 5.19

Scores of the Bottom 10 LSTG Participants whose Scores Decreased in Week 15 of Experiment III

| Participants | Week 1 | Week 15 | Differences | Rank |
|--------------|--------|---------|-------------|------|
| 1 | 255 | 200 | -55 | 1 |
| 2 | 315 | 285 | -30 | 2 |
| 3 | 255 | 235 | -20 | 3 |
| 4 | 255 | 235 | -20 | 3 |
| 5 | 275 | 260 | -15 | 5 |
| 6 | 255 | 240 | -15 | 5 |
| 7 | 245 | 230 | -15 | 5 |
| 8 | 225 | 215 | -10 | 8 |
| 9 | 310 | 305 | -5 | 9 |
| 10 | 265 | 260 | -5 | 9 |

Figure 5.14 presents the pre- and post-mean scores of the top 12 LSTG participants on the MALQ in Experiment III.

Figure 5.14. Pre- and post-mean scores of the top 12 LSTG participants whose scores increased on the MALQ in Experiment III.

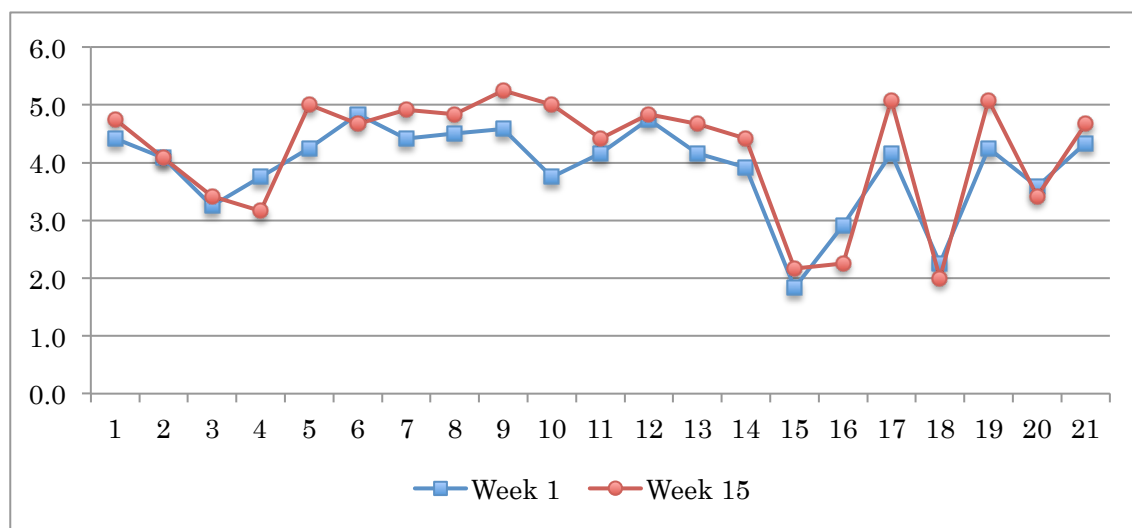


Table 5.20 shows a summary of the changes regarding the metacognitive awareness of the top 12 LSTG participants before and after the experiment. According to the table, No. 2 showed no change, the mean scores of Nos. 4, 6, 16, 18 and 20 decreased and the others increased after the experiment.

Table 5.20

Pre- and Post-Mean Scores of the Top 12 LSTG Participants whose Scores Increased on the MALQ in Experiment III

| LSTG Top 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|-------------|-----|-----|-----|------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|------|-----|------|-----|
| Wk 1 | 4.4 | 4.1 | 3.3 | 3.8 | 4.3 | 4.8 | 4.4 | 4.5 | 4.6 | 3.8 | 4.2 | 4.8 | 4.2 | 3.9 | 1.8 | 2.9 | 4.2 | 2.3 | 4.3 | 3.6 | 4.3 |
| Wk 15 | 4.8 | 4.1 | 3.4 | 3.2 | 5 | 4.7 | 4.9 | 4.8 | 5.3 | 5 | 4.4 | 4.8 | 4.7 | 4.4 | 2.2 | 2.3 | 5.1 | 2 | 5.1 | 3.4 | 4.7 |
| D | 0.4 | 0 | 0.1 | -0.6 | 0.7 | -0.1 | 0.5 | 0.3 | 0.7 | 1.2 | 0.2 | 0 | 0.5 | 0.5 | 0.4 | -0.6 | 0.9 | -0.3 | 0.8 | -0.2 | 0.4 |

Next, Figure 5.15 presents the pre- and post-mean scores of the bottom 10 LSTG participants on the MALQ in the in Experiment III.

Figure 5.15. Pre- and post-mean scores of the bottom 10 LSTG participants whose scores decreased on the MALQ in Experiment III.

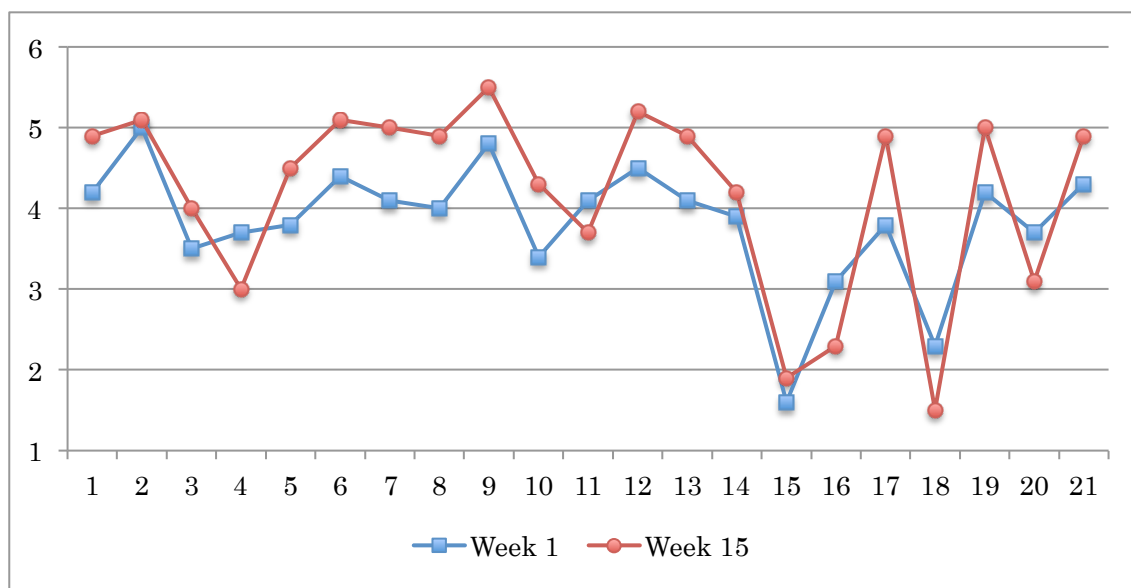


Table 5.21 shows a summary of the changes regarding the metacognitive awareness of the bottom 10 LSTG participants before and after the experiment. According to the table, the mean scores of Nos. 4, 11, 16, 18 and 20 decreased and the others increased after the experiment.

Table 5.21

Pre- and Post-Mean Scores of the Bottom 10 LSTG Participants whose Scores Decreased on the MALQ in Experiment III

| LSTG Bottom 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|----------------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|------|-----|------|-----|
| Wk 1 | 4.2 | 5 | 3.5 | 3.7 | 3.8 | 4.4 | 4.1 | 4 | 4.8 | 3.4 | 4.1 | 4.5 | 4.1 | 3.9 | 1.6 | 3.1 | 3.8 | 2.3 | 4.2 | 3.7 | 4.3 |
| Wk 15 | 4.9 | 5.1 | 4 | 3 | 4.5 | 5.1 | 5 | 4.9 | 5.5 | 4.3 | 3.7 | 5.2 | 4.9 | 4.2 | 1.9 | 2.3 | 4.9 | 1.5 | 5 | 3.1 | 4.9 |
| D | 0.7 | 0.1 | 0.5 | -0.7 | 0.7 | 0.7 | 0.9 | 0.9 | 0.7 | 0.9 | -0.4 | 0.7 | 0.8 | 0.3 | 0.3 | -0.8 | 1.1 | -0.8 | 0.8 | -0.6 | 0.6 |

Table 5.22 shows a summary of the changes regarding metacognitive awareness in the CG, DTG and LSTG. Both the DTG and LSTG are further divided into two groups.

Table 5.22

Summary of the MALQ before and after Experiment III

| Item No. | Categories | CG | DTG | Top 10 | Bottom 7 | LSTG | Top 12 | Bottom 10 |
|----------|---------------------|----|-----|--------|----------|------|--------|-----------|
| 1 | Planning/evaluation | △ | △ | △ | △ | △ | △ | △ |
| 2 | Directed attention | ↓ | ↓ | ↓ | △ | △ | — | △ |
| 3 | Person knowledge | △ | △ | — | — | △ | △ | △ |
| 4 | Mental translation | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| 5 | Problem-solving | — | ↓ | ↓ | △ | △ | △ | △ |
| 6 | Directed attention | △ | △ | △ | △ | △ | ↓ | △ |
| 7 | Problem-solving | △ | ↓ | ↓ | △ | △ | △ | △ |
| 8 | Person knowledge | △ | ↓ | ↓ | △ | △ | △ | △ |
| 9 | Problem-solving | △ | ↓ | ↓ | — | △ | △ | △ |
| 10 | Planning/evaluation | △ | — | — | △ | △ | ○ | △ |
| 11 | Mental translation | △ | ↓ | ↓ | △ | ↓ | △ | ↓ |
| 12 | Directed attention | — | △ | ↓ | △ | △ | △ | △ |
| 13 | Problem-solving | △ | — | ↓ | △ | △ | △ | △ |
| 14 | Planning/evaluation | △ | ↓ | ↓ | ↓ | △ | △ | △ |
| 15 | Person knowledge | △ | ↓ | ↓ | △ | △ | △ | △ |
| 16 | Directed attention | △ | ↓ | — | ↓ | ↓ | ↓ | ↓ |
| 17 | Problem-solving | △ | △ | △ | △ | △ | △ | ○ |
| 18 | Mental translation | △ | ↓ | ↓ | ↓↓ | ↓ | ↓ | ↓ |
| 19 | Problem-solving | △ | — | △ | ↓ | △ | △ | △ |
| 20 | Planning/evaluation | △ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| 21 | Planning/evaluation | △ | ↓ | △ | ↓ | △ | △ | △ |

○: Increased more than 1.0

△: Increased less than 1.0

— : No change

↓: Decreased less than 1.0

↓↓: Decreased over 1.0

5.4 Discussion

The results, as illustrated in the figures and tables, are discussed in the following order:

1. Pre- and post-data for the CG, DTG and LSTG
2. Two-way ANOVA, multiple comparison, effect size and scatter plot
3. The DTG and LSTG participants whose scores increased in Week 15
4. The DTG and LSTG participants whose scores decreased in Week 15
5. The MALQ

5.4.1 Discussion about the pre- and post-data for the CG, DTG and LSTG.

The participants of the CG only received regular lessons for 13 weeks, and there was almost no improvement in their listening comprehension (Figure 5.1). This result is different from that of Experiment I in which there was some improvement even in the CG (Figure 3.1 in Chapter 3). These two results confirm that listening comprehension can possibly improve even without any particular training, but the level of improvement is not prominent and the process is significantly time consuming. On the contrary, both the DTG and LSTG showed sharp increases, thus demonstrating that both dictation training and listening strategy training are effective for intermediate listeners under certain conditions (in this case, 30 minutes a week for 13 weeks). This result is similar to that of Experiment I.

As shown in Table 5.3, in Week 1, the mean scores of the CG, DTG and LSTG were 202.83, 241.91 and 242.84, respectively, whereas in Week 15, the mean scores were 203.70, 268.82 and 264.19, respectively. To compare these data as the relative values, the mean scores of each group in Week 1 were treated as 1.00 and compared with those in Week 15. The relative values of the CG, DTG and LSTG were 1.00, 1.11 and 1.09, respectively. The LSTG had the highest mean score in Week 1, but the most prominent improvement was observed in the DTG. The same result was obtained in Experiment I. Both results indicate that dictation training is more suitable than listening strategy training for intermediate learners. Thus far, the major results of Experiments I and III match and correspond with the theories of Schneider and

Shiffrin (1977) and Anderson (2010). As referred in Chapter 3, Nation and Newton (2009) also support the importance of bottom-up processes such as dictation training in listening; ‘learners need to be proficient with these bottom-up processes and...learners can benefit from being taught how to listen’ (p. 41). The following section analyses the data from a different perspective.

5.4.2 Discussion about the two-way ANOVA, multiple comparison, effect size and scatter plot.

A two-way ANOVA was conducted on two factors, i.e. ‘teaching methods’ and ‘before/after the experiment’. In addition, significance was observed in both the factors and in the interaction between these two factors, as shown in Table 5.4. In addition, there was significance in both ‘teaching methods’ and ‘before and after the experiment’ at the 0.1% level. In addition, there was significance in the interaction between these two factors at the 0.5% level. Thus, Ryan’s method was utilised for further analysis. The results show significance between the CG and DTG as well as between the CG and LSTG, though no significance was found between the DTG and LSTG (Table 5.5). Again, the same results were obtained in Experiment I. Note that listening strategy training is *also* significantly effective after dictation training for intermediate listeners. The results of both Experiments I and III support the research results of Graham et al. (2008), Vogley (1995), Vandergrift (1997; 1998) and Baleghizadeh and Rahimi (2011), who all claim that strategy development seems to be related to proficiency issues.

In Experiment III, the effect size of the teaching methods was 2.31, which suggests that both dictation training and listening strategy training are significantly effective (Table 5.6). Again, this result is the same as in Experiment I. Many researchers, such as Oller (1971), support the effect of dictation training specifically for less-proficient listeners. Yonezaki (2014) also emphasises the effectiveness of dictation since most Japanese learners of English have problems in perception (which is vital for bottom-up processing) and due to such issues, they are unable to activate syntactic knowledge and background knowledge (p. 2). Although Buck (2001, p. 75) indicates that there are various ways of scoring dictation and Hughes (1989) suggests

that scoring for low-ability test takers can be difficult since it is not always clear which part of the text their responses refer to, dictation training is effective to solve problems at the perception level.

For the reason that listening strategy training is effective for intermediate learners, it can be considered that they are capable of employing listening strategies to some extent even though their perception level has not been fully automatised. Thus, they could maintain a certain capacity for instructed listening strategies. This assumption is supported by both the effect size of Factor B ('before and after the experiment'), which is 0.27 (between small and medium) and the effect size of the interaction between Factors A and B, which is 0.13 (between small and medium). These results indicate that there is effectiveness in 'teaching methods', 'before and after the experiment' and the interaction between these two factors.

Next, a closer examination of the scatter plot reveals that there is no regular pattern and that even some CG participants increased their scores, whereas participants in the DTG and LSTG decreased their scores in Week 15 (Figure 5.2). Based on these findings, it is assumed that the score range between 166 and 330 in the listening parts of the TOEIC® is possibly very wide to induce any type of pattern or tendency. It is clear that the elements and factors related to improve listening comprehension do not simply rely on the scores of the listening parts of the TOEIC®. Thus, for further analysis, the score range of 166–330 was sub-divided into two ranges, i.e. 166–249 as low-intermediate and 250–330 as upper-intermediate.

5.4.3 Discussion about the DTG and LSTG participants whose scores increased in Week 15.

First, let us observe those participants in the DTG who increased their score in Week 15. Figure 5.3 shows that 27 of the 34 participants (79%) in the DTG increased their scores in Week 15, and 12 of the 27 participants (44%) were low-intermediate listeners (Figure 5.4). The majority of those participants in the DTG who increased their scores in Week 15 were upper-intermediate listeners in Experiment III. Then, for a further analysis, a two-way ANOVA was conducted on two factors, i.e. 'more/less

than 250 in Week 1' and 'before/after the experiment'. The results show that there was no significance in the interaction between these two factors, as shown in Table 5.7. This result is different from that of Experiment I. In Experiment I, 32 of the 37 participants (86%) in the DTG who increased their scores in Week 15 were low-intermediate listeners, and there was significance in the interaction between 'more/less than 250 in Week 1' and 'before/after the experiment' at the 1% level. The results of Experiment I indicate that specific training that focuses on phonetic level, such as dictation training, is more effective for low-intermediate listeners. Table 5.23 presents the score proportion in Week 1 of the DTG participants whose scores increased in Week 15 of both Experiments I and III.

Table 5.23

Score Proportion of the DTG Participants whose Scores Increased in Week 15 of Experiments I and III

| | Dictation Training | |
|----------------|----------------------------|--------------------------|
| | Less than 250 in Week 1 | 250 or more in Week 1 |
| Experiment I | 86% | 14% |
| Experiment III | 44% | 56% |

Although dictation training was significantly effective in both the experiments, the majority of these increased scores in Week 15 differed in Experiments I and III. One possible reason for this phenomenon might be that the proficiency level of the DTG participants in Experiment I was lower than that of the DTG participants in Experiment III (Table 5.24). Although all the participants in the experiments were at the intermediate level, there were more low-intermediate listeners in Experiment I, whereas there were more upper-intermediate listeners in Experiment III. This might be the reason for such differences.

Table 5.24

Comparison of the DTG Participants in Experiments I and III

| | Week 1 | | | Week 15 | | | |
|-----------------------|----------|-------------|-----------|-------------|-----------|-----------------------|---------------------------|
| | <i>N</i> | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> | <i>Relative Value</i> | <i>Mean of difference</i> |
| Experiment I DTG | 52 | 230.19 | 28.90 | 253.46 | 37.02 | 1.10 | 23.27 |
| Experiment III DTG | 34 | 241.91 | 39.16 | 268.82 | 47.26 | 1.11 | 26.91 |

Now, let us focus on the LSTG participants who increased their scores in Week 15. Figure 5.5 shows that 25 of the 37 participants (67%) in the LSTG increased their scores in Week 15, and 21 of the 25 participants (84%) were low-intermediate listeners (Figure 5.6). The majority of those in the LSTG who increased their scores in Week 15 were low-intermediate listeners, and the same results were observed in Experiment I. Table 5.25 presents the score proportion in Week 1 of the LSTG participants whose scores increased in Week 15 of both Experiments I and III.

Table 5.25

Score Proportion of the LSTG Participants whose Scores Increased in Week 15 of Experiments I and III

| | Listening Strategy Training | |
|----------------|-----------------------------|--------------------------|
| | Less than 250 in Week 1 | 250 or more in Week 1 |
| Experiment I | 59% | 41% |
| Experiment III | 84% | 16% |

A two-way ANOVA was conducted for further analysis on two factors, i.e. ‘more/less than 250 in Week 1’ and ‘before/after the experiment’. The results show that there was significance in the interaction between these two factors at the 0.1% level, as shown in Table 5.8. The simple main effect test about listening strategy training also showed significance between the 14 upper- and 23 low-intermediate listeners based on their scores of the listening parts of the TOEIC® in Week 1. These results indicate that listening strategy training is significantly effective, especially for

upper-intermediate listeners at the 0.1% level (Table 5.10). Although listening strategy training was significantly effective in both the experiments, significance in the interaction between two factors (i.e. ‘more/less than 250 in Week 1’ and ‘before/after the experiment’) was only obtained in Experiment III. One possible reason for this might be the difference in the SD since other factors in Experiments I and III are similar, except for the number of the participants. In Experiment I, the SD of the LSTG is 45.19, whereas it is 30.88 in Experiment III (Table 5.26). This finding indicates that the spread of the distribution in Experiment I was much more than that of Experiment III. In addition, it is assumed that a smaller SD probably contributes to significance and this assumption is supported by other data. Although dictation training was significantly effective in both experiments, significance in the interaction between the two factors (i.e. ‘more/less than 250 in Week 1’ and ‘before/after the experiment’) was only found in Experiment I. Table 5.27 shows the summary of significance regarding the two teaching methods in Experiments I and III. Table 5.24 shows that the SD of the DTG is 37.02 in Experiment I, whereas it is 47.26 in Experiment III. These results prove that significance is observed in experiments where the SD is less than 40. Thus, it is considered that the smaller SD probably contributes to significance.

Table 5.26

Comparison of the LSTG Participants in Experiments I and III

| | Week 1 | | | Week 15 | | | |
|------------------------|----------|-------------|-----------|-------------|-----------|-----------------------|---------------------------|
| | <i>N</i> | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> | <i>Relative Value</i> | <i>Mean of difference</i> |
| Experiment I LSTG | 46 | 241.30 | 32.41 | 263.26 | 45.19 | 1.09 | 21.96 |
| Experiment III LSTG | 37 | 242.84 | 32.22 | 264.19 | 30.88 | 1.09 | 21.35 |

Table 5.27

Summary of Significance about the Teaching Methods in Experiments I and III

| | Dictation Training | | Listening Strategy Training | |
|----------------|----------------------------|--------------------------|-----------------------------|--------------------------|
| | Less than 250 in Week 1 | 250 or more in Week 1 | Less than 250 in Week 1 | 250 or more in Week 1 |
| Experiment I | significant | | | |
| Experiment III | | | | significant |

Table 5.28 presents the summary regarding the percentages of those who increased their scores in dictation training and listening strategy training in Experiments I and III, respectively. Although the difference is not significant, it is clear that more participants in the DTG increased their scores than the LSTG in both the experiments. Based on the theories of both Schneider and Shiffrin (1977) and Anderson (2010), these results are logical and reasonable, and specific listening training that focuses on phonetic level, such as dictation training, can enhance the level of perception in listeners, which ultimately leads them to higher levels (i.e. parsing and utilisation).

Table 5.28

Comparison of Those who Increased and Decreased Their Scores in the DTG and LSTG in Experiments I and III¹⁸

| | Dictation Training | | Listening Strategy Training | |
|----------------|--------------------|-----------|-----------------------------|-----------|
| | Increased | Decreased | Increased | Decreased |
| Experiment I | 71% | 23% | 70% | 28% |
| Experiment III | 79% | 21% | 67% | 30% |

¹⁸ Some participants did not change their scores before and after the experiment; 6% in the DTG, 2% in the LSTG in Experiment I and 3% in the LSTG in Experiment III.

5.4.4 Discussion about the DTG and LSTG participants whose scores decreased in Week 15.

In Experiment III, both dictation training and listening strategy training were statistically effective for intermediate listeners under a certain condition (in this case, 30 minutes for 13 weeks). Whilst the majority of the participants in both groups increased their scores in Week 15, many participants in both groups decreased their scores in Week 15.

First, let us investigate the DTG. Figure 5.3 shows that seven of the 34 participants (21%) in the DTG decreased their scores in Week 15, and five of these seven participants (71%) were upper-intermediate listeners (Figure 5.7). In Experiment I, 12 of the 52 DTG participants (23%) decreased their scores in Week 15, and six of the 12 participants (50%) were upper-intermediate listeners (Figures 3.3 and 3.7). After comparing Figures 5.4 and 5.7, it was found that upper-intermediate listeners are more likely to decrease their scores with dictation training. Although it does not exceed more than 50% in Experiment I, the same result was obtained in Experiment I (Figure 3.7). One possible reason for this could be explained by the score of 250 in the listening parts of the TOEIC®. Those who achieved the TOEIC® listening scores of 250 or more in Week 1 might have overcome the level of perception, the lowest level in Anderson's (2010) cognitive psychology theory. Thus, basic phonetic perception training, such as dictation training, might no longer be effective for those who have passed this level. This assumption and the results are consistent with the theories of Schneider and Shiffrin (1977) and Anderson (2010).

Table 5.29

Score Proportion of the DTG Participants whose Scores Decreased in Week 15 of Experiments I and III

| | Dictation Training | |
|----------------|----------------------------|--------------------------|
| | Less than 250 in Week 1 | 250 or more in Week 1 |
| Experiment I | 50% | 50% |
| Experiment III | 29% | 71% |

Now, let us observe the LSTG. Figures 5.5 and 5.8 show that 11 of the 37 LSTG participants (30%) decreased their scores in Week 15, and nine of these 11 participants (82%) were upper-intermediate listeners (Table 5.30 below). After comparing Figures 5.6 and 5.8, upper-intermediate listeners are more likely to decrease their scores, which was the same finding as in Experiment I. Table 5.30 presents the score proportion in Week 1 of the LSTG participants whose scores decreased in Week 15 of both Experiments I and III.

Table 5.30

Score Proportion of the LSTG Participants whose Scores Decreased in Week 15 of Experiments I and III

| | Listening Strategy Training | |
|----------------|-----------------------------|--------------------------|
| | Less than 250 in Week 1 | 250 or more in Week 1 |
| Experiment I | 46% | 54% |
| Experiment III | 18% | 82% |

Although it has been proven that the effect of listening strategy training between low- and upper-intermediate listeners is significant at the 0.1% level (Table 5.8), why is listening strategy training ineffective for some upper-intermediate listeners? As proven thus far, if those with TOEIC® listening scores of 250 or more in Week 1 have overcome the level of perception, then theoretically, listening strategy training could be effective specifically for upper-intermediate listeners. What is the difference between those who increased and decreased their scores amongst the upper-intermediate listeners? In the following section, this question is investigated and discussed based on the data from the MALQ.

5.4.5 Discussion about the MALQ.

In this section, the results of the MALQ, which was conducted for all the three groups in both Weeks 1 and 15, are analysed and discussed from a different perspective: metacognitive awareness before and after the experiment. In addition, the

results of the MALQ in Experiments II and III are compared and discussed. The discussion is as per the following five factors by comparing the differences in the CG, DTG and LSTG before and after the experiment. Only the items whose difference is 0.5 or more are closely analysed since the difference below 0.5 is considered as nil in this study.

- 1) Directed Attention (ways of concentrating on certain aspects of a task)
- 2) Mental Translation (translation from English to L1 when listening)
- 3) Person Knowledge (confidence or anxiety and self-perception as a listener)
- 4) Planning and Evaluation (preparing to listen and assessing success)
- 5) Problem Solving (guessing as well as monitoring these guesses)

First, there are four items that investigate Directed Attention in the MALQ:

No. 2: I focus harder on the text when I have trouble understanding.

No. 6: When my mind wanders, I recover my concentration right away.

No.12: I try to get back on track when I lose concentration.

No. 16: When I have difficulty understanding what I hear, I give up and stop listening.

Table 5.31

Differences in the Post-Mean Scores in the CG, DTG and LSTG about Directed Attention

| Directed Attention | 2 | | | 6 | | | 12 | | | 16 | | |
|--------------------|------|------|------|-----|-----|------|-----|-----|------|-----|------|------|
| | CG | DTG | LSTG | CG | DTG | LSTG | CG | DTG | LSTG | CG | DTG | LSTG |
| Wk 1 | 4.3 | 4.8 | 4.2 | 3.9 | 4.3 | 4.5 | 4.2 | 4.3 | 4.5 | 3.3 | 3.0 | 3.2 |
| Wk 15 | 3.8 | 4.7 | 4.4 | 4.2 | 4.6 | 4.8 | 4.2 | 4.5 | 4.8 | 3.5 | 2.8 | 2.5 |
| D | -0.5 | -0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0 | 0.2 | 0.3 | 0.2 | -0.2 | -0.7 |

Scale

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------|----------|-------------------|--------------|-------|----------------|
| Strongly disagree | Disagree | Slightly disagree | Partly agree | Agree | Strongly agree |

According to Table 5.31, No. 2 in the CG shows a change of 0.5, which does not represent an improvement in metacognitive awareness since the post-mean score is within the range of 3 (Slightly disagree) (Figure 5.9 and Table 5.11). The same result was obtained in Experiment II in which the CG participants showed no improvement in Directed Attention in metacognition. Based on these results, it is assumed that Directed Attention does not improve if intermediate listeners do not receive special listening training. In addition, they continue having difficulty concentrating and tend to stop listening when facing difficulty in listening in English.

Now, let us observe the results of the DTG. All the items show a change of no more than 0.3 (Figure 5.10 and Tables 5.12 and 5.31). Again, the results show that dictation training, under the conditions of Experiment III, has no effect for intermediate listeners to improve Directed Attention in metacognition. Similar to their CG counterparts, they also continue having difficulty concentrating, and also tend to stop listening when facing difficulty in listening in English.

Next, let us analyse the results of the LSTG. The post-mean scores of Nos. 2, 6 and 12 show a change of no more than 0.3 (Figure 5.11 and Tables 5.13 and 5.31). Although No. 16 in the LSTG shows a decrease of 0.7 from 3.2 to 2.5, it actually represents an improvement since the post-mean score changed to the range of 2 (Disagree) for the item: When I have difficulty understanding what I hear, I give up and stop listening. Since No. 16 is the only sign of improvement in Directed Attention in metacognition, these results show that listening strategy training, under the conditions of Experiment III, does not seem to be extremely effective for intermediate listeners on Directed Attention.

Second, there are three items that investigate Mental Translation in the MALQ:

No. 4: I translate in my head as I listen.

No.11: I translate key words as I listen.

No.18: I translate word by word as I listen.¹⁹

¹⁹ sic

Table 5.32

Differences in the Post-Mean Scores in the CG, DTG and LSTG about Mental Translation

| Mental Translation | 4 | | | 11 | | | 18 | | |
|--------------------|------|------|------|-----|------|------|-----|------|------|
| | CG | DTG | LSTG | CG | DTG | LSTG | CG | DTG | LSTG |
| Wk 1 | 4.0 | 3.8 | 3.8 | 4.0 | 4.0 | 4.3 | 4.0 | 4.0 | 2.4 |
| Wk 15 | 3.8 | 3.7 | 3.3 | 4.3 | 3.9 | 4.1 | 4.3 | 3.9 | 1.9 |
| D | -0.2 | -0.1 | -0.5 | 0.3 | -0.1 | -0.2 | 0.3 | -0.1 | -0.5 |

Scale

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------|----------|-------------------|--------------|-------|----------------|
| Strongly disagree | Disagree | Slightly disagree | Partly agree | Agree | Strongly agree |

Table 5.32 shows that all the items in the CG show a change of no more than 0.3. The results indicate that the CG participants showed no improvement regarding Mental Translation in metacognition. Based on these results, it is assumed that Mental Translation does not improve when intermediate listeners do not receive special listening training since they continue translating the presented material.

However, this result differs from that of Experiment II. In Experiment II, intermediate listeners translated the information with less frequency even when they did not receive any special listening training. This might be due to the EFL listening proficiency differences between the CG participants in Experiments II and III. In fact, the proficiency level in the EFL listening of the CG participants in Experiment II was higher (Tables 4.4 and 5.3). Thus, intermediate listeners who do not receive listening training have a tendency to translate many words, including key words. However, depending on their proficiency level, they may be able to translate the presented material with less frequency.

Now, let us observe the results of the DTG. Table 5.32 shows that all the items in the DTG show almost no difference. Like the CG, the results show that dictation training, under the conditions of Experiment III, has no effect for improving intermediate listeners' Directed Attention in metacognition: They continue translating

the presented material.

Next, let us analyse the results of the LSTG. Table 5.32 shows that the post-mean scores of Nos. 4 and 18 in the LSTG decreased by 0.5. However, it does not represent the deterioration of Mental Translation. In fact, it is an improvement. For example, let us look at No. 18: I translate word by word, as I listen. Before the experiment, the mean score of the LSTG participants was 2.4 (disagree). However, after the experiment, it changed to 1.9 (Strongly disagree). Although No. 11 does not show prominent change, this result might indicate that listening strategy training, under the conditions of Experiment III, has a certain degree of influence for intermediate listeners to improve Mental Translation in metacognition: They can gradually decrease their tendency to translate the presented material.

Third, there are three items that investigate Person Knowledge in the MALQ:

No. 3: I find that listening is more difficult than reading, speaking, or writing in English.

No. 8: I feel that listening comprehension in English is a challenge for me.

No.15: I don't²⁰ feel nervous when I listen to English.

Table 5.33

Differences in the Post-Mean Scores in the CG, DTG and LSTG about Person Knowledge

| Person Knowledge | 3 | | | 8 | | | 15 | | |
|------------------|-----|-----|------|-----|------|------|-----|------|------|
| | CG | DTG | LSTG | CG | DTG | LSTG | CG | DTG | LSTG |
| Wk 1 | 4.1 | 3.3 | 3.3 | 3.6 | 4.7 | 4.4 | 1.8 | 2.3 | 1.9 |
| Wk 15 | 4.7 | 3.6 | 3.5 | 4.0 | 4.6 | 4.8 | 2.0 | 2.1 | 2.3 |
| D | 0.6 | 0.3 | 0.2 | 0.4 | -0.1 | 0.4 | 0.2 | -0.2 | 0.4 |

Scale

| | | | | | |
|-------------------|----------|-------------------|--------------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| Strongly disagree | Disagree | Slightly disagree | Partly agree | Agree | Strongly agree |

²⁰ sic

According to Table 5.33, none of the post-mean scores in the CG changed by more than 0.5 except for No. 3. In regard to No. 3, although it changed from 4.1 to 4.7, it still remained within the range of 4 (Partly agree) for the item: I find that listening is more difficult than reading, speaking, or writing in English. Based on these results, it is assumed that Person Knowledge in metacognition does not seem to improve when intermediate listeners do not receive special listening training. The same result was obtained in Experiment II where intermediate listeners without special listening training remained nervous and found listening in English challenging.

Now, let us observe the results of the DTG. Table 5.33 shows that all the items in the DTG show a change of no more than 0.5. Like the CG, the results indicate that dictation training, under the conditions of Experiment III, has no effect for intermediate listeners to improve Person Knowledge in metacognition: Intermediate listeners remain nervous and find listening in English challenging.

Next, let us observe the results of the LSTG. According to Table 5.33, all the items in the LSTG show a change of no more than 0.5. Like the CG and DTG, the results show that listening strategy training, under the conditions of Experiment III, has no effect for intermediate listeners to improve Person Knowledge in metacognition: Intermediate listeners remain nervous and find listening in English challenging.

Fourth, there are five items that investigate Planning/Evaluation in the MALQ:

No. 1: Before I start to listen, I have a plan in my head for how I am going to listen.

No. 10: Before listening, I think of similar texts that I may have listened to.

No. 14: After listening, I think back to how I listened, and about what I might do differently next time.

No. 20: As I listen, I periodically ask myself if I am satisfied with my level of comprehension.

No. 21: I have a goal in mind as I listen.

Table 5.34

Differences in the Post-Mean Scores in the CG, DTG and LSTG about Planning/Evaluation

| Planning Evaluation | 1 | | | 10 | | | 14 | | | 20 | | | 21 | | |
|------------------------|-----|-----|------|-----|-----|------|-----|------|------|-----|------|------|-----|------|------|
| | CG | DTG | LSTG | CG | DTG | LSTG | CG | DTG | LSTG | CG | DTG | LSTG | CG | DTG | LSTG |
| Wk 1 | 3.9 | 3.9 | 4.3 | 3.4 | 4.3 | 3.8 | 3.1 | 3.8 | 3.7 | 2.6 | 3.5 | 3.4 | 3.8 | 4.5 | 4.2 |
| Wk 15 | 4.2 | 4.3 | 4.9 | 3.7 | 4.3 | 4.7 | 4.0 | 3.7 | 4.3 | 3.3 | 3.3 | 3.3 | 4.3 | 4.3 | 4.7 |
| D | 0.3 | 0.4 | 0.6 | 0.3 | 0 | 0.9 | 0.9 | -0.1 | 0.6 | 0.7 | -0.2 | -0.1 | 0.5 | -0.2 | 0.5 |

Scale

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------|----------|-------------------|--------------|-------|----------------|
| Strongly disagree | Disagree | Slightly disagree | Partly agree | Agree | Strongly agree |

Table 5.34 reveals that the post-mean scores of the CG in Nos. 14, 20 and 21 show a change of 0.5 or more. As for No. 14, it changed from 3.1 to 4.0 (Partly agree) for the item: After listening, I think back to how I listened, and about what I might do differently next time. As for No. 21, it changed from 3.8 to 4.3 (Partly agree) for the item: I have a goal in mind as I listen. Based on these two items, intermediate listeners seem to improve planning/evaluation without any special listening training. However, Nos. 1 and 10 show no change of more than 0.5. In addition, the post-mean score of No. 20 still remains within the range of 3 (Disagree) for the item: As I listen, I periodically ask myself if I am satisfied with my level of comprehension. These results indicate that Planning/Evaluation in metacognition does not generally improve without any particular listening training. The same result was obtained in Experiment II.

Now, let us investigate the DTG. Table 5.34 demonstrates that none of the post-mean scores of the DTG changed by more than 0.5. Based on these results, it is assumed that dictation training, under the conditions of Experiment III, has no effect for intermediate listeners to improve Planning/Evaluation in metacognition: Intermediate listeners were unable to plan how they were going to listen and evaluate how they listened with dictation training under the conditions of Experiment III.

Next, let us analyse the results of the LSTG. Table 5.34 shows that all the items,

except for No. 20, show a change of 0.5 or more. These results indicate that listening strategy training, under the conditions of Experiment III, is effective for intermediate listeners to improve Planning/Evaluation in metacognition: They can gain the ability to plan how they are going to listen, think of similar texts before listening, evaluate how they listened and have a goal in mind when listening in English.

Finally, there are six items that investigate Problem Solving in the MALQ:

No. 5: I use the words I understand to guess the meaning of words I don't²¹ understand.

No. 7: As I listen, I compare what I understand with what I know about the topic.

No. 9: I use my experience and knowledge to help me understand.

No. 13: As I listen, I quickly adjust my interpretation if I realise that it is not correct.

No. 17: I use the general idea of the text to help me guess the meaning of words that I don't²² understand.

No. 19: When I guess the meaning of a word, I think back to everything that I have heard,²³ to see if my guess makes sense.

Table 5.35

Differences in the Post-Mean Scores in the CG, DTG and LSTG about Problem Solving

| Problem Solving | 5 | | | 7 | | | 9 | | | 13 | | | 17 | | | 19 | | |
|-----------------|-----|------|------|-----|------|------|-----|------|------|-----|-----|------|-----|-----|------|-----|-----|------|
| | CG | DTG | LSTG | CG | DTG | LSTG | CG | DTG | LSTG | CG | DTG | LSTG | CG | DTG | LSTG | CG | DTG | LSTG |
| Wk 1 | 4.0 | 4.7 | 4.0 | 3.4 | 4.3 | 4.2 | 4.3 | 4.7 | 4.7 | 4.1 | 4.2 | 4.1 | 3.8 | 4.3 | 4.0 | 3.9 | 4.5 | 4.2 |
| Wk 15 | 4.0 | 4.6 | 4.7 | 3.8 | 4.1 | 4.9 | 4.5 | 4.6 | 5.4 | 4.6 | 4.2 | 4.8 | 4.1 | 4.5 | 4.8 | 4.1 | 4.5 | 4.7 |
| D | 0 | -0.1 | 0.7 | 0.4 | -0.2 | 0.7 | 0.2 | -0.1 | 0.7 | 0.5 | 0 | 0.7 | 0.3 | 0.2 | 0.8 | 0.2 | 0 | 0.5 |

Scale

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------|----------|-------------------|--------------|-------|----------------|
| Strongly disagree | Disagree | Slightly disagree | Partly agree | Agree | Strongly agree |

²¹ sic

²² sic

²³ sic

Table 5.35 shows that the CG shows no change of more than 0.5. These results indicate that intermediate listeners are unable to improve Problem Solving in metacognition without any particular listening training. The same result was obtained in Experiment II.

The same features are observed in the DTG. No item shows a change of more than 0.5. These results indicate that dictation training, under the conditions of Experiment III, has no effect for intermediate listeners to improve Problem Solving in metacognition.

Now, let us observe the results of the LSTG. Every item shows an increase of 0.5 or more. These results show that listening strategy training, under the conditions of Experiment III, is effective for intermediate listeners to improve Problem Solving in metacognition: With listening strategy training, intermediate listeners can possibly gain the ability to guess the meaning of unknown words by thinking back to everything that they have heard, using the general idea of the text, comparing what they understand with what they know about the topic, using their experience and knowledge and monitoring their comprehension and adjusting it if necessary.

In Experiment II, dictation training and listening strategy training were combined, and consequently, it was difficult to judge which training was more effective. However, Experiment III shows that listening strategy has a distinctive effect specifically on Problem Solving in metacognition.

Thus far, the features and changes regarding the metacognitive skills of the participants in the CG, DTG and LSTG have been observed and discussed. Finally, let us briefly observe those in both the DTG and LSTG who increased their scores for further investigation that focuses only on changes of more than 1.0 between the pre- and post-mean scores on the MALQ. Figure 5.12 and Tables 5.16 and 5.22 show that the top 10 DTG participants made no change of more than 1.0 in all the items.

As for the LSTG, the top 12 participants show a change (Figure 5.14, Tables 5.20 and 5.22) of 1.2 in No. 10 (planning/evaluation) from 3.8 (Slightly disagree) to 5.0 (Agree) for the item: Before listening, I think of similar texts that I may have listened to. As stated earlier, the most prominent difference amongst the CG, DTG and LSTG

is that the LSTG participants improved all their metacognitive skills in both Planning/Evaluation and Problem Solving. Based on these results, it can be concluded that the improvement of Planning/Evaluation and Problem Solving in metacognitive skills is the key to becoming an effective listener. Overall, it has become clear that the ability to tackle problems when listening with various strategies, including grammar, background knowledge, inference, vocabulary, planning, monitoring one's comprehension and evaluation, are vital for 'survival' in EFL listening. This is similar to the concept in which only creatures with diversity can evolve and survive over the long term.

5.5 Summary

- S-1 Both dictation training and listening strategy training are significantly effective for intermediate listeners.
- S-2 Listening strategy training is significantly effective, especially for upper-intermediate listeners.
- S-3 Without special listening training, intermediate listeners do not improve metacognitive skills in EFL listening.
- S-4 Dictation training is not effective for intermediate to improve metacognitive skills in EFL listening.
- S-5 Listening strategy training is effective for intermediate listeners to improve some metacognitive skills in EFL listening such as Mental Translation, Planning/Evaluation and Problem Solving.
- S-6 The improvement of Planning/Evaluation and Problem Solving in metacognitive skills is vital for becoming an advanced listener in EFL listening.

A total of 94 Japanese learners of English participated in Experiment III. Only those who scored between 166 and 330 in the listening parts of the TOEIC® in Week 1 were selected after which they were divided into three groups, i.e. the CG, DTG and LSTG. There were 23, 34 and 37 participants in the CG, DTG and LSTG, respectively. During Weeks 2 and 14, the CG participants had no training except for their usual 90-minute class each week. The DTG participants received dictation training for 30 minutes in their usual 90-minute class each week, whereas the LSTG participants were instructed on the various types of listening strategies for 30 minutes in their usual 90-minute class each week. In Week 15, all the participants took the same listening parts of the TOEIC® as in Week 1.

The results show that 79% of the DTG participants and 67% of the LSTG participants increased their scores in Week 15 and that significance was observed in their increases of both the DTG and LSTG with a two-way ANOVA. The same results were obtained in Experiment I. Like Experiment I, based on the idea that the score range of 166–330 in the listening parts of the TOEIC® is probably very broad to withdraw a concrete result, the DTG and LSTG participants were further divided into two groups, i.e. low-intermediate listeners (who scored less than 250 in the listening part of the TOEIC® in Week 1) and upper-intermediate listeners (who scored 250 or more on the same test). In the DTG, no significance was obtained between low- and upper-intermediate listeners of dictation training, whereas significant effectiveness of listening strategy training was found for the upper-intermediate listeners.

Finally, the results show that intermediate listeners do not improve metacognitive skills in EFL listening without any special listening training, that dictation training is not effective for them to improve metacognitive skills in EFL listening and that listening strategy training is effective for improving some metacognitive skills in EFL listening such as Mental Translation, Planning/Evaluation and Problem Solving. Based on the features on the MALQ of those who increased their scores in the listening parts of the TOEIC® in Week 15, it is concluded that an improvement of Problem Solving in metacognitive skills is vital for becoming an advanced listener in EFL listening. The importance of the explicit teaching of second

language listening in the language classroom is supported by Vandergrift and Goh (2009) who found that such instruction has often been neglected and left to be incidentally developed through tasks that focus on other language skills.

Chapter Six: Summary, Implications and Suggestions

The purpose of this chapter is threefold. First, it attempts to provide a summary of the experiments conducted in this study and a synopsis of the results. Second, it describes the implications of the study. Finally, it offers some suggestions for future research.

6.1 Overview of the Experiments

The goals of this study were to investigate the effective teaching methods in EFL listening, especially for intermediate levels, and to appeal the importance of using a standardised test in any EFL/ESL research. For these goals, the following seven hypotheses were investigated based on the listening parts of the TOEIC® and the MALQ:

- H-1 For intermediate listeners, dictation training is more effective than listening strategy training.
- H-2 For low-intermediate listeners, dictation training is more effective.
- H-3 For intermediate listeners, the combined training of dictation and listening strategy is not effective for improving EFL listening comprehension.
- H-4 For intermediate listeners, the combined training of dictation and listening strategy is not significantly effective for improving metacognitive skills in EFL listening.
- H-5 For intermediate listeners, both dictation training and listening strategy training are effective with significance.
- H-6 For upper-intermediate listeners, listening strategy training is more effective.

- H-7 Intermediate listeners with listening strategy training show a greater change in their metacognitive skills.

To test these hypotheses, three experiments were conducted (i.e. Experiments I, II and III). The purpose of Experiment I was to investigate Hypotheses 1 and 2. The participants consisted of 108 first-year students (in the Faculty of Economics) at a Japanese private university. Only those who scored between 166 and 330 in the listening parts of the TOEIC® were selected and divided into three groups (i.e. CG, DTG and LSTG) in Week 1. From Weeks 2 to 14, for 30 minutes in their usual weekly class for 13 weeks, the DTG participants received dictation training, whereas the LSTG participants received training in the various types of listening strategies. In Week 15, the same listening parts of the TOEIC® were used to investigate Hypotheses 1 and 2.

The purpose of Experiment II was to investigate Hypotheses 3 and 4. The participants consisted of 57 first-year students (in the Faculty of Economics) at a Japanese private university. Only those who scored between 166 and 330 in the listening parts of the TOEIC® were selected and divided into two groups (i.e. CG and D+LSTG) in Week 1. The MALQ was also administered in Week 1 in order to examine the participants' metacognitive awareness in EFL listening before the experiment. From Weeks 2 to 14, for 60 minutes in their usual weekly class for 13 weeks, the D+LSTG participants received the combined training of both dictation training and the various types of listening strategies. In Week 15, the same listening parts of the TOEIC® and MALQ were used to investigate Hypotheses 3 and 4.

The purpose of Experiment III was to investigate Hypotheses 5, 6 and 7. The participants consisted of 94 first-year students (in the Faculty of Economics) at a Japanese private university. Only those who scored between 166 and 330 in the listening parts of the TOEIC® were selected and divided into three groups (i.e. CG, DTG and LSTG) in Week 1. The MALQ was also administered in Week 1 to examine the participants' metacognitive awareness in EFL listening before the experiment. From Weeks 2 to 14, for 30 minutes in their usual weekly class for 13 weeks, the DTG

participants received dictation training, whereas the LSTG participants received training in the various types of listening strategies. In Week 15, the same listening parts of the TOEIC® and the MALQ were used to investigate Hypotheses 5, 6 and 7.

In each experiment, a two-way ANOVA was conducted, and the effect size was measured using each participant's score of the listening parts of the TOEIC® (before and after the experiment) in order to examine the effect of each training. In addition, Ryan's method was employed to trace where the significance lies when the result of the ANOVA was significant. For a deeper investigation, the participants were divided into two groups, i.e. lower- and upper-intermediate listeners. The former consisted of participants who scored less than 250 in the listening parts of the TOEIC® in Week 1, whereas the latter consisted of those who scored 250 or more in the same test.

6.2 Overview of the Findings

The three experiments provided the results necessary to investigate the seven aforementioned hypotheses. The results of Experiment I revealed that 71% of the DTG participants and 70% of the LSTG participants increased their scores in Week 15, that both dictation training and listening strategy training were significantly effective for intermediate listeners and that dictation training was significantly effective specifically for low-intermediate listeners. These results supported Hypotheses 1 and 2.

Experiment II showed that the combined training of dictation training and listening strategy training was not effective for intermediate listeners, that the combined listening training was not effective for intermediate listeners to improve some metacognitive skills in EFL listening such as Directed Attention, Mental Translation, and Person Knowledge and that an improvement of Planning/Evaluation and Problem Solving in metacognitive skills were vital to becoming an advanced listener in EFL listening. These findings confirmed Hypotheses 3 and 4.

The results of Experiment III revealed that 79% of the DTG participants and 67% of the LSTG participants increased their scores in Week 15. In addition, the findings showed that both dictation training and listening strategy training were significantly effective for intermediate listeners, that listening strategy training was significantly

effective for upper-intermediate listeners, that intermediate listeners did not improve metacognitive skills in EFL listening without any listening training, that dictation training was not effective for intermediate listeners to improve metacognitive skills in EFL listening, that listening strategy training was effective for intermediate listeners to improve some metacognitive skills in EFL listening such as Mental Translation, Planning/Evaluation and Problem Solving and that an improvement of Problem Solving in metacognitive skills was vital to becoming an advanced listener in EFL listening. Therefore, Hypotheses 5, 6 and 7 were all confirmed.

Finally, all the results in Experiments I, II and III confirmed the theories of both Schneider and Shiffrin (1977) and Anderson (2010), in which there are gradual steps in both human information processing and language comprehension.

6.3 Implications of the Study

As stated in Chapter 2, numerous studies on EFL/ESL listening strategies have been conducted within the framework of applied linguistics and cognitive psychology since the 1970s (Brown, 1977; DeFilippis, 1980; O'Malley, Chamot and Küpper, 1989; Vandergrift, 1997; Goh, 2000; Graham, Santos and Vanderplank, 2011). The majority of these studies have concluded that advanced listeners use a wide array of listening strategies and that teaching listening strategies is effective. However, many of these studies neither employed a standardised test to measure the proficiency level of the participants before and after the experiments nor clearly defined how the participants were categorised. Without making these two points objectively clear, no scientific results are expected and no solid outcome is gained, regardless of the field. Therefore, the present study was undertaken to address these shortcomings. The findings of this study significantly contribute to the field of EFL listening, as described in the following paragraphs.

The most important contribution of this investigation is the confirmation that dictation training is significantly effective for low-intermediate listeners and that listening strategy training is also significantly effective for upper-intermediate listeners. This sheds new light on the study of EFL listening. By examining the level of listening

competence in English with a standardised test *prior to* the training, it is possible for both instructors and learners to know which type of training is more effective for learners. Many Japanese learners of English have been repeatedly instructed to ‘listen again’ and to ‘listen carefully’, but there are many situations in which learners cannot comprehend what is being said, regardless of their attempts to listen. Thus, learners need to know where comprehension breaks down, its cause and diagnostic instructions.

To begin with, dictation is probably the best way to investigate where comprehension breaks down. By comparing what is dictated with the audio script, it is possible to check the perception level. It is not necessary to dictate every single word but focus on whether only content words are written down. If any content word is missing at this level, then the possible causes are 1) the learner does not know the word, 2) the learner knows the word but does not know its spelling and 3) the learner can recognise the word by reading but not simply by listening. Vocabulary study can be instructed for the first and the second cases. For the third case, however, the three steps in dictation training procedure described in this study can be suggested.

When there is no problem in the perception level, the level of parsing can be checked by inserting slashes on the audio script. If they are inserted at grammatically incorrect places, the possible remedy is to instruct grammar in English.

Finally, when there is no problem in the parsing level, the level of utilisation can be checked by either translating the sentences or rephrasing them in English. For example, a sentence such as ‘Were you born in a barn?’ does not actually enquire whether the listener was born in a barn, as discussed in Chapter 2. The possible causes at this level are lack of background knowledge and/or inference. Thus, a potential instruction would provide the knowledge and further information about it. Hence, diagnostic instructions in listening with Anderson’s (2010) theory are possible at a classroom level.

As for the importance of diagnostic instructions in listening, Sheerin (1987, p. 129) indicates that until we have some diagnostic procedures, teachers can only continue to *test* comprehension but not teach it. Mendelsohn (1995, p. 133) also argues that the task of language teachers is to teach students how to listen by using strategies

that will ultimately lead to better comprehension rather than merely giving students an opportunity to listen.

The present study can provide both instructors and learners with insights where understanding has broken down based on the theory of Anderson (2010). These insights can be followed up with small-scale remedial exercises that can help prevent the errors of interpretation (especially low-level errors) from occurring again (Field, 2003, p. 326). Most people have limited time and money, and under these conditions, it is natural that one seeks the most effective way to reach a certain goal. Thus, providing more effective teaching or learning methods for particular learners would be greatly beneficial.

The second contribution of this study is to focus on the intermediate level. From empirical research perspective, it is natural for researchers to choose advanced learners and less-advanced learners since the gap between these two groups is generally large and easy to compare. However, intermediate learners make up the majority of the population, as proven in Chapter 1. Examples include this author's classes in which 91% of the students were intermediate listeners based on their scores of the listening parts of the TOEIC® in 2011 (Figure 1.4). Not only in this author's classes but also the majority of Asian and South American learners of English are categorised as intermediate in listening (Figure 1.8). The findings of the present study, which only focuses on intermediate listeners, can provide detailed insight into the formulation of future research designs on EFL/ESL listening.

The third contribution of this study is the introduction of a standardised test with a clear definition regarding how the participants were divided. As stated in Chapter 2, some researchers agree that listening strategy training is effective in EFL/ESL, whereas others disagree. One of the main reasons for this disagreement could be derived from the lack of a standardised test in these studies. Without the use of such a test, those categorised as more-successful listeners in one study might be considered as intermediate in another, whilst those categorised as intermediate in one study might be classified as less successful in another. Regardless of the outcomes of these studies, it would be extremely difficult or sometimes impossible to compare the results with

those of other studies without such a test. In addition, regardless of how many studies are conducted, the research of EFL/ESL listening would not be fruitful. Although Rubin (1994) indicated this important issue 20 years earlier, many studies have still been conducted without a standardised test. Moreover, it is essential to clearly describe how the participants were divided or categorised in a study. In this study, the listening parts of the TOEIC® were used as the standardised test and only those who scored between 166 and 330 were selected as intermediate listeners. Therefore, the results of this study can be easily adapted to many EFL/ESL learners by using Table 2.3 in Chapter 2. Although the listening parts of the TOEIC® were used as the standardised test in this study, it is not necessary to use this test as the standardised test. Any language proficiency test, which is reliable, international, popular, relatively easy to access and capable of comparing/converting other tests, can be used as a standardised test.

The final contribution of this study is in regard to metacognition in EFL listening. As stated in Chapter 2, an improvement in metacognitive skills in EFL/ESL is not doubtful. In addition, the findings from Experiments II and III provide a concrete pedagogical implication. An improvement of Planning/Evaluation and Problem Solving in metacognitive skills is vital to become an advanced listener in EFL listening. More specifically, Nos. 1, 10, 14, 20 and 21 for Planning/Evaluation and Nos. 5, 7, 9, 13, 17 and 19 in the MALQ for Problem Solving can provide aspects regarding what learners should be aware of. The results of this study prove that it is possible to determine which type of training is more effective for learners based on their scores of the listening parts of the TOEIC® *prior to* the training. At the same time, being aware that an improvement of Planning/Evaluation and problem solving in metacognitive skills is vital to become an advanced listener in EFL listening, which is extremely beneficial.

6.4 Suggestions for Future Research

The present study investigated the effect of teaching methods for EFL intermediate listeners. In this study, particular emphasis was placed on the intermediate level. Therefore, this experimental study can be replicated and extended in several directions.

First, it would be interesting to replicate this study with different linguistic backgrounds in Asia and South America. As stated in Chapter 2, it has been proven that the majority of learners of English in Asia and South America are at the intermediate level. This study identified that dictation training is significantly effective for low-intermediate listeners, that listening strategy training is significantly effective for upper-intermediate listeners and that an improvement of Problem Solving in metacognitive skills is vital to become an advanced listener in EFL listening. However, it would be interesting to determine if the same results can be obtained with EFL/ESL learners in Asia and South America.

Second, the results can be supplemented by a different combination of the two types of training, i.e. dictation training and listening strategy training. Although the results of this study confirmed that the combined training of dictation training and listening strategy training was not significantly effective for intermediate listeners, it would be interesting to investigate the effect of a different combination of training. For example, for one group, dictation training could be given for 60 minutes a week (from Weeks 2 to 7) for six weeks, and then listening strategy training could be conducted for 60 minutes a week (from Weeks 8 to 13) for another six weeks. For another group, listening strategy training could be given for 60 minutes a week (Weeks 2 to 7) for six weeks and dictation training could be conducted for 60 minutes a week (Weeks 8 to 13) for another six weeks. Then, in Week 14, a post-test could be conducted with a standardised test. The unique feature of this suggested study is that there is no control group. To make an empirical study objective and scientific, it is impossible to avoid having a control group. However, some researchers find it unethical. For us instructors, we *do* know that the participants in a control group receive no benefit from the research even before it begins. A control group is vital as a researcher, but it might be

unprincipled as an instructor. With the style of the suggested study above, it is not necessary to have a control group even in an empirical study. Thus, the suggested study is unique due to this feature.

Finally, even if a research result shows that a certain teaching method is effective, it is not scientific to make conclusions based on a single research result. In addition, when the method is taught by another instructor, the results might be different. To expect the same effect, an appropriate competence or working knowledge of the teaching methods is vital, and such competence or knowledge can only be based on the judgement of the instructor in the classroom. Instructors must pay careful attention to their students, whether they are following the given instructions, when employing the teaching methods. Thus, an effective teaching method and an appropriate competence or working knowledge of the teaching methods should work in cooperation.

For many years, Japanese learners of English have been simply instructed to ‘listen carefully’ and ‘listen many times’, and then *tested* on their comprehension level in EFL/ESL listening. However, ‘listening test’ and ‘listening instruction’ are two different things. Instructors should instruct ‘*how* to teach listening’, or where comprehension breaks down, why comprehension breaks down and how to address problems in EFL/ESL listening before *testing*.

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Appendix A Schedule of Experiment I

| Week | DTG | LSTG | CG |
|------|---|---|-----------------|
| 1 | TOEIC® | | |
| 2 | L1: Reduction of and/or L2: Reduction of to/for/of | Content & Function words | Usual lesson |
| 3 | L3: Contraction of be verbs L4: Contraction of will | Working memory Note taking | Usual lesson |
| 4 | L5: Contraction of have/has L6: Contraction of would | Inference 1 | Usual lesson |
| 5 | L7: Contraction of had/had better L8: Contraction of not | Inference 2 Redundancy | Usual lesson |
| 6 | L9: Reduction of the words which start with h L10: Reduction of them/him | Discourse markers | Usual lesson |
| 7 | L11: Reduction of ~ing L12: Reduction of (be) going to/want to/have to | Background knowledge Adjustment of inference | Usual lesson |
| 8 | L13: Reduction of be verbs in interrogative sentences L14: Reduction of be verbs in Wh-interrogative sentences | Inference 3 | Usual lesson |
| 9 | L15: Reduction of don't/doesn't/didn't in declarative sentences L16: Reduction of be Do/Does in interrogative sentences | Vocabulary Visual aids Background knowledge | Usual lesson |
| 10 | L17: Reduction of Did in interrogative sentences | Scanning 1 | Usual lesson |

| | | | |
|----|--|--------------------|-----------------|
| | L18: Reduction of do/does in Wh-interrogative sentences | | |
| 11 | L19: Reduction of did in Wh-interrogative sentences L20: Reduction of Do/Does/Did in negative questions | Skimming | Usual lesson |
| 12 | L21: Reduction of Have/Has in interrogative sentences L22: Reduction of have/has in affirmative sentences | Listening literacy | Usual lesson |
| 13 | L23: Reduction of auxiliary verbs in interrogative sentences L24: Reduction of auxiliary verbs + the present/past perfect in affirmative sentences | Scanning 2 | Usual lesson |
| 14 | L25: Omission of Do/Does/Did/be verbs in interrogative sentences | Scanning 3 | Usual lesson |
| 15 | TOEIC® | | |

Week 2 Lesson 1: and/or のリダクション (Reduction of and/or)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. John and I are good friends.
2. Come and see me whenever you have time.
3. John and I are going to visit Edinburgh.
4. Come and seen me anytime.
5. To go or to eat here?

6. Peter or John will be with us.
7. He and I are leaving now.
8. Sit down and fill out this form.
9. John or Bill will help you in a moment.
10. Have you seen John and Mary?

11. Come over about 2 or 3 o'clock.
12. The postman left a letter and a package for you.
13. Do you need a stamp and an envelope?
14. I will take a train or a bus to Baltimore.

Listening Tips

一般的に、2つの表現を結びつける接続詞 and や or には、ストレスが置かれられないので、これらの語は弱く発音され、リダクションを起こします。これは、その前後にくる語句の方が意味のうえで重要だからです。and は [ænd] ではなく [ən, n] という形になり、or は [ɔ:r] ではなく [ər] となります。したがって、John and I の場合には、and の [d] の音は完全に脱落し、John の [n] の音と and の [ə] の音が結びついて、[dʒənənai]、つまり「ジョーナンナイ」のようにひとつながりに聞こえます。Peter or John の場合は、Peter の語尾の [ər] を発音した後、口を崩さず続けて、or の [ər] の音を少し長めに発音した感じに近くなります。スピーキングとリスニングは表裏一体なので、両方の能力向上のためにも、ふだんからこのように実際に発音してみることが大切です。

Week 2 Lesson 2: to/for/of のリダクション (Reduction of to/for/of)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. I live next to a shopping centre.

2. Thanks for calling.

3. There is a lot of traffic today.

4. I'm going to the post office.

5. This apartment is not for rent.

6. I'm looking for my English book.

There are a lot of mistakes. There're も可とした。(There're is also OK.)

7. Will you talk to Bill this afternoon?

8. I went to Mexico for a vacation.

9. They are standing in the back of the room.

10. I mailed the package to Jack.

11. He is in front of the building.

12. They went home for an hour.

13. Do you have a message for me?

14. The machine is out of order.

Listening Tips

to, for, of などの前置詞が名詞や冠詞、代名詞などの前で使われる場合、これらの前置詞にはストレスは置かれず弱く発音されるため、学習者にとっては聞き取りにくくなります。to は [tə], for は [fə(r)], of は [ə(v)] となります。例えば This apartment is not for rent. の for rent 部分は [fə'rent] となり、「ファレン(ト)」と聞こえます。There are a lot of mistakes. では a lot of 部分の lot の [t] と of の [ə] が結びついて「アロタ」と聞こえます。こうした音を判別するには、lot のあとにあるかすかな [ə] の音を感じることが聞き取りのコツといえるでしょう。

Week 3 Lesson 3: be 動詞の短縮形 (Contraction of be verbs)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. I'm fine.
2. We're surprised.
3. Who's that man?
4. I'm right.
5. We're sorry.

6. Who's your boss?
7. Here's my passport.
8. It's really cool today.
9. Where's Helen?
10. They're standing outside.

11. She's studying to be a dentist.
12. We are thinking about taking a trip to California.
13. Who's at the front door?
14. What is the flight number?
15. There's a restaurant in the lobby of the hotel.

Listening Tips

私たち日本人は英語を話すとき、短縮されていない形を使いがちですが、実際の日常会話の英語では短縮された形の方が自然で、相手にとってもそちらの方が聞きやすいものです。例えば He is over there. という文ならば、特に丁寧に話すとき以外は、(He's) over there. の方が自然です。日頃からこのような短縮形で話す訓練をしておけば、ストレスの置かれない be 動詞が自然に弱くなり、全体として英語らしい発音になります。He's over there. の He's も、始めは His と聞こえがちですが、それでは文法的にも不自然なのでおかしいと思うでしょうし、ふだんから前述のような話し方をしていれば、自然と理解できるようになります。この音のイメージをいつも再現できるように心がけましょう。

Week 3 Lesson 4: will の短縮形 (Contraction of will)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. I'll see you tomorrow.
2. They'll leave Edinburgh at 8:00.
3. It'll be fine tomorrow.
4. I'll be ready in a minute.
5. They'll be there.

6. It'll rain later.
7. He'll help you.
8. There'll be enough.
9. It'll be finished by tomorrow.
10. Mike will send for his things.

11. It'll be much cooler tomorrow.
12. Mike will probably pay for the groceries with a check.
13. There will be a short intermission after the first act.
14. You will find the book on the reserve shelf in the library.
15. The doctor'll do for now. (The doctor will も可とした。) (The doctor will is OK.)

Listening Tips

一般的に助動詞は、主な意味を表す動詞に意味を添える働きをします。よって通常、ストレスは動詞に置かれ、助動詞には置かれません。助動詞の will の場合も、次に動詞を伴う一般的な形では、短縮された形で発音されることが多くなります。上記の He'll help you. は help にストレスが置かれ、[hi:l(h)élpju:] 「ヒィウヘルピュ」と、[l] の音が「ウ」に近くなります。一方、子音に続いて will の短縮形が使われる場合は、例えば、It'll なら [t] の音を発音するために舌先を上前歯の後ろにつけますが、完全には発音せず、ほぼ同じ舌の位置で発音される次の [l] の音に移行します。そのため、[i(t)l] 「イ(ト)ウ」という音に近くなります。日常の会話では [t] の音はあまりはっきりとは聞こえないようです。いずれの場合も、発音するときには [l] の音をしっかり出すように心がけましょう。

Week 4 Lesson 5: have/has の短縮形 (Contraction of have/has)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. I've been there three times.
2. He's done it.
3. You've spent all the money.
4. I've been here before.
5. He's left.

6. You've seen them.
7. That's happened before.
8. You've been improving recently.
9. They've returned.
10. There's been an accident.

11. I have seen this movie before.
12. They have already left.
13. Bill's gone to school by now.
14. It's been going on for a long time.
15. She's taught English for many years.

Listening Tips

be動詞の場合と同様に、現在完了形を作る have/has には、一般的にストレスが置かれず、実際の日常会話では短縮された形の方がよく使われています。最初のうちは You've seen them. の You've の部分が You としか聞こえないかもしれませんが、慣れてくると、You と seen の間に小さな [v] の音があるのに気づくでしょう。このイメージを覚えておいてください。一方、He's left. は、[s] の音が比較的是っきり聞こえるのでわかりやすいでしょう。

Week 4 Lesson 6: would の短縮形 (Contraction of would)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. I'd like to reserve my plane ticket.
2. It'd be better to leave right away.
3. He'd say it is nonsense.
4. I'd like some tea.
5. They'd like to leave.

6. It'd be better to go by subway.
7. You'd enjoy this.
8. I'd ask him to help me.
9. We'd like to talk to you.
10. There'd be a lot of food.

11. We would be glad to have you stay with us.
12. I'd offer you a coke, but there's not one in the house.
13. It would be nice to get tickets to the ball game.
14. She'd like that gift.
15. I think you'd enjoy that movie.

Listening Tips

前にも書きましたが、助動詞にはストレスが置かれないのが原則です。would も同様に、動詞の前で使われているときには弱く発音され、逆に動詞は強く読まれるのがふつうです。ナチュラル・スピードの会話では、上の Short の例のように、I'd like..., You'd enjoy... と、短縮された形で発話される傾向が強いようです。I'd like は [ai(d)laik] 「アイ(ドゥ)ライク」と発音され、[ai] を発音した後 [d] を発音するための用意をしますが、その直後にストレスの置かれる動詞 like がくるため、[d] の音はほとんど破裂しないまま、like の [l] の音に移行してしまいます。したがって I like に比べると、I'd like の方が I と like の間に弱い [d] の音が聞こえるか、ほんの少し間合いがあるように感じられます。

Week 5 Lesson 7: had/had better の短縮形 (Contraction of had/had better)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. She'd finished the job before 5:00.
2. We'd done it.
3. I'd better go home right now.
4. She'd already seen the movie.
5. We'd left by midnight.

6. I'd better do this.
7. You'd better go now.
8. She'd met the man before.
9. We'd arrived at the station by 9:00.
10. I'd better call my family.

11. I think we'd better go now.
12. We'd already seen that film, but we saw it again.
13. You'd better listen to my advice.
14. I had already gone home when you arrived.
15. The doctor said that he had better rest.

Listening Tips

過去完了形などで使われる助動詞 had は, would の場合と同様の短縮形になります。ナチュラル・スピードでは would と同様に, この 'd という短縮形の [d] の音の部分を聞き取るのは難しいかもしれません。多くの場合, 上の We'd left by midnight. のように We'd の [d] の音はあまりはっきりとは聞こえず, 音が少しつまったような感じがするだけです。これは [d] の音を発音しようと舌先を上の歯ぐきの裏につけた瞬間に, もう次の [l] の発音に移行するためです。You'd better go now. も同様に, You'd の [d] はほとんど聞こえないことが多いようです。

Week 5 Lesson 8: not の短縮形 (Contraction of not)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. It isn't rainy today.
2. He hasn't finished his essay.
3. It isn't time to leave.
4. They weren't here last week.
5. He hasn't arrived yet.

6. They don't want to come.
7. They weren't able to come yesterday.
8. He didn't say that.
9. They wouldn't go with us.
10. He is not in the fifth grade.

11. We were not interested in that.
12. The child won't eat.
13. We can't understand the professor.
14. That doesn't make sense.

Listening Tips

私たち日本人は英語を話すとき、not を短縮しない形で使う傾向がありますが、実際の会話では not は短縮され、be 動詞や助動詞とともに 1 語になった形の方をよく使います。is not は isn't, were not は weren't, has not は hasn't, do not は don't という形になります。そして語尾の [t] の音はかなり弱く、聞こえにくくなります。会話では日頃から短縮形を使うように心がけ、その音のイメージを再現するように努めてください。ポイントは [n] の音をしっかりと発音してから、舌先を上歯ぐきの裏につけたまま、すばやく [t] の音に移行することです。

Week 6 Lesson 9: h で始まる語のリダクション

(Reduction of the words which start with h)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. He'll call her in the afternoon.
2. I think he's coming soon.
3. Come here right away.
4. I'll call her again tonight.
5. I think he's waiting to see you.

6. Come here a minute.
7. It's her application.
8. Give it to him.
9. Do you know her well?
10. Is this his seat?

11. He hasn't been here all day.
12. I need to buy a gift for him.
13. Is that her brother?

Listening Tips

[h] の音は英語の子音の中で最も弱い音の1つで、ナチュラル・スピードの会話ではリダクションされることがよくあります。call her は [kɔ:lər], he's は [(h)i:z/(h)iz], そして gave him は [géivim] と聞こえます。ここで大切なことは、リダクションされるのは、例えば代名詞などの「[h] で始まるストレスが置かれない語」であるという点です。ただし声に出して練習するときには、意図的に [h] の音を落とすことに夢中になるのではなく、ナチュラル・スピードと正しいイントネーションで話すよう心がけてください。そうすればストレスが置かれない語の [h] の音は自然に弱くなって落ちます。

Week 6 Lesson 10: them/him のリダクション (Reduction of them/him)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. I'll get them soon.
2. Give them a hard time.
3. I told them yesterday.
4. I told them to leave.
5. Why don't you write them a letter?

6. I saw him yesterday.
7. Did you ask him if he could come?
8. Let me check him again.
9. Have you ever met him before?
10. Have him call them.

11. Tell him Joe sent you.
12. I'll put them behind the cash register.
13. Why don't you write him a letter?
14. One of them is more expensive than the other.

Listening Tips

実際の会話では、特に強調された場合を除き、them や him は文中では強く発音されない語で、told them の th [ð] の音や ask him の [h] の音は、実際には発音の準備をするだけで、音自体はリダクションされて聞こえにくくなります。したがって、その場合の them か him かの聞きわけは、母音の音の違いに頼るしかありませんが、文の状況も考慮すれば、どちらか判断がつきやすくなるでしょう。

Week 7 Lesson 11: ~ing のリダクション (Reduction of ~ing)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. I'm going home.
2. What are you doing?
3. He's working on his essay.
4. Where are you going?
5. She isn't doing the dishes.

6. Is the car being repaired?
7. What are you doing later on?
8. Are you expecting him soon?
9. I'm learning to speak English.
10. He's going to Los Angeles next week.

11. How are you doing today?
12. Who is living with you now?
13. He is borrowing some money from the bank.
14. They are being fired.

Listening Tips

英語の歌などを聞いていると、going や doing などの語尾の g の音が聞こえないことがよくあります。そして歌詞カードには、該当箇所が goin', doin' などと書かれています。これは -ing の [ɪŋ] の音がリダクションされ、ほとんど前置詞 in [ɪn] に近い音に変わっているからです。ただしリダクションを受けた -in' は、前置詞の in よりも弱い音であることが、多いようです。このリダクションされた形を実際に発音する場合には、舌先を上歯ぐきの裏につけて [n] の音をしっかりと発音することが大切です。私たちはややもすると、日本語の弱い「ん」の音で代用してしまいがちなので注意が必要です。

Week 7 Lesson 12: (be) going to/ want to/ have to のリダクション

(Reduction of (be) going to/want to/have to)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. You're going to/gonna look at it.
2. I want to/wanna talk to you.
3. Does she have to check her boyfriend's essay?
4. I'm going to leave now.
5. Are you going to stay here?

6. I want to go with you.
7. Do you have to leave now?
8. I'm going to stay home.
9. I don't want to take a taxi.
10. We want to leave at 9:00.

11. They are going to move to Los Angeles.
12. Do you have to go home now?
13. Do you want to see her sometime?
14. They are not going to/are not gonna bother us anymore.

Listening Tips

(be) going to, want to, have to はそれぞれ決まった表現であり、それぞれ to との結びつきが非常に強いので切り離して使うことはありません。しかも使用頻度が高いため、ストレスの置かれない部分が自然にリダクションを起こして用いられます。リダクションせずに読む場合でも、それぞれ (be) going to, want to, have to, いずれの場合も going, want, have にストレスを置いて発音し、to は添える程度に軽く発音するのがポイントです。リダクションの形ではそれぞれ、(be) gonna [gənə], wanna [wənə], have to [hæftə] と発音します。have to の [f] の音をしっかり出すように心がけてください。

Week 8 Lesson 13: 疑問文中の be 動詞のリダクション

(Reduction of be verbs in interrogative sentences)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. Are you OK?
2. Is it fun?
3. Was he able to come yesterday?
4. Are you ready to go?
5. Is it serious?

6. Was he with you last night?
7. Were they talking about me?
8. Is it OK if I smoke?
9. Were there any problems with it?
10. Is it cold outside today?

11. Are they making too much noise?
12. Am I in this class or the other one?
13. Was that your idea?
14. Were you speaking to me?

Listening Tips

一般的に、be 動詞はストレスが置かれず、しかも使用頻度が高いため、リダクションを起こしやすくなります。疑問文の場合は、be 動詞がリダクションされて、次にくる代名詞の主語と結びつくことが多いので、しっかりと聞き取ることが大切です。また、英語を話す際にもそのような音のイメージを再現できるように練習しましょう。Are you...?, Were they...? はそれぞれ「アーヤ」、「ワゼイ」となります。また Is it...?, Was he...? はそれぞれ「(イ)ズイット」、「ワズイー」となります。ナチュラル・スピードで話された場合、is の [i] の音は弱まり、場合によってはほとんど聞こえなくなります。一方、was の [w] の音は、多少弱まるものの、聞き取ることができます。

Week 8 Lesson 14: Wh-疑問文中の be 動詞のリダクション

(Reduction of be verbs in Wh-interrogative sentences)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. Where are you going?
2. When is he coming?
3. Who were they working with?
4. Where are you staying?
5. Who were they talking to? (are も可とした。) (are is also OK.)

6. What was she doing last night?
7. How are you going to pay the rent?
8. Why were they upset?
9. Who was he talking to just now?
10. What am I supposed to do?

11. When is he picking you up?
12. Where is it located?
13. How are those gloves?
14. Why were you standing in line yesterday?

Listening Tips

ここで扱っているのは疑問詞を伴った場合の be 動詞のリダクションです。疑問詞の語尾の発音と次にくる be 動詞の発音、さらにそのあとの主語の代名詞の発音の組み合わせにより、リダクションは微妙に異なります。特に注意が必要なのが、3人称単数の疑問形のリダクションです。上の例でいえば、When is he in his office? の When is he では、he の弱い [h] の音が落ち、「オエンズイー」とひとまとまりのように聞こえます。また What was she doing last night? の What was she は、what の [t] の音が弱くなる傾向があり、was の [z] の音と she の [ʃ] の音がぶつかって [ʃ] の音の方に飲み込まれ、「ワッフシー」のように聞こえます。

Week 9 Lesson 15: 平叙文中の don't/doesn't/didn't のリダクション

(Reduction of don't/doesn't/didn't in declarative sentences)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. I don't like cats.
2. She doesn't live near here.
3. They didn't come yesterday?
4. I don't like coffee.
5. They don't arrange the meeting.

6. It doesn't cost much.
7. She didn't tell me.
8. It doesn't take long to get here.
9. We don't have enough time.
10. He didn't know what to do.

11. You don't need to worry about it.
12. My watch doesn't work.
13. I didn't understand the question.
14. The meeting doesn't start until twelve.
15. I don't have a reservation.

Listening Tips

ナチュラル・スピードの英語では、次に母音で始まる単語がきてリンキングする場合を除いて、単語の語尾の子音がリダクションされることがよくあります。会話で頻繁に使われる否定語 don't, doesn't, didn't はその最も顕著な例です。don't like, doesn't cost, didn't tell などの場合、舌先を [t] を発音するための位置にまで持っていって準備をしながらもほとんど発音はせず、次の動詞の最初の子音の発音に移行します。また、didn't の2つ目の [d] は完全には発音されずに [n] の音に移行するので、実際にははっきりと聞こえるのは [n] の音だけです。

Week 9 Lesson 16: 疑問文中の Do/Does のリダクション

(Reduction of be Do/Does in interrogative sentences)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. Do you like it?
2. Does she work in here?
3. Does it attract many people?
4. Do you know her?
5. Does she have your number?

6. Do we need it?
7. Does she know how to swim?
8. Does it work well?
9. Do you really have to go now?
10. Do we read page 40 or 14?

11. Does she like coffee with cream and sugar in it?
12. Does that make any difference?
13. Does he speak any English?

Listening Tips

ナチュラル・スピードの英語では、疑問文の文頭にくる Do/Does はリダクションを起こし、次に続く主語の代名詞の最初の音と結びついて、1つの単語のような音を作ります。実際の音の変化は、Do/Does とその次にくる主語との組み合わせによって異なります。Do we...? の場合は「ドゥウィ」と比較的わかりやすい音になりますが、Do you...? の方は「ドゥウ」という形になり、Do と you が結びついて1つの単語のように聞こえます。同様に Does she...? は「ダ(ズ)シー」という形で、Does の [z] と she [ʃ] の音がぶつかって [z] が弱まる結果、あまり聞こえなくなります。その一方で、Does it...? の場合は「(ダ)ズイツ(ト)」となり、最初の [d] の音が弱くなる傾向にあります。

Week 10 Lesson 17: 疑問文中の Did のリダクション

(Reduction of Did in interrogative sentences)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. Did you have a good time?
2. Did he make a speech yesterday?
3. Did we make a reservation?
4. Did you call him in advance?
5. Did she call you last night?

6. Did we win the football game?
7. Did he pay back the money?
8. Did you see the movie at the Paramount?
9. Did he get the job?
10. Did we have any homework?

11. Did we win the game?
12. Did you do the laundry?
13. Did she quit her job?
14. Did he come on time?
15. Did they put in your phone?

Listening Tips

ナチュラル・スピードの英語では、疑問文の文頭にくる Did はリダクションを起こして次にくる主語である代名詞の最初の音と結びつき、1つの単語のような音を作ります。Did you...? の場合は、最初の [d] の音がかなり弱くなり、2つ目の [d] の音と you の [j] の音が結びつく結果、「(ディ)ジュ」のような音になります。Did he...? の場合は、2つ目の [d] の音が弱くなる傾向があり、最初の [d] の音と he の [h] が落ちた残りの部分が結びついて、「ディ(ヒ)ー」に近い音になります。Did she...? の場合は、最初の [d] の音がかなり弱まり、2つ目の [d] の音と she の [ʃ] の音が結びついて、「(ディ)シー」から「(ディ)チー」のような音になります。一方、Did we...? では2番目の [d] を発音の用意をするとすぐに、we に移行してしまいます。

Week 10 Lesson 18: Wh-疑問文中の do/does のリダクション

(Reduction of do/does in Wh-interrogative sentences)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. When do we have to come?
2. Where does he work?
3. When does it stop?
4. Where do I have to go?
5. Where does he live?

6. When does it start?
7. What do you want for dinner?
8. When does it open?
9. What does he do for a living?
10. How do you want your hair cut?

11. What does she have in the bag?
12. Why does it make a difference?
13. Where does he go for shopping?
14. Who do they work for?

Listening Tips

疑問詞のある文における do/does のリダクションですが、多くの場合 do/does はその前にある疑問詞ではなく、続く主語である代名詞と結びついてリダクションを起こします。Where do I...? の場合は「ドゥアイ」と読む人と「ドゥワイ」と読む人がいるようです。What do you...? の場合は、what の [t] が落ち、do you の部分が「ダヤ」とそれぞれ弱くなり、全体として1語のように聞こえます。Where does he...? の does he では [d] がかなり弱くなり、場合によっては、[h] の音が落ちて「(ダ)ズイー」に近くなります。When does it...? の場合も同様に does it の [d] の音がかなり弱くなって「(ダ)ズイッ(ト)」に近い発音になります。

Week 11 Lesson 19: Wh-疑問文中の did のリダクション

(Reduction of did in Wh-interrogative sentences)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. Where did I have to go?
2. What did you do yesterday?
3. When did it stop?
4. Where did I put my key?
5. What did you do last night?

6. When did it start?
7. Where did you have to go last night?
8. Why did he miss the class?
9. How much did that cost?
10. What did you do last night?

11. Why did it matter so much to you?
12. Where did they hear the story?
13. When did I talk to you?
14. Who did she give them to?

Listening Tips

多くの場合、疑問詞のある文の did は、その前にある疑問詞ではなく、続く主語の代名詞と結びついてリダクションを起こします。Where did I...? の場合、did I は did の最初の [d] が弱まり、2 つ目の [d] と I [ai] が結びついて、「(ディ)ダイ」に近くなります。What did you...? の場合は、did の 2 つ目の [d] と you の [j] の音が結びついて「(ディ)ジュ」のようになります。また、Where did that...? はそれらとは異なり、did の 2 つ目の [d] の音が、次にくる that の [ð] の音とぶつかるため、この [d] の音はかなり弱くなります。

Week 11 Lesson 20: 否定疑問文中の Do/Does/Did のリダクション
(Reduction of Do/Does/Did in negative questions)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. Don't you think so?
2. Doesn't he like to come with us?
3. Didn't it snow yesterday?
4. Don't you want to go?
5. Doesn't he live here anymore?

6. Didn't it rain last night?
7. Don't you think it's time to go?
8. Didn't it clear up in the morning?
9. Doesn't she want to come along?
10. Didn't you bring your camera?

11. Doesn't he remind you of someone else?
12. Don't they need to extend their visas?
13. Didn't it snow a lot last year?

Listening Tips

否定疑問文中の Don't/Doesn't/Didn't のリダクションは、次にくる主語である代名詞と結びつく形で起こります。したがって、その代名詞の最初の音によってリダクションの音のイメージは微妙に異なります。Don't you...? は「ドゥンチュー」のように、[n] が少し鼻にかかったように発音され、[t] は次の [j] の音と結びつきます。Doesn't he...? は「ダズニー」のように [t] と [h] の音が落ち、Didn't they...? は [t] と [ð] の音がぶつかるために [t] が弱くなって「ディンゼイ」に近くなります。Didn't it...? は「ディニツ(ト)」のような感じです。don't you/didn't you の場合を除き、多くの場合、否定の ...n't の [t] の音は舌先で発音の準備はしますが、実際にほとんど発音することではなく、音は飲み込まれて聞こえないことが多いのです。発音のポイントは、舌先を上の歯ぐきの裏につけて [n] の音をしっかり出すことと、次の代名詞との間を空けずに発音することによって ...n't の [t] の音をうまく落とすことです。

Week 12 Lesson 21: 疑問文中の Have/Has のリダクション

(Reduction of Have/Has in interrogative sentences)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. Have you ever been to Danville?
2. Has he talked to the police officer?
3. Has it become known to everyone?
4. Have you ever been to Arizona?
5. Has it happened before?

6. Have you called the plumber yet?
7. Has he ever talked about me?
8. Have you finished your assignment yet?
9. Has she ever been married?
10. Has it started to rain yet?

11. Has he solved the problem?
12. Have there been any messages for me?

Listening Tips

現在完了は have/has + 動詞の過去分詞の形をとりますが、この場合の have/has は助動詞なので、一般的には弱く発音されてリダクションの対象となります。特に最初の [h] の音は、弱くなることが多く、それに続く a の [ə] の音も弱くて聞きとれないことがよくあります。したがって、Have you...? は [(hə)vju], Have I...? は [(hə)vai], Has he...? は he の [h] の音も落ちて [h(ə)zi:] に近くなり、Has it...? は [(hə)zit] となります。ただし、have/has の [h(ə)] の音は、実際にはかすかに発音はされているので、聞き取りには注意してください。

Week 12 Lesson 22: 肯定文中の have/has のリダクション

(Reduction of have/has in affirmative sentences)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. I have several hobbies.
2. She has a driver's licence.
3. We have a lot in common.
4. I have some work to do.
5. She has a good job.

6. We have a lot to learn.
7. It has a lock on it.
8. She has a ticket.
9. It has a good view.
10. We have too many books.

11. I have a headache.
12. She has a new job.
13. He has a friend in the army.
14. They have a savings account at this bank.
15. It has a lot of benefits.

Listening Tips

Lesson 21 では、現在完了形 (have/has + 動詞の過去分詞形) を作る助動詞 have/has の疑問文におけるリダクションを学びました。今回は、ストレスが置かれるはずの動詞 have/has もまた、リダクションの対象になるということに注目しましょう。なぜそのようなことが起こるのかという理由は2つ挙げられます。1つ目は、そもそも [h] の音が非常に弱い音であること。そして次に have という動詞が頻繁に使われるということです。したがって、have は動詞であるにもかかわらず、[h] の音が落ちてしまうというリダクションが起こるのです。

Week 13 Lesson 23: 疑問文中の助動詞のリダクション

(Reduction of auxiliary verbs in interrogative sentences)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. Could you help me?
2. Can you make a reservation?
3. Could you give me a ride?
4. Should we give this to her?
5. Can you give me a hand?

6. Shall we go now?
7. Would he help us if we asked?
8. Can I borrow your note?
9. Should I hand in the homework now?
10. What would you do with a million dollars?

11. Shall we go to the park?
12. Could he go with you?
13. Can you pick me up tomorrow?
14. Should I be helping you?

Listening Tips

ここでは、疑問文中における助動詞のリダクションを扱っています。どのような音のイメージになるかは、助動詞の語尾の音と主語である代名詞の最初の音との関係で決まります。Could you...? の場合は「クジユ」という [d] と [j] が混じった音になり、Should we...? の場合は [d] が弱くなって、「シユ(ドウ)ウィ」のような音になります。Shall we...? の場合は「シャウィ」という音になり、比較的聞き取りやすい形になります。Can you...? は [n] と [j] の音が結びついて、「キャニユ」となります。そしていちばん大切なことは、それぞれを1語のように続けて発音することです。

Week 2 Lesson 24: 肯定文中の助動詞＋完了形のリダクション

(Reduction of auxiliary verbs + the present/past perfect in affirmative sentences)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. You must have done it.
2. We would have made it if we had prepared a lot.
3. They will have completed the project by that time.
4. He must have gone home already.
5. We would have come if you had asked us.

6. By 2001, he will have graduated.
7. You shouldn't have done that.
8. Somebody must have taken it.
9. The plane might have been delayed.
10. They really shouldn't have made that mistake.

11. He must have forgotten the conference.
12. We would have been lost.
13. He could have become a doctor but he didn't.
14. The snow will have stopped by now.
15. That couldn't have been the right answer.

Listening Tips

完了形 (have + 動詞の過去分詞) とともに使われる助動詞のリダクションは、助動詞と have で1つの音のように聞こえます。どのような音のイメージになるかは、それぞれの助動詞の語尾の音と have との関係で決まります。must have は「マスタ(ヴ)」に、would have は「ウダ(ヴ)」, そして will have は「ウィラ(ヴ)」と聞こえ、[v] の音はかなり弱くなり、確認できないくらいになることもあります。文字にとらわれず、この音のイメージを再現するように努めてください。

Week 14 Lesson 25: 疑問文中の Do/Does/Did/be 動詞の省略

(Omission of Do/Does/Did/be verbs in interrogative sentences)

CD を聞いて下線部に入る語句を書きましょう。

(Listen to the CD and complete the blanks.)

1. You want some wine?
2. He come here yesterday?
3. She been fine lately?
4. You want some tea?
5. He come to school yesterday?

6. He call you last night?
7. You seen him recently?
8. She been here?
9. You have Bob's telephone number?
10. Did he find his notebook?

11. He been in Tuscan for long?
12. There any cheap apartments in Tempe?
13. Is there any food in the refrigerator?

Listening Tips

Lesson 13, 16および21で、疑問文の文頭にくるbe動詞やDo/Does/Did、助動詞のHave/Hasが弱く発音されるために、Is he...?「(イ)ズィー」Do you...?「ドユウ」のようなリダクションが起きることを勉強しました。そのリダクションがさらに進むと、be動詞やDo/Does/Did、助動詞のHave/Hasそのものが完全に落ちてしまうことがあります。つまり、You want some tea?やHe come to school yesterday?あるいは、There any visitors here?のように、形のうえでは肯定文に近いものになりますが、最後にイントネーションが上がるので疑問文だということがわかるのです。また、文頭の助動詞やbe動詞が脱落していても、文の構造やyesterdayのような時制を表す語句のおかげで、コミュニケーションには支障はありません。

Week 2 Content & Function words

- **内容語** (Content words) → 強く読む (stressed)
名詞・一般動詞・形容詞・副詞・疑問詞・指示代名詞
nouns・verbs・adjectives・adverbs・interrogatives・demonstrative pronouns
- **機能語** (Function words) → 弱く読む (unstressed)
助動詞・冠詞・接続詞・前置詞・関係詞・人称代名詞
auxiliary verbs・articles・conjunctions・prepositions・relative adjective
adverbs/clauses/pronouns・personal pronouns

<Exercise> Listen to the CD and complete the blanks.

1. **centennial**: This is the 100-year anniversary of the founding of a country, college, or other institution.
2. **pedestal**: This is the base of stone, metal, or wood that a statue stands on.
3. **routine**: This is another word for the performance of a singer, magician, or comedian.
4. **you name it**: This expression is used to show that there is a wide variety of things to see, do, or choose from.
5. **from all walks of life**:
This expression is used to show that the people in a particular place come from many different backgrounds and have many different jobs.

(Someya & Ferrasci, 2010, p.10)

Week 3

- 短期記憶容量について (Working memory)
- ノートの取り方(Note taking): 記号、省略、数字などを使う。

(Use marks, abbreviations, numbers, etc.)

| | | | |
|------------|---------|---------------|---------|
| e.g.) and | → + | No | → × |
| with | → w) | sixty | → 60 |
| somebody | → s/b | Sunday | → Sun |
| anybody | → a/b | 10 o'clock | → 10:00 |
| everywhere | → e/w | students | → ss |
| language | → lg. | English | → E. |
| learning | → lrng. | international | → int'l |

Week 4 Inference 1

- 推測能力 1 (= 音声 + 文法 + 語彙 + 背景的知識など)

(= voice + grammar + vocabulary + background knowledge, etc.)

* 音声(voice): pitch (高さ) + tone(口調)

= 話し手の感情、性別、年齢、状況などが推測できる。

(= A listener can guess the speaker's feelings, gender, age, situations, etc.)

<Exercise> Listen to the CD and answer the questions.

Questions:

1. Where was Tommy?
2. What was Tommy doing?
3. What happened to the book?
4. What did Tommy plan to do about the book?
5. How did Tommy make his eye feel better?

Script:

Tommy was lying down looking at a reading book.

The room was full of steam.

Suddenly Tommy got some soap in his eye.

He reached wildly for the towel.

Then, he heard a splash.

Oh, no! What would he tell his teacher?

He would have to buy a new one.

Tommy rubbed his eye and it soon felt better.

(Yuill, N., & Oakhill, J., 1991, p.182)

Week 5 Inference 2 and Redundancy

- 推測能力 2 (= 音声 + 文法 + 語彙 + 背景的知識など)

(= voice + grammar + vocabulary + background knowledge, etc.)

* 文法的知識の活用 (Active usage of grammatical knowledge)

<Exercise 1> Listen to the CD and choose the appropriate words.

1. This expression is ~~use~~/used to show/~~showed~~ that there is/~~are~~ a wide variety of ~~thing~~/things to see, do or choose from.

Listen to the CD and complete the blanks.

2. He was sick last night.
3. I have done it before.

-
- 語彙 (Vocabulary) : 未知 (聞こえない/聞き取れない) の語句の対処法
(How to understand the words that you do not know)
→とにかく落ち着く。余剰性(=繰り返し)がある。
(Keep calm and keep listening expecting redundancy.)
e.g.) What *** means? It means that..., in other words, etc.
-

< Exercise 2> Listen to the CD and complete the blanks.

Today, we're going to talk about foods and drinks that can be addictive.

What does “addictive” mean? Well, it means that a person can't easily stop consuming something. They crave it.

(Clement & Lennox, 2009, p.34)

Week 6

- 談話標識 : discourse markers(=話しの展開が予測できる材料)
(= They indicate a speaker's attitude to what s/he is saying next.)
e.g.) firstly, secondly, finally, and, but, however, No, So, because, since, for, etc.

<Exercise 1> Listen to the CD and write three discourse markers.

1. firstly 2. and 3. no

< Exercise 2> Listen to the CD and write three addictive substances and examples.

1. caffeine ----- coffee
----- tea
----- colas ----- Pepsi
----- Coke
2. sugar
3. chocolate

Script:

Let's talk first about caffeine. That's c-a-f-f-e-i-n-e. It's a natural substance that makes people feel excited or more awake. And studies have shown that it's addictive. Can you think of something you drink that contains caffeine? Let's see. There's coffee. And tea. And how about colas, like Pepsi and Coke? These all contain caffeine, and therefore carry the risk of addiction. Does this mean you'll become addicted if you have a coffee now and then? Or a Coke or a cup of tea? No. It's only when you drink several cups or glasses every day that you might experience the addicting quality of these drinks. So how does caffeine affect our bodies and what are the dangers of a caffeine addiction? Well, too much caffeine can cause your heart to "race." And you may have difficulty sleeping. Caffeine can also cause your body to lose water. And, finally, if you consume a lot of caffeine over a long period of time, and then try to quit it? You might experience headaches. Here's another example of something common—and addictive. Sugar! You might say "What? There's sugar in all sorts of foods and drinks." You're right. Americans consume an average of 135 pounds of sugar every year—that's 2 to 3 pounds a week! It's pretty hard to get through a day

without eating something with sugar in it. Lots of common foods and drinks—like candy, soft drinks, breakfast cereal, even spaghetti sauce—contain sugar! So what are the dangers of having a sugar addiction? Well, if we eat or drink a lot of it, we might feel “high” or happy at first. But later it can make us feel unhappy or low. And eating a significant amount of sugar can make us fat. Sugar is also bad for our teeth. But, like with caffeine, if we consume a little sugar each day, we probably won’t experience addiction. OK. I’ve saved the best example for last. At least I think it’s the best: chocolate! Here we have sugar, plus a couple of chemicals that are like caffeine. So all of the consequences of caffeine and sugar I mentioned are true for chocolate, too.

(Clement & Lennox, 2009, p.34)

Week 7

● 背景的知識 (既に知っていること) (Background knowledge)

<Exercise 1> Listen to the CD and answer the question.

1. Why did she rush into her house?

● 推測の修正 (Adjustment of inference)

<Exercise 2> Listen to the CD and answer the question.

1. What is John?

| | | | |
|---------|--------------------|--------------------------|--------|
| ①生徒 | 先生 | 主任の先生 | その他 |
| student | teacher/instructor | chief teacher/instructor | others |
| ②生徒 | 先生 | 主任の先生 | その他 |
| ③生徒 | 先生 | 主任の先生 | その他 |
| ④生徒 | 先生 | 主任の先生 | その他 |
| ⑤生徒 | 先生 | 主任の先生 | その他 |

Script of Exercise 1:

Eleanor heard the ice cream van coming down the street. She remembered her birthday money and rushed into her house.

Script of Exercise 2:

- ① John was on his way to school.
- ② He was terribly worried about the mathematics lesson.
- ③ He thought he may not be able to control the class again today.
- ④ He thought it was unfair of the instructor to make him supervise the class for a second time.
- ⑤ After all, it was not a normal part of a junior's duties.

(Sanford & Garrod, 1981:10)

Week 8

- 推測能力 (Inference 3) : タイトルのもつ影響力+背景的知識
(The effect of a title + background knowledge)

<Exercise>

1. 要約を口頭で述べなさい。(Listen to the CD and write a summary.)

<Two titles>

For Group A, A prisoner plans his escape.

For Group B, A wrestler in a tight corner.

Script:

Rocky slowly got up from the mat, planning his escape, he hesitated a moment and thought. Things were not going well, what bothered him almost was being held, especially since the charge against him had been weak. He considered his present situation. The lock that held him was strong, but he thought he could break it.

(Anderson, Reynolds, Schallert and Goetz, 1977, p.10)

Week 9

- 語彙＜音声：1回＞ (Vocabulary → The script was read three times.)
- 視覚情報＜音声：1回＞ (Visual aids → The script was read once.)
- 背景的知識＜音声：1回＞ (Background knowledge → The script was read once.)

<Exercise>

1. 要約を口頭で述べなさい。 (Listen to the CD and write a summary.)
-

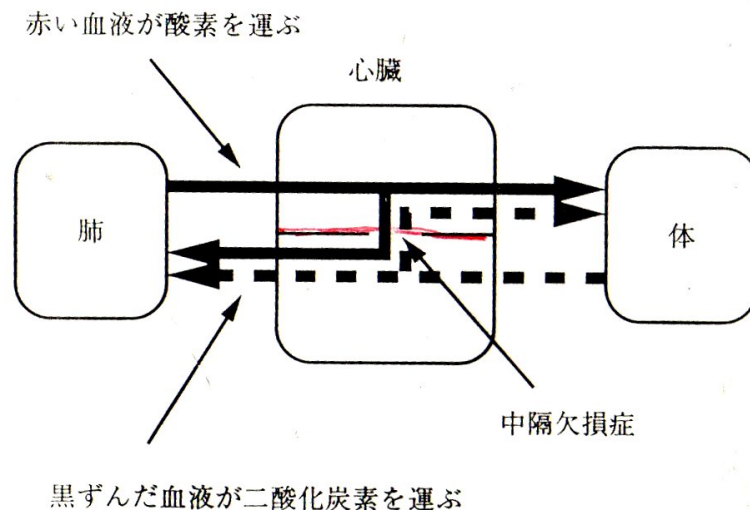
Script:

When a baby has a **septal defect**, the blood cannot **get rid of** enough **carbon dioxide** through the **lungs**. Therefore, it looks purple.

(Kinstch, 1988, p.294)

Vocabulary: septal defect, get rid of, carbon dioxide, lungs

Visual aids:



Week 10

● スキャニング 1 (Scanning 1)

<Exercise 1>

You will hear a short conversation between two people. Listen carefully and then read each question and choose the best answer.

1. Where is this conversation taking place?
 - (A) In an office
 - (B) In an airplane
 - (C) At a school office
 - (D) On a train platform

 2. What did the woman do with the papers?
 - (A) She sent them to customers.
 - (B) She put them in the trash.
 - (C) She copied them.
 - (D) She read them.

 3. How does the man feel?
 - (A) Very tired.
 - (B) Disappointed.
 - (C) Angry.
 - (D) Relieved.
-

Script of Exercise 1:

Man: What did you do with the customer record I gave you about an hour ago?

They were on my desk earlier this morning.

Woman: Oh, I took them to the copy room and copied them. I put them back on your desk.

Man: Oh, good. I thought you might have sent them to our customers. I still need to make some changes before I take them to the post office.

(Stafford, 2009, p.7)

< Exercise 2>

You will hear a short conversation between two people. Listen carefully and then read each question and choose the best answer.

1. What is the topic of the conversation?
 - (A) A new TV series.
 - (B) Going on a trip.
 - (C) Buying an appliance.
 - (D) Selling an old television.

2. What is Simpson's?
 - (A) A television manufacturer.
 - (B) A store that sells electronics.
 - (C) A TV broadcasting company.
 - (D) A large department store.

3. What will the woman probably do in the future?
 - (A) Have a garage sale.
 - (B) Screen a new film.
 - (C) Go to Simpson's.
 - (D) Attend a screening.

Script of Exercise 2:

Woman: My TV is too old. I want to buy a large flat screen TV but they're so expensive. I really don't know what to do.

Man: I have an idea. Simpson's electronic is having a big sale over the weekend. Why don't you see what they have?

Woman: Good idea. I don't have much money. So I need to pay as little as I can.

Man: I know what you mean. Everything seems to be getting more expensive.

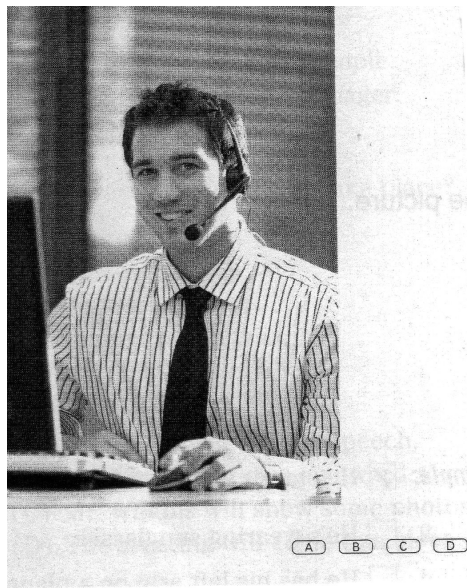
(Stafford, 2009, p.7)

Week 11

● スキミング (Skimming)

<Exercise>

You will hear four statements. Look at the picture and choose the statement that best describes what you see in the picture.



Script:

- A. She may be a carpenter.
- B. His tie is striped.
- C. He seems to be angry.
- D. He's wearing a headset.

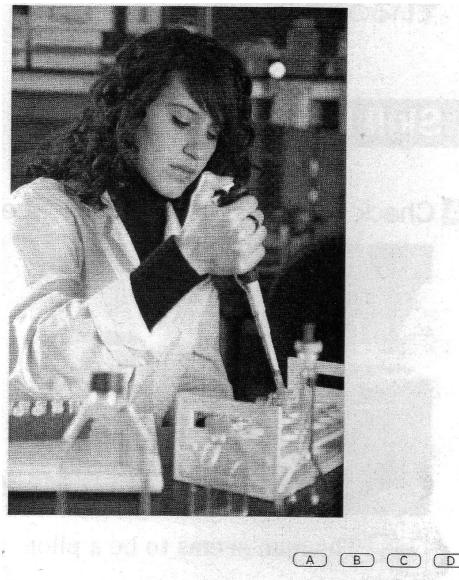
(Stafford, 2009, p.10)

Week 12

● リスニング・リテラシー (Listening literacy)

<Exercise>

You will hear four statements. Look at the picture and choose the statement that best describes what you see in the picture.



Script:

- A. They are wearing sweaters.
- B. His clothes are formal.
- C. Her basket is full.
- D. She is shopping for clothes.

(Stafford, 2009, p.10)

Week 13

● スキャニング 2 (Scanning 2)

<Exercise>

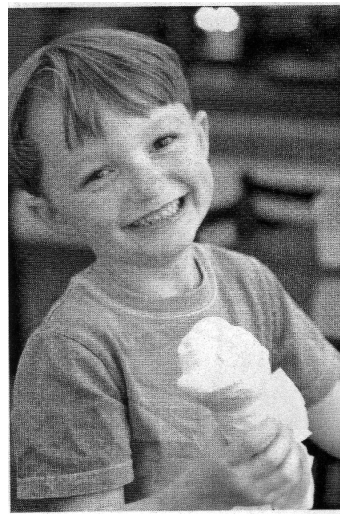
You will hear four statements. Look at the picture and choose the statement that best describes what you see in the picture.

1.



(A) (B) (C) (D)

2.



(A) (B) (C) (D)

Script of 1:

- A. They are wearing sweaters.
 - B. His clothes are formal.
 - C. Her basket is full.
 - D. She is shopping for clothes.
-

Script of 2:

- A. He's grown up now.
- B. He looks happy.
- C. He seems to be cold.
- D. He has ice cream on his face.

(Stafford, 2009, p.10)

Week 14

● スキャニング 3 (Scanning 3)

<Exercise 1> Listen to the conversation and choose the best answer for each question.

| | | |
|------------------------|-----------------------|-----------------------|
| a. mother and child | b. in a salesroom | c. guide and tourist |
| d. in a kitchen | e. salespeople | f. a new kitchen tool |
| g. helping new workers | h. applying for a job | i. in a TV studio |

1. What is the topic of the conversation?

2. Where are they speaking?

3. Who are the two speakers?

Script of Exercise 1:

Woman: We're going to start selling a new product here in the salesroom late this year. It should be very successful.

Man: Oh, really. I didn't hear about that. What kind product is it?

Woman: Well, it's a new type of kitchen tool that both professionals and non-professionals can use.

(Stafford, 2009, p.35)

< Exercise 2> You will hear a short conversation between two people. Listen carefully and then read each question and choose the best answer.

1. What is the man talking about?
 - A. Being unsatisfied with a product.
 - B. Working at a popular store.
 - C. Buying a used television set.
 - D. Going back to university.

2. Who might the two speakers be?
 - A. Friends.
 - B. An attendant and a passenger.
 - C. A clerk and a customer.
 - D. A teacher and a student.

3. Where might they be speaking?
 - A. A travel agency.
 - B. A local bank.
 - C. A bicycle shop.
 - D. An electronics shop.

Script of Exercise 2:

Man: I'm not happy with the stereo I bought here yesterday. It doesn't seem to have the sound that I expected.

Woman: Ok. You can either exchange it for a different one or get your money back.

Man: Umm. I'll have a look at your other products and see if I like anything.
Where are the higher quality sets?

Woman: They're over there in the corner. Just come back here when you have made your decision.

(Stafford, 2009, p.36)

< Exercise 3> You will hear a short conversation between two people. Listen carefully and then read each question and choose the best answer.

1. Where are the people probably speaking?

- A. A school.
- B. A music shop.
- C. A bakery.
- D. A bank.

2. What does the man want to do?

- A. Apply for a job.
- B. Withdraw some money.
- C. Set up a new account.
- D. Ask about paying rent.

3. Who is the second speaker?

- A. An announcer.
- B. A parking attendant.
- C. A bank teller.
- D. A computer technician.

Script of Exercise 3:

Man: I would like to open a new account but I don't know what I have to do first.
Did I come to the right counter?

Woman: Yes, sure. I can help you. First, fill out this form completely. Sign it and bring it back to me with your deposit.

Man: Sounds easier enough. I'll be back in a few minutes. Can I use your pen?

Woman: There should be a pen at the desk over there.

(Stafford, 2009, p.36)

Appendix E Schedule of Experiment II

| Week | D+LSTG | | CG |
|------|---|---|-----------------|
| 1 | TOEIC® + MALQ | | |
| 2 | L1: Reduction of and/or L2: Reduction of and/or | Content & Function words | Usual lesson |
| 3 | L3: Contraction of be verbs L4: Contraction of will | Working memory Note taking | Usual lesson |
| 4 | L5: Contraction of have/has L6: Contraction of would | Inference 1 | Usual lesson |
| 5 | L7: Contraction of had/had better L8: Contraction of not | Inference 2 Redundancy | Usual lesson |
| 6 | L9: Reduction of the word which starts with h L10: Reduction of them/him | Discourse markers | Usual lesson |
| 7 | L11: Reduction of ~ing L12: Reduction of (be) going to/ want to/ have to | Background knowledge Adjustment of inference | Usual lesson |
| 8 | L13: Reduction of be verbs in interrogative sentences L14: Reduction of be verbs in Wh-interrogative sentences | Inference 3 | Usual lesson |
| 9 | L15: Reduction of don't/doesn't/didn't in declarative sentences L16: Reduction of be Do/Does in interrogative sentences | Vocabulary Visual aids | Usual lesson |
| 10 | L17: Reduction of Did in interrogative sentences L18: Reduction of do/does | Scanning 1 | Usual lesson |

| | | | |
|----|--|--------------------|--------------|
| | in Wh-interrogative sentences | | |
| 11 | L19: Reduction of did in Wh-interrogative sentences L20: Reduction of Do/Does/Did in negative questions | Skimming | Usual lesson |
| 12 | L21: Reduction of Have/Has in interrogative sentences L22: Reduction of have/has in affirmative sentences | Listening literacy | Usual lesson |
| 13 | L23: Reduction of auxiliary verbs in interrogative sentences L24: Reduction of auxiliary verbs + the present/past perfect in affirmative sentences | Scanning 2 | Usual lesson |
| 14 | L25: Omission of Do/Does/Did/be verbs in interrogative sentences | Scanning 3 | Usual lesson |
| 15 | TOEIC® + MALQ | | |

Appendix F The MALQ

The Metacognitive Awareness Listening Questionnaire

| Strongly disagree | Disagree | Slightly disagree | Partly agree | Agree | Strongly agree |
|-------------------|----------|-------------------|----------------|-------|----------------|
| 全く違う | 反対 | どちらかという と反対 | どちらかという と賛成 | 賛成 | 全くその通り |
| 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

聞く前に、どのようにして聞くのか頭の中でプランを立てる。

2. I focus harder on the text when I have trouble understanding. 1 2 3 4 5 6

わからなくなった時は、内容により集中する。

3. I find that listening is more difficult than reading, speaking, or writing in 1 2 3 4 5 6

English. リスニングが一番難しい。

4. I translate in my head as I listen. 英語を聞く時は頭の中で訳する。 1 2 3 4 5 6

5. I use the words I understand to guess the meaning of the words I don't 1 2 3 4 5 6

understand. 知っている語彙を使ってわからない語彙を理解しようとする。

6. When my mind wanders, I recover my concentration right away. 1 2 3 4 5 6

集中力が散漫になったら、すぐにまた集中するようにしている。

7. As I listen, I compare what I understand with what I know about the topic. 1 2 3 4 5 6

自分が知っている内容と比較しながら聞く。

8. I feel that listening comprehension in English is a challenge for me. 1 2 3 4 5 6

英語のリスニングは、困難だけれどやりがいがあると感じる。

9. I use my experience and knowledge to help me understand. 1 2 3 4 5 6

自身の経験や知識を、理解促進のために用いる。

10. Before listening, I think of similar texts that I may have listened to. 1 2 3 4 5 6

聞く前に、以前聞いたことがある同様の内容を思い出すようにする。

| | | | | | | | |
|-----|---|---|---|---|---|---|---|
| 11. | I translate key words as I listen. 重要な語彙は、訳をしながら聞く。 | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. | I try to get back on track when I lose concentration. 集中力がなくなった時は、すぐにまた集中して聞くようにしている。 | 1 | 2 | 3 | 4 | 5 | 6 |
| 13. | As I listen, I quickly adjust my interpretation if I realise that it is not correct. 推測した内容がおかしいなと思ったら、すぐに考えを切り替える。 | 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. 聞いた後に、「どのようにして聞いたのか」 「次回はこんな風に聞こう」など、内省する。 | 1 | 2 | 3 | 4 | 5 | 6 |
| 15. | I don't feel nervous when I listen to English. 英語でのリスニングに不安は感じない。 | 1 | 2 | 3 | 4 | 5 | 6 |
| 16. | When I have difficulty understanding what I hear, I give up and stop listening. 聞いていてわからなくなった時は、途中で聞のを諦めてしまう。 | 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. わからない語彙を理解する為に、一般的な知識を用いる。 | 1 | 2 | 3 | 4 | 5 | 6 |
| 18. | I translate word by word, as I listen. 聞く時は、一言一句を訳して聞く。 | 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. わからない語彙を理解する為に、今迄聞いたことや見たことを用いる。 | 1 | 2 | 3 | 4 | 5 | 6 |
| 20. | As I listen, I periodically ask myself if I am satisfied with my level of comprehension. リスニングの最中に、定期的に理解できているか自己チェックを入れる。 | 1 | 2 | 3 | 4 | 5 | 6 |
| 21. | I have a goal in mind as I listen. 目的意識を持って聞いている。 | 1 | 2 | 3 | 4 | 5 | 6 |

Appendix G

Raw data for Experiment II

| CG | Wk1 | Wk15 | D |
|------|--------|--------|-------|
| 1 | 230 | 250 | 20 |
| 2 | 255 | 290 | 35 |
| 3 | 330 | 365 | 35 |
| 4 | 310 | 260 | -50 |
| 5 | 210 | 195 | -15 |
| 6 | 250 | 270 | 20 |
| 7 | 260 | 275 | 15 |
| 8 | 235 | 315 | 80 |
| 9 | 275 | 275 | 0 |
| 10 | 235 | 265 | 30 |
| 11 | 255 | 240 | -15 |
| 12 | 245 | 230 | -15 |
| 13 | 230 | 260 | 30 |
| 14 | 190 | 225 | 35 |
| 15 | 235 | 260 | 25 |
| 16 | 280 | 275 | -5 |
| 17 | 235 | 240 | 5 |
| 18 | 205 | 255 | 50 |
| 19 | 240 | 290 | 50 |
| 20 | 275 | 290 | 15 |
| 21 | 250 | 240 | -10 |
| 22 | 230 | 225 | -5 |
| 23 | 250 | 230 | -20 |
| 24 | 205 | 205 | 0 |
| 25 | 225 | 220 | -5 |
| 26 | 205 | 210 | 5 |
| 27 | 290 | 340 | 50 |
| 28 | 280 | 295 | 15 |
| Mean | 246.96 | 260.36 | 13.39 |
| SD | 32.58 | 39.49 | 27.39 |

| D+LSTG | Wk1 | Wk15 | D |
|--------|--------|--------|-------|
| 1 | 310 | 270 | -40 |
| 2 | 215 | 280 | 65 |
| 3 | 310 | 260 | -50 |
| 4 | 250 | 280 | 30 |
| 5 | 360 | 385 | 25 |
| 6 | 265 | 270 | 5 |
| 7 | 275 | 290 | 15 |
| 8 | 280 | 240 | -40 |
| 9 | 255 | 310 | 55 |
| 10 | 260 | 280 | 20 |
| 11 | 300 | 305 | 5 |
| 12 | 265 | 290 | 25 |
| 13 | 295 | 325 | 30 |
| 14 | 235 | 290 | 55 |
| 15 | 270 | 245 | -25 |
| 16 | 280 | 275 | -5 |
| 17 | 285 | 335 | 50 |
| 18 | 245 | 270 | 25 |
| 19 | 255 | 245 | -10 |
| 20 | 220 | 205 | -15 |
| 21 | 305 | 270 | -35 |
| 22 | 230 | 250 | 20 |
| 23 | 230 | 315 | 85 |
| 24 | 205 | 210 | 5 |
| 25 | 230 | 230 | 0 |
| 26 | 200 | 235 | 35 |
| 27 | 215 | 270 | 55 |
| 28 | 220 | 250 | 30 |
| 29 | 195 | 205 | 10 |
| Mean | 257.24 | 271.90 | 14.66 |
| SD | 39.29 | 39.94 | 33.65 |

Appendix H Schedule of Experiment III

| Week | DTG | LSTG | CG |
|------|---|---|-----------------|
| 1 | TOEIC® + MALQ | | |
| 2 | L1: Reduction of and/or L2: Reduction of to/for/of | Content & Function words | Usual lesson |
| 3 | L3: Contraction of be verbs L4: Contraction of will | Working memory Note taking | Usual lesson |
| 4 | L5: Contraction of have/has L6: Contraction of would | Inference 1 | Usual lesson |
| 5 | L7: Contraction of had/had better L8: Contraction of not | Inference 2 Redundancy | Usual lesson |
| 6 | L9: Reduction of the words which start with h L10: Reduction of them/him | Discourse markers | Usual lesson |
| 7 | L11: Reduction of ~ing L12: Reduction of (be) going to/want to/have to | Background knowledge Adjustment of inference | Usual lesson |
| 8 | L13: Reduction of be verbs in interrogative sentences L14: Reduction of be verbs in Wh-interrogative sentences | Inference 3 | Usual lesson |
| 9 | L15: Reduction of don't/doesn't/didn't in declarative sentences L16: Reduction of be Do/Does in interrogative sentences | Vocabulary Visual aids Background knowledge | Usual lesson |
| 10 | L17: Reduction of Did | Scanning 1 | Usual |

| | | | |
|----|---|--------------------|--------------|
| | <p>in interrogative sentences</p> <p>L18: Reduction of do/does</p> <p>in Wh-interrogative sentences</p> | | lesson |
| 11 | <p>L19: Reduction of did</p> <p>in Wh-interrogative sentences</p> <p>L20: Reduction of Do/Does/Did</p> <p>in negative questions</p> | Skimming | Usual lesson |
| 12 | <p>L21: Reduction of Have/Has</p> <p>in interrogative sentences</p> <p>L22: Reduction of have/has</p> <p>in affirmative sentences</p> | Listening literacy | Usual lesson |
| 13 | <p>L23: Reduction of auxiliary verbs</p> <p>in interrogative sentences</p> <p>L24: Reduction of auxiliary verbs +</p> <p>the present/past perfect</p> <p>in affirmative sentences</p> | Scanning 2 | Usual lesson |
| 14 | <p>L25: Omission of Do/Does/Did/be</p> <p>verbs in interrogative sentences</p> | Scanning 3 | Usual lesson |
| 15 | TOEIC® + MALQ | | |

Raw data for Experiment III

| LSTG | Wk1 | Wk15 | D |
|------|--------|--------|-------|
| 1 | 275 | 305 | 30 |
| 2 | 295 | 280 | -15 |
| 3 | 265 | 280 | 15 |
| 4 | 285 | 325 | 40 |
| 5 | 245 | 230 | -15 |
| 6 | 215 | 290 | 75 |
| 7 | 245 | 305 | 60 |
| 8 | 240 | 250 | 10 |
| 9 | 220 | 305 | 85 |
| 10 | 315 | 285 | -30 |
| 11 | 240 | 270 | 30 |
| 12 | 280 | 280 | 0 |
| 13 | 275 | 260 | -15 |
| 14 | 230 | 245 | 15 |
| 15 | 240 | 285 | 45 |
| 16 | 225 | 285 | 60 |
| 17 | 310 | 305 | -5 |
| 18 | 220 | 250 | 30 |
| 19 | 265 | 260 | -5 |
| 20 | 190 | 225 | 35 |
| 21 | 225 | 270 | 45 |
| 22 | 225 | 215 | -10 |
| 23 | 205 | 260 | 55 |
| 24 | 195 | 255 | 60 |
| 25 | 230 | 235 | 5 |
| 26 | 255 | 235 | -20 |
| 27 | 195 | 220 | 25 |
| 28 | 255 | 235 | -20 |
| 29 | 285 | 330 | 45 |
| 30 | 230 | 260 | 30 |
| 31 | 255 | 200 | -55 |
| 32 | 190 | 245 | 55 |
| 33 | 225 | 255 | 30 |
| 34 | 235 | 240 | 5 |
| 35 | 240 | 285 | 45 |
| 36 | 255 | 240 | -15 |
| 37 | 210 | 275 | 65 |
| Mean | 242.84 | 264.19 | 21.35 |
| SD | 32.22 | 30.88 | 33.12 |