博 士 学 位 論 文

IMPACTS OF INFORMATION SOURCES ON JAPANESE STUDENTS' IN-CLASS AND OUT-OF-CLASS SELF-EFFICACY BELIEFS IN SPEAKING ENGLISH

日本人学生の教室内・教室外英語スピーキング自己効力感におよぼす情報源の影響

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ABSTRACT

This thesis examines the relationships between learners' speaking *self-efficacy* and the four sources of self-efficacy information that Bandura (1977, 1997) advocated, and then recommends ways for Japanese English speakers to enhance their speaking self-efficacy.

It is often reported that Japanese people are not confident when speaking English. Horwitz, Horwitz, and Cope (1986) claim that in the EFL learning environment students are likely to feel anxious about speaking English because they have to interact with each other using their limited skills. Cheng, Horwitz, and Schallert (1999) also argue that low confidence contributes to anxiety in L2 speaking.

The world has globalized and it is expected that people will have colleagues whose cultural backgrounds are different from their own. Studying or working abroad will likely become more common in the near future. In such settings, it will be urgent for learners to acquire better L2 speaking skills. Warschauer (2000) argues that globalization will make English an international language, forcing non-native speakers to use English daily in their communications. It will be essential for these learners to be confident in speaking English.

Bandura (1995) defines self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations" (p. 2), adding that self-efficacy influences one's thinking, feeling, motivation and actions. He postulates that self-efficacy beliefs are derived from one's interpretation of the four sources of self-efficacy information (1997, p. 79); *mastery experiences* (ME), *vicarious experiences* (VE), *verbal persuasion* (VP), and *emotional states* (ES).

ME is based on successful performances that can predict one's future course, and is regarded as the most influential source (Bandura, 1997, p. 80). VE indicates observers' self-comparison with the performances and outcomes of their models (e.g., Usher & Pajares, 2008). When observers watch models similar to themselves perform successfully, it raises their confidence, helping them believe in their ability to master comparable tasks (Bandura, 1997, p. 87). VP denotes feedback or encouragement received from significant others such as parents and teachers about academic performance (Usher & Pajares, 2008). People who are convinced that they are capable of accomplishing provided tasks often make more sustained efforts than those who doubt their own capabilities when adversity occurs (e.g., Bandura, 1997, p. 101). ES indicates emotional arousal through physiological reactions (e.g., stress, anxiety, mood, or elation) that one experiences while performing an academic task (e.g., Britner & Pajares, 2006). While positive mood might raise one's self-efficacy and contribute to the expectation of future successful performances, negative mood might undermine one's perceived self-efficacy (e.g., Bandura, 1997, p. 113). Bandura (1995, p. 3) asserts that nurturing these four sources of self-efficacy information could develop people's beliefs about their competence.

Researchers assert that high self-efficacy learners have lower levels of anxiety, continually make more efforts to achieve their goals, utilize more effective learning strategies and are more successful while low self-efficacy learners tend to show opposite reactions (e.g., Bandura, 1997, p. 39). Bandura (1995, p. 6) also affirms that highly self-efficacious people can imagine successful scenarios which lead them to good performances while people with self-doubt may imagine unsuccessful scenarios which lead them to failure.

Bandura's (1977, 1997) self-efficacy theory has been applied to other areas such as

athletics and health. There are also numerous studies which investigated the relationships between self-efficacy and acquiring foreign languages, but compared with other English skills such as reading, listening, and writing, very few studies (e.g., Asakereh & Dehghannezhad, 2015; Liu, 2013) can be found which have investigated the relationships between self-efficacy and speaking skills. Above all, empirical studies which examined Japanese students' English-speaking self-efficacy are rare. Self-efficacy can predict one's oral proficiency (Woodrow, 2006), so more research should be conducted to investigate the relationships between self-efficacy and oral proficiency (Mills, 2014, p. 13). Sufficient investigation into Japanese learner self-efficacy beliefs in speaking English has yet to be developed.

In this thesis, both quantitative (Chapter 3, 4, 6, and 7) and qualitative (Chapter 5) analyses were adopted. Chapter 3 investigated the relationships among 180 undergraduates' speaking self-efficacies, their speaking proficiency levels, and Bandura's (1997) hypothesized four sources of self-efficacy information, ME, VE, VP, and ES. The participants responded to a 36-item questionnaire on speaking self-efficacy beliefs. A factor analysis demonstrated that in-class and out-of-class self-efficacies formed separate factors. A multiple regression analysis revealed that ME and ES were significant predictors of in-class and out-of-class self-efficacies and that only in-class self-efficacy contributed to the prediction of the learners' speaking proficiency levels. In-class self-efficacy was found to be a significant predictor of Japanese undergraduates' speaking proficiency levels, where ME especially showed a stronger influence. The reason only in-class self-efficacy predicted learners' speaking self-efficacy is due to Japanese students' lack of speaking experiences outside the classroom. Therefore, accumulating speaking experiences not only in the classroom but also outside the classroom enhances self-

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efficacy and improves learners' overall speaking proficiency.

Chapter 4 examined how 17 university undergraduates' English-speaking self-efficacies changed through their participation in a three-week language training program in the United States. The results of a paired-samples t-test and correlation analyses revealed three things. First, the participants showed greater gains in out-of-class self-efficacy than in in-class self-efficacy. Second, the correlation between in-class and out-of-class self-efficacies in a post-survey was much stronger than that in a pre-survey. Finally, in general, ME and ES had stronger correlations with in-class/out-of-class self-efficacy gains than VE and VP, but such traits were especially evident regarding out-of-class self-efficacy gain. The advantage of speaking experiences abroad is that they could enhance learners' out-of-class self-efficacy through interactions with native speakers in natural settings, which are often accompanied by an emotional surge. It was found that this occurs in reflection of in-class self-efficacy which learners possess.

Chapter 5 reexamined the qualitative data on how attending a three-week study abroad program in the United States affected the participants' speaking self-efficacies. Specifically, this study focused on how the student groups divided by a cluster analysis differed in terms of the four sources of self-efficacy information with their in-class and out-of-class self-efficacies. This study attempted to reveal what the participants really experienced in the way of self-efficacy beliefs presented in Chapter 4. Quantitative analysis of the interview results revealed that the High and Middle self-efficacy groups obtained more beneficial experiences to enhance their self-efficacy, especially in ME, VP, and ES, than the Low self-efficacy group. Though the Low self-efficacy group showed much lower means of ME, VP, and ES than the High and Middle self-efficacy groups, they demonstrated almost the same level of VE as the High and Middle self-efficacy

groups. The high means of VE in the Low self-efficacy group indicated that their admiration for models was strong. However, it also made them realize their inferiority when speaking English, which negatively affected their speaking self-efficacy. In addition, the interviews confirmed that the High and Middle self-efficacy groups enhanced their self-efficacies more than the Low self-efficacy group, though the correlations between pre-survey in-class/out-of-class self-efficacies and the gains in self-efficacies were slightly negative.

Chapter 6 investigated the relationships between high school students' speaking self-efficacy and the four sources of self-efficacy information, ME, VE, VP, and ES across genders. Two hundred and ten Japanese high school freshmen answered a 36-item questionnaire about speaking self-efficacy beliefs. Multiple regression analyses revealed that ME and ES overall significantly predicted male and female students' self-efficacies, with the exception that ES did not predict in-class self-efficacy for male students. An independent samples *t*-test demonstrated that there was a significant gender difference in VE, females showing higher VE than males. The higher VE and VP for female students than for males were taken to indicate stronger sensitivity of females to others' reactions.

Chapter 7 examined how *cognitive self-modeling* (CSM) and *self-persuasion* (SP), which are more self-derived influential sources than traditional VE and VP, differ in terms of influence on self-efficacy. It was found that both CSM and SP were more influential sources of self-efficacy than traditional VE and VP. This implies that visualizing oneself accomplishing a difficult task and persuading oneself that one can do a provided task are more influential than traditional VE and VP, revealing that students are more likely to be influenced by themselves than by others.

Chapter 8 summarizes all the findings in this thesis and discusses implications as

to how Japanese learners of English can improve their self-efficacy in speaking English. The studies in this thesis confirmed the general tendency that ME and ES are more directly linked to self-efficacy than VE and VP. It was also found that experiences in natural settings work effectively to improve ME and ES, which especially helps boost out-of-class self-efficacy. On the other hand, it was revealed that heightening self-efficacy in speaking English before studying abroad works effectively for having more beneficial experiences based on ME and ES in study abroad settings and for improving self-efficacy. If students with little confidence in English proficiency go abroad, it might lead them to lose confidence further. Moreover, it was found that VE and VP, which depend on influence from others, were higher for female students than male students. It could be suggested that instructors with female students should consider their sensitivity to others. In addition, it was found that visualizing oneself achieving a difficult task (CSM) or persuading oneself to become confident of one's ability (SP) are more effective ways to improve one's self-efficacy than admiring others as speaking models (VE) or being persuaded to be confident by others (VP).

So far, few empirical studies have examined the relationships between English-speaking and Japanese learners' self-efficacy, and the author hopes that this thesis will encourage further research into this area.

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LIST OF ABBREVIATIONS

ALT   Assistant Language Teacher

ANOVA   Analysis of Variance

CEFR   Common European Framework of Reference for Languages

CLT   Communicative Language Teaching

EFL   English as a Foreign Language

EIKEN   The Eiken Test in Practical English Proficiency

FL   Foreign Language

GTEC   Global Test of English Communication

JTE   Japanese Teachers of English

L2   Second Language

MEXT   The Ministry of Education, Sports, Science and Technology

SE   Self-efficacy

SL   Second Language

SLA   Second Language Acquisition

VIF   Variance Inflation Factor

CHAPTER 1

INTRODUCTION

1.1 Statement of the Problem

In Japan, an EFL country, many people lack confidence in speaking English. For instance, in a survey conducted at the author's high school at the beginning of the school year in 2016 and again in 2017, freshmen were asked about their learning strategies during junior high school. Merely 14 and 19 percent respectively answered that they spoke English enthusiastically. This suggests that high school freshmen had low confidence or motivation in speaking English at the time they entered high school. They think that it is difficult to speak in English. Their low confidence in speaking makes them overly apprehensive. In light of the common understanding that Japanese English learners in general are in a state of low confidence and high anxiety when speaking the language, these high school students can be taken as representing the typical Japanese EFL learners.

There may be several reasons for this tendency in Japanese English learners. First, English as a language is fundamentally different from Japanese in terms of letters, word order, grammar, pronunciation, usage, and most importantly, background cultures. Therefore, quite a few Japanese learners tend to think that English is both difficult to learn and to speak.

Furthermore, among the four language skills, reading, listening, writing, and speaking, only speaking requires an impromptu response, which could easily cause anxiety and stress among learners. Moreover, many contemporary English classrooms use English as the medium of instruction, where students have to understand lesson contents in English and must interact with the instructor and their peers in English.

Horwitz, Horwitz, and Cope (1986) argue that in the EFL environment students are likely to feel anxious in their FL speaking lessons, because interacting with limited FL skills makes it difficult for students to express themselves or to understand their classmates. Cheng, Horwitz, and Schallert (1999) also assert that perceived low self-confidence is contributory to anxiety in L2 speaking.

A number of studies have examined speaking anxiety among language learners (e.g., Horwitz, 2001; MacIntyre, Noels, & Clément, 1997). Horwitz et al. (1986) categorize the anxiety into three types: *communication apprehension*, *test anxiety*, and *fear of negative evaluation* (p. 127). Cutrone (2009) asserts that communication anxiety is most associated with oral EFL classes in Japan, adding that such apprehension should be overcome or lessened in language classrooms.

It may be that other factors, such as Japanese modesty, concern about making mistakes, or receiving negative evaluations from others, could lead to anxiety in speaking English. However, speaking anxiety should be first overcome when speaking another language (Horwitz et al., 1986).

1.2 Objectives of the Study

This dissertation investigates the relationships between learners' speaking *self-efficacy* and the four sources of self-efficacy information (*mastery experiences*, *vicarious experiences*, *verbal persuasion*, and *emotional states*) that Bandura (1977, 1997) argues develop self-efficacy. This study examines learners' speaking self-efficacy, as opposed to reading, listening, or writing self-efficacy, and differentiates between in-class and out-of-class learning environments. The four experimental studies in this thesis investigate how the relationships between self-efficacy and the four sources of self-efficacy information are manifested when other factors such as the learners' speaking proficiency,

speaking experiences in a study-abroad program, and gender, are given consideration. Considering the results of these studies, in the final quantitative analysis, the author reexamines Bandura's (1977, 1997) traditional sources of self-efficacy information, vicarious experiences and verbal persuasion from a different perspective, in which two other sources of self-efficacy information, *cognitive self-modeling* and *self-persuasion*, derived from learners' direct experiences, are investigated. It is hoped that investigating these relationships will reveal how Japanese English speakers can enhance their speaking self-efficacy, by providing different perspectives from those traditionally held.

This study draws on the theory of self-efficacy that Bandura first advocated in the 1970s. Bandura (1997) defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3), adding that the degree of self-efficacies that individuals hold could influence their future actions and results. In brief, those who possess high self-efficacy believe that they can accomplish provided tasks, which would lead to their successful performance, while those low with self-efficacy show the opposite behaviors (Bandura, 1997, p. 39). While this theory has been applied in various fields such as sports and health care, it has not been investigated sufficiently in language learning studies (Woodrow, 2006).

In an ever globalizing world, young Japanese students will have more experiences using English at school and work. However, in the current situations, students may not be able to fulfill their speaking obligations due to extreme tension or nervousness. By examining factors related to improving learners' speaking self-efficacies, it is hoped that future instructors will be able to encourage learners to speak English by reducing anxiety.

1.3 Overview of the Chapters

This chapter introduced the background problem and the objectives of this study.

The other chapters are designed as follows: Chapter 2 demonstrates the theoretical framework of self-efficacy theory and its related views. Chapter 3 presents a quantitative study on the relationships between Japanese undergraduates' English-speaking self-efficacy and their speaking competence. Chapter 4 addresses the impact of a study abroad program on college students' self-efficacy in English-speaking using a quantitative method, followed by Chapter 5 which conducts additional analyses on the data obtained in Chapter 4 and adds a qualitative investigation for further fact-finding about the impacts of studying abroad. Chapter 6 explores gender differences in English-speaking self-efficacy among Japanese high school students. Chapter 7 examines two sources of self-efficacy information, cognitive self-modeling (CSM) and self-persuasion (SP), which are different from Bandura's (1997) traditional vicarious experiences (VE) and verbal persuasion (VP). Contrary to Bandura's widely-used VE and VP, CSM and SP are derived from learners' own experiences and self-appraisals. Finally, Chapter 8 summarizes all the findings and suggests future implications. The chapters are as follows:

Chapter 1   Introduction

Chapter 2   Theoretical Framework

Chapter 3   Research 1--- The relationships between Japanese undergraduates'

English-speaking self-efficacy and their speaking levels

<Quantitative Study>

Chapter 4   Research 2--- The impact of a study abroad program on college students'

self-efficacy in English-speaking Part I

<Quantitative Study>

Chapter 5   Research 3--- The impact of a study abroad program on college students'

self-efficacy in English-speaking Part II

<Quantitative + Qualitative Study>

Chapter 6   Research 4--- Gender differences in English-speaking self-efficacy among

Japanese high school students   < Quantitative Study >

Chapter 7   Research 5--- Examining two types of self-efficacy information derived

from learners' own experiences   < Quantitative Study >

Chapter 8   Conclusion

Figure 1.1. The framework of this thesis.

Chapters 4, 5, 6 and 7 are based on the author's own publications as listed below.

Chapter 4

Miyauchi, N. (2017). The impact of a study abroad program on college students' self-efficacy in English speaking. *The JACET Kyusyu-Okinawa Chapter Annual Review of English Learning and Teaching*, *22*, 1–18.

(With peer review)

Chapter 5

Miyauchi, N. (in press). The impact of a study abroad program on college students' self-efficacy in English speaking (Part II). *The JACET Kyusyu-Okinawa Chapter Annual Review of English Learning and Teaching*, *24*, 1–21.

(With peer review)

Chapter 6

Miyauchi, N. (2019). Gender differences in English-speaking self-efficacy among Japanese high school students. *Eigo Kumamoto* [English Kumamoto], 53, 1–15. Jono Publishing Company: Kumamoto.

Chapter 7

Miyauchi, N. (2019). Examining two sources of self-efficacy information derived from learners' authentic experiences. *LET Kyushu-Okinawa BULLETIN*, *19*, 37–52.

(With peer review, modified for the inclusion in this thesis)

CHAPTER 2

THEORETICAL FRAMEWORK

2.1 Introduction

This chapter presents the historical background and mechanism of self-efficacy and discusses its measurement, the four sources of self-efficacy information, and the relationship between self-efficacy and academic achievement. This chapter also discusses why self-efficacy in speaking, as opposed to reading, listening, or writing, is the main focus of study in this dissertation, and why the contrast between in-class and out-of-class speaking self-efficacies is highlighted throughout the studies. The theory of self-efficacy was first advocated by Bandura (1977).

2.2 The Historical Background of Self-Efficacy and Its Mechanism

2.2.1 Self-Efficacy

The history of language learning motivation is viewed as having experienced several turning points. Dörnyei and Ryan (2015, pp. 73–74) categorizes its history into three periods: the *social psychological period* from the 1960s to 1990s when the motivational constructs advocated by Gardner and his colleagues were the main concerns of language learning motivation studies, followed by the *cognitive situated period* in the 1990s when Crooks and Schmidt (1991) insisted on the need of introducing educational settings in order to investigate learners' motivation in FL learning. This was followed by the *process-oriented period* from the beginning of the 21st century to the present time, which focuses more on the mechanism of motivation derived from the interaction between individuals and their surroundings.

In the social psychological period, the main theory (Gardner, 1985) emphasized

integrative motivation and instrumental motivation. Integrative motivation is related to the desire of meeting and communicating with native speakers in the target culture while instrumental motivation is concerned with the usefulness of the language for obtaining jobs or educational achievements. This period had a strong influence on studies of SL learning (Crookes & Schmidt, 1991, p. 471), but they failed to integrate other motivational theories from the standpoint of educational psychology, for example, teachers' viewpoints and SL classroom settings (Crookes & Schmidt, 1991, p. 470; Mills, 2014, pp. 6–7). Oxford and Shearin (1994, p. 14) criticize Gardner's framework of motivation, claiming that it regulates motivation solely to integrative and instrumental motivation, which should be broadened in accordance with students' learning situations. Concerned about such situations, several researchers thought that more practical, education-focused approaches, especially from the perspectives of teachers and students' behaviors, should be included. This opened the way for the introduction of the *social cognitive theory* (Crookes & Schmidt, 1991, p. 470; Dörnyei, 1994, p. 516; Oxford & Shearin, 1994, p. 15).

In the cognitive situated period in the 1990s, social cognitive theory (Bandura, 1977, 1997), attribution theory (Weiner, 1985), self-determination theory (Deci & Ryan, 1985), goal setting theory (Locke & Lathem, 1990), and expectancy value theory (Atkinson, 1957; Wigfield, 1994; Wigfield and Eccles, 1992) were the principal theories in discussing FL motivation. Bandura's (1977, 1997) self-efficacy theory played a pivotal role in social cognitive theory.

Social cognitive theory postulates that human behaviors are extensively controlled by self-influence, that is, through "cognitive, vicarious, self-reflective, and self-regulatory processes" (Bandura, 1989, p. 1175). In human behavior, people possess self-beliefs

which control their thoughts, feelings, and actions (Mills, Pajares, & Herron, 2007). Bandura (1997, p. 5) affirms that in the system of self-beliefs, self-reflection plays an especially crucial role in human thoughts and actions. This is because through reflecting on and examining their own deeds, people are able to control their thoughts and actions regarding future behaviors (Mills, 2014, p. 7).

Self-efficacy is defined as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3), and it is believed that it exercises control on human actions because they affect "how people think, feel, motivate themselves, and act" (Bandura, 1995, p. 2). This is based on the important proposition that people's emotional states, level of motivation, and actions are derived more from what they believe, than from what they actually are (Bandura, 1997, p. 2). This means that people who lack a positive image in their proficiency may not be able to perform well even though they actually have the capacity, and vice versa.

One of the most outstanding features of self-efficacy is its ability to predict future performance. For example, Mills (2014, p. 8) and Palmer (2006) claim that people's self-efficacy beliefs might determine how they perform in the future. Bandura (1997, p. 81) also asserts that self-efficacy beliefs can predict individuals' future performances better than their prior achievements.

The question now arises: Why are there differences between those who possess high self-efficacy and those who do not? It is maintained that high self-efficacy learners have lower levels of anxiety, continually make more efforts to achieve their goals, utilize effective learning strategies, and are more successful while low self-efficacy learners tend to show the opposite behaviors (Bandura, 1997, p. 39; Britner & Pajares, 2006; Mills, 2014, p. 9). Bandura (1995) also affirms that highly self-efficacious people can imagine

successful scenarios which lead them to good performances, while people who doubt their ability may imagine unsuccessful scenarios which will guide them to failure, implying that self-efficacy beliefs play an important role in learners' motivation, behavior, self-regulation, academic achievement, and so forth (p. 6).

2.2.2 Measurement of Self-Efficacy

Self-efficacy beliefs can predict future performance under variable circumstances even better than past performances can because more information is included in one's self-efficacy than in simple measures of success or failure (Bandura, 1997, p. 81). When measuring self-efficacy, three dimensions, *level*, *generality*, and *strength*, should be considered (Bandura, 1997, pp. 42–43). Regarding the level (e.g., high or low), the degree of perceived capability to achieve a successful performance can be measured by specific tasks representing different degrees of challenge or difficulty, for example, spelling words or solving math problems with increasing difficulty (Bandura, 1997, p. 42; Zimmerman, 1995, 2000). Self-efficacy beliefs are also examined in terms of generality, that is, whether the beliefs pertain to specific tasks or to something more general. It is often believed that general, global, ambiguous, and indefinite measures are not able to predict human motivation and behavior with any precision (Bandura, 1997, pp. 47–50). Finally, strength of self-efficacy can be assessed by asking individuals how certain they are (e.g., strongly or weakly) that they can perform provided tasks (Zimmerman, 1995). These three features should be considered in designing a scale for assessing self-efficacy.

In a standard self-efficacy measurement which Bandura constructed, individuals are given scale items presenting different levels of task demands, and they rate how strongly they believe that they can perform the required activities (Bandura, 1997, p. 43). In addition, the scale items should be based on individual concrete tasks, rather than on

indefinite tasks (Bandura, 1997, p. 45).

2.2.3 Four Sources of Self-Efficacy Information

Self-efficacy beliefs are based on a person's interpretation of the four sources of efficacy information (Bandura, 1997, p. 79). Bandura (1995, p. 3) asserts that the following four sources have a great influence on how self-efficacy beliefs are formed, by either heightening or lowering one's confidence in accomplishing a given task.

Mastery experiences (ME) are based on successful performances that can predict one's future course, and are regarded as the most influential and durable source (Bandura, 1997, p. 80; Pajares & Valiante, 2006). ME becomes especially stronger when a person overcomes obstacles through sustained effort (Bandura, 1997, p. 80), and maintains a long-lasting effect on self-efficacy (Usher & Pajares, 2006b, 2008). The reason why ME has stronger influence on self-efficacy may be because it is derived from one's authentic experience. A number of studies point out several effects of ME which could contribute to improving performance. For example, accomplishing provided tasks would encourage learners to observe how they have made progress (Mills, 2009), and to continue obtaining continuing feedback from their teachers or classmates on their performance (Stoller, 2006, p, 30). Bandura (1997, p. 80) also asserts that self-efficacy beliefs obtained through ME could lead to self-regulative skills for better performances. Whereas successful performances can strengthen one's self-efficacy belief, failed performances may weaken it (Britner & Pajares, 2006).

Vicarious experiences (VE) indicate observers' self-comparison with the performances and outcomes of their models (Usher & Pajares, 2008; Zimmerman, 2000). A number of authors insist that it is of great importance whether people can identify with their models in being self-efficacious (e.g., Bandura, 1995; Britner & Pajares, 2006;

Usher & Pajares, 2008). Bandura (1997, p. 87) and Schunk (1987) claim that when observers watch models similar to themselves perform successfully, it raises their confidence in self-efficacy and they come to believe in their ability to master comparable tasks. However, compared with ME, VE generally shows weaker effects on self-efficacy due to the observers' indirect knowledge about their own capabilities (Bandura, 1997, p. 88; Britner & Pajares, 2006; Pajares & Valiante, 2006). VE can be divided into several modes. Palmer (2006) summarizes Bandura's (1997, pp. 86–101) VE into four modes; (1) *effective actual modeling*, which occurs when one sees a desirable model similar to oneself perform a given task successfully, (2) *symbolic modeling*, which occurs when one is influenced by an impressive model on television or other media, (3) *self-modeling*, which occurs when one's performance is videotaped or recorded so that one can watch it, but focusing only on the favorable aspects, and (4) *cognitive self-modeling*, which occurs when one visualizes oneself performing successfully in a challenging task.

Verbal persuasion (VP) denotes feedback or encouragement received from significant others such as parents and teachers about one's own performance (Usher & Pajares, 2008). It is thought to make a great difference whether or not one receives encouragement from others. People who are convinced that they are capable of accomplishing provided tasks often make more sustained efforts than those who doubt their own capabilities when adversity occurs (Bandura, 1997, p. 101; Palmer, 2006). Similar to VE, VP alone does not produce a significant influence on self-efficacy beliefs because it does not provide an authentic and direct influence like ME (Bandura, 1997, p. 80; Britner & Pajares, 2006). Usher and Pajares (2008) and Schunk (1984) also claim that neither VP nor VE possesses enduring effects on self-efficacy, because they are easily affected and negated by subsequent unsuccessful performances.

Emotional states (ES) indicate emotional arousal through physiological reactions (e.g., stress, anxiety, mood, or elation) that one experiences while performing a provided task (Britner & Pajares, 2006; Usher & Pajares, 2006b). Bandura (1995, p. 5) claims that what matters is not just the strength of physical or emotional reactions but the way people perceive and interpret them, adding that individuals with high self-efficacy tend to regard the surge of emotions as a contributor to their performance, whereas those with self-doubt in their abilities are likely to regard the same emotional surge as a sign of debilitation. Furthermore, many authors point to the effects of mood on self-efficacy beliefs. While positive mood might raise one's self-efficacy belief and contribute to the expectation of future successful performances, negative mood might undermine one's perceived self-efficacy (Bandura, 1997, p. 113; Britner & Pajares, 2006; Maddux, 2002, p. 12; Usher & Pajares, 2008). Usher and Pajares (2008) also assert that high levels of apprehension can be interpreted as a proof that one lacks skill.

Bandura's (1977, 1997) self-efficacy theory hypothesizes that the four sources of self-efficacy information alone cannot directly influence self-efficacy. Figure 2.1. is a diagram which shows the mechanism of how self-efficacy is formed in an individual. Individuals select influential self-efficacy information derived from the four sources, interpret the information selected, and integrate their interpretations to form self-efficacy (Bandura, 1997, p. 79). It is only through this cognitive processing and reflective thought that self-efficacy can be formed (Bandura, 1997, p. 79).
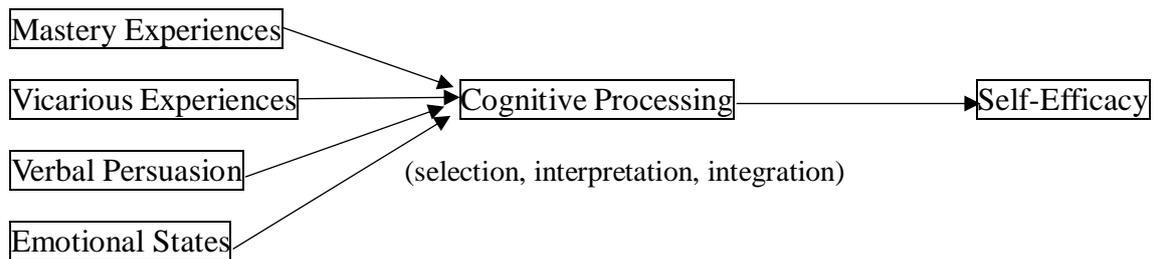
Figure 2.1. The mechanism of self-efficacy forming.

2.3 The Relationship Between Self-Efficacy and Academic Achievement

Self-efficacy beliefs exert a strong influence, which can be applied to academic domains. Only recently has self-efficacy been examined widely in area of educational research, particularly in the area of academic performance, motivation, and self-regulation (Bandura, 1997; Mills, 2014; Pajares, 1996). For example, Bandura and Schunk (1981) discovered in their empirical study related to mathematics that elementary school students' self-efficacy beliefs showed positive relations to their academic performance and intrinsic motivation. Hsieh and Schallert (2008) and Hsieh and Kang (2010) found that self-efficacy strongly predicted academic achievement among university students and ninth-graders learning foreign languages. A number of other studies have also demonstrated strong positive relationships between self-efficacy and academic achievement (e.g., Asakereh & Dehghannezhad, 2015; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Brinter & Pajares, 2006).

Significant differences can be found between those with a strong sense of self-efficacy and those with a weak one in academic achievement. As aforementioned, high self-efficacy learners possess less anxiety, strive harder to achieve their goals, and are more likely to succeed while low self-efficacy learners show the opposite behaviors (e.g., Bandura, 1997, p. 39). Bandura (1997, p. 194) also claims that perceived self-efficacy

influences the degree of an individual's effort, persistence, and choice of tasks. Since a student's perception of academic self-efficacy can promote their achievement by raising their motivation (Zimmerman, Bandura, & Martinez-pons, 1992), it can be confirmed that nurturing learners' self-efficacy is essential in helping them achieve their academic goals.

Perceived self-efficacy could lead to heightening an individual's academic ability above actual ability (Zimmerman, 1995, pp. 213–214). Zimmerman (1995) found that students with high self-efficacy used effective strategies and solved problems in efficient ways, which means that the higher students' self-efficacies are, the better they can accomplish their performance. Therefore, it is suggested that schools should develop students' self-efficacy beliefs and their self-regulatory abilities beyond teaching intellectual skills, so that students can educate themselves through life (Zimmerman, 1995, p. 202). This is needed for students to become mature, full-fledged learners.

2.4 Speaking Self-Efficacy and Other Views Related to Self-Efficacy

2.4.1 Speaking Self-Efficacy

With respect to studies of self-efficacy and language skills, most have examined reading (e.g., Mills et al., 2006; Nelson & Manset-Williamson, 2006; Schunk & Zimmerman, 2007; Shell, Colvin, & Bruning, 1995; Shell, Murphy, & Bruning, 1989), listening (e.g., Graham, 2011; Levitt, 2002; Mills et al., 2006, 2007; Rahimi & Abedini, 2009), and writing (e.g., Pajares & Johnson, 1996; Pajares & Valiante, 1997, 1999, 2001, 2006; Pajares, Johnson, & Usher, 2007; Schunk & Swartz, 1993). In contrast, the number of studies which investigated speaking self-efficacy in foreign/second language learning has been rather small, though they have been increasing (e.g., Asakereh & Dehghannezhad, 2015; Cubillos & Ilvento, 2012; Idrus, Salleh, & Abdullah, 2011; Liu, 2013; Paradewari, 2017; Saeidi & Ebrahimi, 2012).

In this globalizing world, it is essential for learners to acquire English-speaking proficiency to communicate with people from different cultural backgrounds. In Japan, the government course guidelines for high school, which were revised and re-issued in March 2019, aim to nurture student attitudes and capacity to try to communicate with foreign people by means of a foreign language enthusiastically. It also emphasizes interaction with foreign people in accordance with their aims and situations (MEXT, 2019). Certainly, Japanese students need to acquire better communicative speaking skills in English in order to adapt to globalization. Higher levels of self-efficacy can increase speaking proficiency (Woodrow, 2006) and therefore more research should be conducted to examine the function of self-efficacy in speaking a foreign language. This research area has yet to be fully developed, so it is worth investigating more thoroughly.

2.4.2 In-Class and Out-of-Class Learning Environments

According to Tanaka (2004), an in-class environment in Japan implies using English in the classroom, but where grammatical and lexical knowledge are the main focus due to preparing for university entrance exams. In the typical classroom, students are surrounded by large numbers of their peers and taught English by a solitary teacher. This is usually a teacher-centered environment. On the other hand, an out-of-class environment implies using English outside the classroom, for example, in study-abroad settings, English camps, or English language schools. In such settings, students are expected to speak English voluntarily in order to acquire hands-on communication skills while interacting informally with native speakers. Krashen and Seliger (1975) distinguish in-class from out-of-class settings, stating that in the formal learning environment (typically in the classroom) learners are expected to acquire correct linguistic forms of the language while in the informal learning environment (typically outside the classroom)

students can learn language in natural settings. Furthermore, Gardner (1985, p. 85) refers to the in-class learning environment as the place where students develop their knowledge and skill in L2, and the out-of-class environment as the place where students interact with L2 community members with little instruction in L2 (Gardner, 1985, p. 89). In short, learning English in the classroom and learning to use it in the out-of-class informal settings are largely different.

In assessing students' self-efficacy related to English speaking, this thesis divided the learning environment into in-class and out-of-class environments. This distinction in L2 self-efficacy has not been applied in other studies except Woodrow (2006), who found that self-efficacy could predict speaking proficiency in both in-class and out-of-class contexts. It is expected that this distinction of in-class and out-of-class settings could help reveal several aspects of the students' past, present, and future speaking experiences associated with their self-efficacy beliefs.

2.4.3 Self-Efficacy and Self-Confidence

It is often difficult to distinguish self-efficacy from self-confidence. The two seem similar but embody different notions. Bandura (1997, p. 382) defines perceived self-efficacy as "a belief in one's power to produce given levels of attainment," adding that "a self-efficacy assessment, therefore, includes both the affirmation of a capability and the strength of that belief." On the other hand, Bandura asserts that confidence is an unremarkable and ambiguous term, which does not necessarily specify its certainty. To put it briefly, self-efficacy can be interpreted as a concept that refers to specific tasks while self-confidence is a more general concept.

CHAPTER 3

THE RELATIONSHIPS BETWEEN JAPANESE UNDERGRADUATES' ENGLISH-SPEAKING SELF-EFFICACY AND THEIR SPEAKING LEVELS

3.1 Introduction

Chapter 2 investigated prior studies regarding self-efficacy and its mechanism, and other views related to self-efficacy. This investigation led the author to examine the relationships among learners' speaking self-efficacies, their speaking proficiency levels, and Bandura's (1997) hypothesized four sources of self-efficacy information, ME, VE, VP, and ES. For this, 194 Japanese first- and second-year undergraduates were asked to respond to a 36-item questionnaire on speaking self-efficacy beliefs.

3.1.1 Learning Environments in Japan

In this globalized world, speaking English has become important to communicate with people from different backgrounds. This can be confirmed from Warschauer's (2000) assertion that globalization will make English an international language, causing non-native speakers to use English daily and to acquire communication skills by means of English.

Traditionally in Japan, grammar-focused and grammar-translation methods were utilized in English education for a long time. This is because preparing for university entrance examinations took the highest priority with a focus on rote learning over productive learning. Then, communicative language teaching (CLT), which promotes higher communication skills among secondary school students, was introduced in English education in 1989 by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) (Nishino, 2011). This was followed by several changes to the course guidelines,

but overall enhancing students' reading and writing skills seemed to be prioritized more than listening and speaking skills in junior and senior high schools.

However, these days in Japan, due to the drastic change of the course guidelines in response to globalization, teachers are required to teach English basically in English. In addition, introducing student-centered and collaborative learning has been strongly recommended by MEXT. It can be said that developing students' productive skills in English, especially speaking skills, is urgently desired in school. Furthermore, English is to be taught as a compulsory subject in the fifth and sixth grades in Japanese elementary schools from 2020 (Aoki, 2016). Students as well as teachers may have no choice but to adjust to these new changes.

In order to improve students' oral proficiency, helping students develop their self-efficacy in English-speaking would play a fundamental role. However, so far, there seem to be few studies which have examined the relations between Japanese students' self-efficacy and their speaking proficiency, and therefore this area is worth investigating more profoundly.

3.2 Objectives and Research Questions

This study aims to examine the relationships among learners' in-class/out-of-class speaking self-efficacies, speaking proficiency levels, and the four sources of self-efficacy information. For this aim, the following research questions were designed:

1. Can in-class and out-of-class self-efficacies be differentiated?

2. How strongly do in-class and out-of-class self-efficacies predict learners' speaking proficiency levels?

3. How strongly do the four sources of self-efficacy information predict learners' in-class and out-of-class self-efficacies?

3.3 Methods

3.3.1 Participants

The participants were 194 Japanese first- and second-year English-major undergraduates at a university located in the western part of Japan. Among them, 103 were freshmen and 91 sophomores. The participants were selected because they were all English majors and engaged in English speaking class once a week, which implies that valid data could be obtained based on their actual experiences of speaking English. The speaking classes are taught by three native speakers of English, and the students are divided into three classes representing three levels ranging from basic and intermediate to advanced. A placement interview test was conducted beforehand at the beginning of the spring semester by three native speakers of English, where each group of three students was observed while discussing one topic freely in English.

3.3.2 Procedures

In this study, a quantitative approach was adopted. The participants were asked to answer 36-questionnaire items in their listening class (freshmen) and in their reading class (sophomores). The questionnaire was written in Japanese, and later translated into English by the author (Appendix A). At the end of the questionnaire, the participants were asked whether they had had experiences of staying abroad for more than one month. Among the participants, there were several juniors and seniors who attended listening and reading classes for the purpose of repeating the courses, all of whom were regarded as invalid considering their additional experiences of practicing speaking English. In addition, several missing data were found. Taking these things into consideration, 14 forms were excluded from the data, and in total, 180 (96 freshmen and 84 sophomores; 56 males and 124 females) out of 194 collected forms were analyzed.

3.3.3 Instrument

3.3.3.1 Speaking Proficiency

Speaking classes were divided into three groups by the students' speaking levels based on the result of the aforementioned placement interview test. Each level was scored by using a point system, from 1 to 3 points corresponding to low to advanced level, put into the data, and analyzed.

3.3.3.2 Speaking Self-Efficacy

In order to assess speaking self-efficacy, a Japanese version of scale was first constructed by the author, corresponding to the present situations of the participants. Then, the original questionnaire was improved and redesigned, referring to several similar scale items found in other research papers, (e.g., Asakereh & Dehghannezhad, 2015; Betz, 1978; Cheng et al., 1999; Horwitz et al., 1986; Idrus et al., 2011; Liu, 2013; Matsui, Matsui, & Ohnishi, 1990). The scale consisted of two subscales: in-class self-efficacy subscale, composed of 6 items related to in-class activities, and out-of-class self-efficacy subscale, comprising 6 items involving the activities outside the class. The questionnaire was designed based on Bandura's assertion (1997, p. 42) that the scale items assessing self-efficacy beliefs should include one's capability judgments on specific tasks, under different task-demand levels. In this study, the participants were asked to indicate self-efficacy in their ability for each item in the scale. An 11-point Likert scale ranging from zero (*cannot do at all*) to ten (*certainly can do*) was utilized in this study. This is because Pajares, Hartley, and Valiante (2001) affirm that an 11-point Likert scale format predicts one's performance better than a traditional 6-point Likert format. Streiner and Norman (1989) also assert that scales with only a few steps are not reliable. Furthermore, Bandura (1997, p. 44) insists that scales with too few steps may not be able to differentiate subjects'

detailed information and that individuals' responses could be differentiated if the scale includes intermediate steps. Actually, in his guidebook for self-efficacy scales, Bandura (2006) utilizes an 11-point Likert scale format to assess self-efficacy, ranging from *Cannot do at all* to *Highly certain can do*. The contents of the items in the questionnaire were examined beforehand by three English teachers. The reliability coefficients (Cronbach's α) for in-class and out-of-class self-efficacy subscales based on the current data were .91 and .92 respectively.

3.3.3.3 Sources of English-Speaking Self-Efficacy Information

In order to examine the four sources of self-efficacy information, a Japanese questionnaire composed of 24 items was designed; 6 items each for ME, VE, VP, and ES. While analyzing the data, 2 items, one each in the VP and ES sections (No. 30 and No. 35) were excluded for the purpose of improving reliability. There is a possibility that the negative wording of these 2 items confused the participants and lowered the reliability. Concerning the scale items including negative wording, Usher and Pajares (2008) refer to its problematic aspects that might make the scale items unclear. However, there were another 3 items with negative wording included in the scale, but they were adopted because they did not seem to cause any problems to the participants' response. Later, responses to these negative-wording items were reversed and converted into positive numerals, corresponding to the other positive scale items. Therefore, 34 items out of original 36 items were adopted in the data. The participants were asked to indicate the degrees of their applicability of each item, utilizing an 11-point Likert scale ranging from zero (*entirely inapplicable*) to ten (*completely applicable*). Reliability coefficients (Cronbach's α) of the four subscales were .94 (ME), .84 (VE), .65 (VP) and .66 (ES).

3.3.4 Data Analysis

Statistical Packages for Social Sciences (SPSS) version 23.0 was utilized to analyze the quantitative data. A factor analysis and multiple regression analyses were adopted. The factor analysis was carried out in order to determine whether in-class and out-of-class self-efficacies could be discriminated or not (Research Question 1). Then, multiple regression analyses were conducted to assess the independent contribution of in-class and out-of-class self-efficacies to the prediction of the learners' speaking proficiency levels (Research Question 2). Lastly, two more multiple regression analyses were performed to assess the independent contribution of the four sources of self-efficacy information to the prediction of the learners' in-class and out-of-class self-efficacies (Research Question 3).

3.4 Results

3.4.1 Factor Analysis of In-Class and Out-of-Class Self-Efficacies

Research Question 1 asked the distinction between in-class and out-of-class self-efficacies. In order to investigate the factor structure of the self-efficacy scale, a factor analysis employing maximum likelihood extraction method was carried out on 12 self-efficacy items (6 each for in-class and out-of-class self-efficacies). The result was then rotated using promax rotation. Kaiser's criterion for the number of factors to be based on the eigenvalue greater than 1.0 produced two factors. The two factors together accounted for 64.3 % of the total variance.

As shown in the factor pattern matrix shown in Table 3.1, items from 1 to 6 involved in in-class self-efficacy scale demonstrate salient loadings on Factor Ⅰ（eigenvalue = 6.75）, while items from 7 to 12 involved in out-of-class scale reveal outstanding loadings on Factor Ⅱ (eigenvalue = 1.68). These findings assure that the two subscales of self-efficacy, indicating in-class and out-of-class self-efficacies,

represent two distinct dimensions derived from different aspects of learner beliefs. While these two types of self-efficacy showed a significant relation between them, $r = .61$, $p < .001$ (Table 3.2), they turned out to be different in nature as Table 3.1 shows.

Table 3.1

Factor Loadings of the Responses to the Self-Efficacy Scale (Promax Rotation)

	Factor	
Items	I	II
In-class self-efficacy		
4. I can continue my speech in English even if I forget the content.	.87	-.06
5. I can deliver a speech in English for my partner to understand well.	.85	-.00
6. I can deliver a speech in English using the time fully.	.78	.02
1. I can smoothly deliver a speech in English which I have prepared beforehand.	.75	-.08
2. I can answer correctly what I am asked in English.	.72	.06
3. I can ask some questions in English while listening to my partner.	.69	.17
Out-of-class self-efficacy		
10. I can easily make friends with foreigners.	-.08	.89
9. I can communicate smoothly with a foreigner in English.	-.00	.86
8. I can offer help in English to a foreigner if he/she is in trouble.	-.14	.86
7. I can correspond with a foreigner in English when spoken to.	.12	.78
11. I can smoothly use the English expressions I have learned in conversations with foreigners.	.14	.70
12. When I meet foreigners that I know, I can greet them in English.	.13	.64

Note. $N = 180$.

To sum up, Research Question 1 can be answered by saying that in-class and out-of-class self-efficacies constitute clearly differentiated dimensions of learner beliefs.

3.4.2 Prediction of the Speaking Proficiency Levels by In-Class and Out-of-Class Self-Efficacies

Given that the two subscales of self-efficacy represent different dimensions of self-efficacy, Research Question 2 asked which type of self-efficacy explained the learners' speaking proficiency levels better.

Table 3.2

Correlations Between Speaking Proficiency Levels and In-Class/Out-of-Class Self-Efficacies

	1	2	3	M	SD
1.SPL	1	—	—	2.12	.85
2. ICSE	.30***	1	—	4.76	1.52
3. OCSE	.18 *	.61***	1	4.39	1.82

Note. $N = 180$. SPL = Speaking proficiency level, ICSE = In-class self-efficacy, OCSE = Out-of-class self-efficacy.
*$p < .05$, *** $p < .001$.

Table 3.2 shows the correlations between the learners' speaking proficiency levels and in-class/out-of-class speaking self-efficacies. Speaking self-efficacy correlated significantly with both in-class and out-of-class self-efficacies, though it correlated more strongly with in-class self-efficacy ($r = .30, p < .001$) than with out-of-class self-efficacy ($r = .18, p < .05$).

In order to investigate which variable could more accurately predict the learners' speaking proficiency levels, a multiple regression analysis was conducted, where the speaking proficiency level was determined as the dependent variable, and in-class/out-of-class self-efficacies as the independent variables. Though in-class and out-of-class self-efficacies correlated significantly with each other, multicollinearity was not detected in the variables, variance inflation factor (VIF) indicating 1.58, which means that the

variables possessed almost no problematic correlation with each other. In general, the severity of multicollinearity will increase when VIF indicates a value over 10.0 (Koshio, 2004). The results are shown in Table 3.3 and 3.4.

Table 3.3
Model Summary of the Relation Between Speaking Proficiency Levels and In-Class/Out-of-Class Self-Efficacies

Model	R	R squared	Adjusted R squared	Std. error of the estimate
1	.30	.09	.08	.81

Note. N=180.

Table 3.3 shows the multiple correlation coefficient as well as the adjusted and unadjusted coefficient of determination between the learners' speaking proficiency levels and in-class/out-of-class self-efficacies. The multiple correlation coefficient is .30 (R^2 = .09) and the adjusted R^2 is .08, which indicates that 8 % of the variance in the learners' speaking proficiency levels can be predicted from the combination of the predictors aforementioned. It can be assumed that the lower percentage of prediction might be attributed to the subjective evaluations of the native speakers in charge of the interview placement test. However, the result of ANOVA (analysis of variance) demonstrated that the regression model is significant and valid, $F(2, 177) = 8.96$, $p < .001$.

Table 3.4
Standard Multiple Regression of In-Class/Out-of-Class Self-Efficacies on the Learners' Speaking Proficiency Levels

	Unstandardized coefficients		Standardized coefficients			Correlations		
	B	Std. error	beta	t	p	Zero order	Partial	Part
ICSE	.17	.05	.31	3.43	.001	.30	.25	.25
OCSE	-.01	.04	-.01	-.12	.908	.18	-.01	-.01

Note. N=180. ICSE = In-class self-efficacy, OCSE = Out-of-class self-efficacy.

The amount of the contribution of each independent variable to the dependent variable is summarized in Table 3.4. Table 3.4 shows that in-class self-efficacy is a significant predictor of speaking proficiency levels, while out-of-class self-efficacy is not. It should also be noted that in-class self-efficacy individually explains only 6.1 % (derived from squared part correlation $.25^2$) of the variance in speaking proficiency.

In summary, Research Question 2 can be answered by suggesting that in-class self-efficacy can be a significant predictor of the learners' speaking proficiency levels, though the unique contribution of in-class self-efficacy, as well as the total contribution of the two types of self-efficacy, to the prediction of the variability in speaking proficiency is considerably low. There is room for consideration of why out-of-class self-efficacy cannot predict the learners' speaking proficiency levels, which is discussed later in 3.5 Discussion in this study.

3.4.3 How Strongly Do the Four Sources of Self-Efficacy Information Predict the Learners' In-Class and Out-of-Class Self-Efficacies?

Research Question 3 raised the question of the predictability of in-class and out-of-class speaking self-efficacies using the four sources of self-efficacy information. A series of multiple regression analyses were conducted, where in-class and out-of-class self-efficacies were employed as dependent variables, and the four sources of self-efficacy information as independent variables. Table 3.5 demonstrates the correlations among in-class/out-of-class self-efficacies and the four sources of self-efficacy information.

Table 3.5

Correlations Among In-Class Self-Efficacy, Out-of-Class Self-Efficacy, and the Four Sources of Self-Efficacy Information

	1	2	3	4	5	6	*M*	*SD*
1. ICSE	1	—	—	—	—	—	4.76	1.52
2. OCSE	.61***	1	—	—	—	—	4.39	1.83
3. ME	.84***	.70***	1	—	—	—	4.88	1.66
4. VE	.14	.24**	.16*	1	—	—	7.99	1.51
5. VP	.44***	.45***	.47***	.53***	1	—	6.40	1.64
6. ES	.53***	.52***	.53***	.33***	.57***	1	6.44	1.60

Note. $N = 180$. ICSE = In-class self-efficacy, OCSE = Out-of-class self-efficacy. ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states.

*$p < .05$, ** $p < .01$, ***$p < .001$.

In-class self-efficacy correlated significantly with ME, VP, and ES, but not with VE. In addition, in-class self-efficacy had especially strong correlations with ME ($r = .84$, $p < .001$), followed by ES ($r = .53$, $p < .001$). In order to investigate which information sources could account for the learners' in-class self-efficacies, a multiple regression analysis was conducted, where in-class self-efficacy was used as a dependent variable, and the four sources of self-efficacy information as independent variables. Multicollinearity was not detected among the four sources, each variance inflation factor (VIF) indicating ME = 1.51, VE = 1.42, VP = 2.00, ES = 1.73, which means that the variables possessed almost no problematic correlation with each other. The results are shown in Table 3.6 and 3.7.

Table 3.6

Model Summary of the Relationship Between the Learners' In-Class Self-Efficacy and the Four Sources of Self-Efficacy Information

Model	R	R squared	Adjusted R squared	Std. error of the estimate
1	.84	.71	.70	.83

Note. $N = 180$. Dependent variable = In-class self-efficacy.

Table 3.6 shows the multiple correlation coefficient as well as the adjusted and unadjusted coefficients of determination between the learners' in-class self-efficacy and the four sources of self-efficacy information. The multiple correlation coefficient is .84 ($R^2 = .71$) and the adjusted R^2 is .70, which indicates that 70 % of the variance in in-class self-efficacy can be predicted from the combination of the predictors aforementioned. The higher percentage of prediction might be attributed to the strong correlation between in-class self-efficacy and the four sources of self-efficacy information. The result of ANOVA demonstrates that the regression model is significant and valid, $F(4, 175) = 106.60, p < .001$.

Table 3.7

Standard Multiple Regression of the Four Sources of Self-Efficacy Information on In-Class Self-Efficacy

	Unstandardized coefficients		Standardized coefficients			Correlations		
	B	Std. error	beta	t	p	Zero order	Partial	Part
ME	.70	.05	.77	15.28	<.001	.84	.76	.62
VE	-.04	.05	-.04	-.74	.459	.14	-.06	-.03
VP	.03	.05	.03	.47	.639	.44	.04	.02
ES	.11	.05	.12	2.21	.028	.53	.17	.09

Note. $N = 180$. Dependent variable = In-class self-efficacy. ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states.

Table 3.7 shows that ME ($\beta = .77$, $t = 15.28$, $p < .001$) and ES   ($\beta = .12$, $t = 2.21$, $p < .05$) are significant predictors of in-class self-efficacy, ME especially having a stronger influence. On the other hand, VE and VP turned out to be nonsignificant.

Next, the correlations between out-of-class self-efficacy and the four sources of self-efficacy information all proved significant (Table 3.5). Out-of-class self-efficacy showed a moderate or strong correlation with ME ($r = .70$, $p < .001$), followed by ES ($r = .52$, $p < .001$). In order to investigate which variable might be able to account for the learners' out-of-class self-efficacy, a multiple regression analysis was performed, where out-of-class self-efficacy was used as a dependent variable, and the four sources of self-efficacy information independent variables. Multicollinearity was not detected, as shown in the previous section. The results are shown in Table 3.8 and 3.9.

Table 3.8
Model Summary of the Relation Between the Learners' Out-of-Class Self-Efficacy and the Four Sources of Self-Efficacy Information

Model	R	R squared	Adjusted R squared	Std. error of the estimate
1	.73	.53	.52	1.27

Note. $N = 180$. Dependent variable = Out-of-class self-efficacy.

Table 3.8 shows the multiple correlation coefficient as well as the adjusted and unadjusted coefficients of determination between the learners' out-of-class self-efficacy and the four sources of self-efficacy information. The multiple correlation coefficient is .73 ($R^2 = .53$) and the adjusted R^2 is .52, which indicates that 52 % of the variance in out-of-class self-efficacy can be explained by the combination of the predictors aforementioned. It shows that the hypothesized four sources together account for a moderate portion of the variance in out-of-class self-efficacy, where learners are expected

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to communicate with native speakers. The result of ANOVA demonstrated that the regression model was significant and valid, $F(4, 175) = 48.54$, $p < .001$.

Table 3.9

Standard Multiple Regression of the Four Sources of Self-Efficacy Information on Out-of-Class Self-Efficacy

	Unstandardized coefficients		Standardized coefficients			Correlations		
	B	Std. error	beta	*t*	*p*	Zero order	Partial	Part
ME	.64	.07	.58	9.09	<.001	.70	.57	.47
VE	.08	.08	.07	1.06	.289	.24	.08	.06
VP	.05	.08	.05	.64	.526	.45	.05	.03
ES	.18	.08	.16	2.35	.020	.52	.18	.12

Note. $N = 180$. Dependent variable = Out-of-class self-efficacy. ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states.

The results of the standard multiple regression analysis show that ME ($\beta = .58$, $t = 9.09$, $p < .001$) and ES ($\beta = .16$, $t = 2.35$, $p < .05$) are significant predictors of out-of-class self-efficacy, ME especially possessing a stronger influence. This result corresponds to that of in-class self-efficacy shown in Table 3.7, which shows that ME and ES are significant predictors of both in-class and out-of-class self-efficacies, while VE and VP are not.

Considering the results of multiple regression analyses, a hypothesized model (Figure 3.1.) was designed and subjected to structural equation modeling (SEM) using AMOS 23. The model shows that ME and ES affect both in-class and out-of-class self-efficacies but that only in-class self-efficacy can contribute to the learners' speaking levels. In assessing the model fit for the structural equation model (SEM), multiple fit indexes were adopted. It is maintained that for a reasonable fit, the Goodness-of-Fit Index (GFI) and the Adjusted Goodness-of-Fit Index (AGFI) should be .90 and over, the Root

Mean Square Error of Approximation (RMSEA) should be within .05, and the Comparative Fit Index (CFI) should be .95 and over (Lomax, & Schumacker, 2004, p. 82; Schermelleh-Engel, Moosbrugger, & Müller, 2003). Compared with the appropriate values for fit indexes above, this model showed GFI .998, AGFI .991, RMSEA .000, and CFI 1.000, verifying that the model has a good fit.
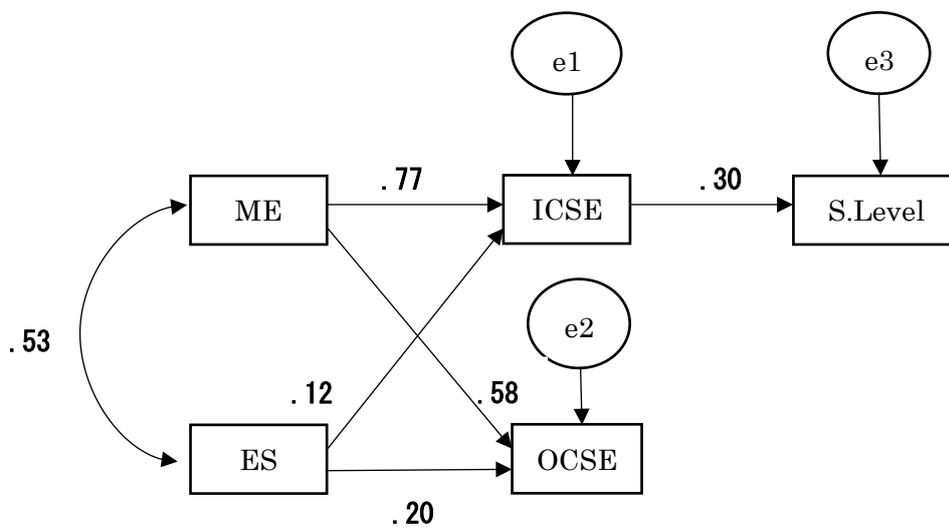
Figure 3.1. Causal model of in-class and out-of-class self-efficacies with standardized estimates. ICSE = In-class self-efficacy, OCSE = Out-of-class self-efficacy, S. Level = Speaking level. ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states. The arrow from out-of-class self-efficacy to speaking level is omitted, because it was not regarded as necessary judging from the significantly low standardized coefficient (-.01) as shown in Table 3.4.

Considering the aforementioned findings, Research Question 3 can be answered by saying that ME and ES are significant predictors of both in-class and out-of-class self-efficacies, while VE and VP are not.   It can safely be confirmed that ME is the strongest predictor among the four sources of self-efficacy information.

3.5 Discussion

Research Question 1 asked whether in-class self-efficacy and out-of-class self-efficacy can be differentiated. The result of factor analysis demonstrated that they were definitely different in nature (Table 3.1). This difference can be derived from the assumption that the in-class environment indicates a familiar place for the students to practice speaking English surrounded by Japanese peers, while the out-of-class environment infers an unfamiliar place surrounded by strangers or native speakers, which is more likely to provoke anxiety, bewilderment, or hesitation.

Research Question 2 asked the degree to which in-class and out-of-class self-efficacies could individually predict learners' speaking proficiency levels. The result of the multiple regression analysis revealed that only in-class self-efficacy could account for the learners' speaking proficiency levels significantly despite its low predictability.

Research Question 3 posed a question of the prediction of in-class and out-of-class self-efficacies by the four sources of self-efficacy information. The result of the multiple regression analyses proved that among the four sources of self-efficacy information, ME and ES could predict both in-class and out-of-class speaking self-efficacies. It was also demonstrated that ME was a stronger predictor than ES in both of the cases. It can also be confirmed from Figure 3.1. that ME and ES affect both in-class and out-of-class speaking self-efficacies, as well as that in-class speaking self-efficacy affects the learners' speaking proficiency levels. Therefore, in order to raise learners' speaking proficiency levels, learners need to accumulate small successful experiences (=ME) in both the in-class and out-of-class learning environments, which may be conducive to raising their positive attitude and lessening their anxiety about speaking English (= ES).

The reason why ME and ES were dominant efficacy sources is likely to be their nature, that is, ME and ES possess 'direct' influence on learners' self-efficacy. Several authors affirm that ME is the most powerful self-efficacy source, because it is directly based on one's own successful experiences (Bandura, 1977, 1995, p. 3; Klassen, 2004a; Mills, 2014, p. 8; Usher & Pajares, 2008). A number of empirical studies support this assertion, claiming that among the four sources of self-efficacy, ME consistently predicted self-efficacy across various academic domains, not to mention its significant correlation with the other sources (e.g., Britner & Pajares, 2006; Klassen, 2004a; Lent, Lopez, & Bieschke, 1991; Lopez & Lent, 1992; Lopez, Lent, Brown, & Gore, 1997; Matsui et al., 1990; Pajares, Johnson, & Usher, 2007; Usher & Pajares, 2006b).

The current study also demonstrated that ES exerts a direct influence on learners' mood. This is because compared with other English skills, speaking calls for impromptu responses, which stimulates one's emotional ups and downs. The results of ES having a moderate but significant effect on self-efficacy in this study corresponds to the result of several studies (e.g., Klassen, 2004a; Matsui et al., 1990; Usher & Pajares, 2006a, 2006b). Similarly, when investigating high school students' math self-efficacy, Lopez and Lent (1992) reported that ES contributed significantly to the prediction of math self-efficacy.

VE and VP did not predict speaking self-efficacy significantly in this study, while ME and ES did. This result corresponds to several other studies, where VE did not predict self-efficacy in multiple regression models that included the other sources (e.g., Lent et al., 1991; Pajares et al., 2007; Usher & Pajares, 2006a). In addition, the weak predictability of VE on self-efficacy in this study corresponds to other studies (Bandura, 1997, p. 88; Usher & Pajares, 2008), referring to the indirect and curvilinear influence of VE on learners' self-efficacy.

In this current study, VE showed lower predictability on self-efficacy than the other sources, which implies that VE is a difficult source to use to build up learners' self-efficacy. This can be derived from the assumption that VE refers only to learners' admiration for others' successful performance or temporary feelings they perceive, and therefore can be forgotten easily. It can be presumed that VE is different from ME in that they do not possess long-lasting effects on one's self-efficacy, as proved in other studies (e.g., Bandura, 1977, 1997, p. 88; Britner & Pajares, 2006; Pajares & Valiante, 2006).

In terms of lower predictability of VP, several researchers mentioned its weak influence on self-efficacy in their studies. They found that VP did not predict self-efficacy in the regression analysis in spite of its consistent correlations with self-efficacy (e.g., Lent et al., 1991; Matsui et al., 1990). Furthermore, when Hutchison, Follman, Sumpter, and Bonder (2006) asked undergraduates majoring in engineering to rank influential self-efficacy sources, neither men nor women considered VP as an influential factor. Therefore, it could be said that VP might not predict speaking self-efficacy, due to its indirect influence based on encouragement or feedback from others.

Regarding the relationship between in-class/out-of-class self-efficacies and learners' speaking levels (Figure 3.1.), only in-class self-efficacy predicted learners' speaking levels. This can be explained by the fact that most of the participants had not experienced studying abroad nor had they obtained enough experiences to interact with native speakers outside class, and therefore it is likely that they could not answer the items concerning out-of-class self-efficacy accurately. Actually, the questionnaire in this study revealed that only 9 out of 180 participants had stayed abroad for more than a month. It can be assumed that most of the participants had to depend on their imagination when

answering the scale items about out-of-class self-efficacy, due to a lack of hands-on speaking experiences at home or abroad. This result is proved by the lower correlation between speaking proficiency level and out-of-class self-efficacy in Table 3.2 and the lower standardized coefficient in Table 3.4.

Taking the findings and Figure 3.1. into consideration, it can be said that it would be necessary to enhance students' out-of-class speaking self-efficacy in order to develop their overall speaking self-efficacies. Judging from the result of Table 3.6 and Table 3.8, it is evident that in-class self-efficacy (R squared = .71) is more strongly influenced by the four sources of self-efficacy information than out-of-class self-efficacy (R squared = .53). Additionally, Table 3.4 indicates that in-class self-efficacy predicted learners' speaking proficiency significantly but out-of-class self-efficacy did not. These findings show that out-of-class self-efficacy may not have been prioritized in enhancing learners' English-speaking self-efficacy, as well as the possibility that it has not been assessed correctly due to the students' fewer hands-on speaking experiences outside of class. In other words, teachers might tend to focus more on in-class self-efficacy than on out-of-class self-efficacy, which may not be enough to improve learners' overall speaking self-efficacies. Table 3.1 clarified that in-class self-efficacy (= practicing English-speaking in class) and out-of-class self-efficacy (= implementing English-speaking outside of class) were different in nature. However, it is crucial to focus more on enhancing out-of-class speaking self-efficacy, because acquiring a command of spoken English outside the classroom is considered to be the ultimate goal for learners to become autonomous English speakers. In fact, it may not be until learners interact well with native speakers outside class that they realize that their speaking proficiency has truly improved.

Then how can learners enhance their out-of-class self-efficacy? Considering ME and ES, accumulating successful speaking experiences would be necessary, which could be achieved by increasing the opportunities to speak with native speakers outside class, such as participating in a short trip abroad or a language program in a foreign country, and so forth. By being exposed to English-speaking surroundings more frequently, it would be possible for learners to become used to speaking English, which would gradually lessen their speaking anxiety, hesitation, or bewilderment, and increase positive feelings toward speaking English. Fredrickson (2002, p. 126) argues that positive emotions may encourage learners to deal with anxiety, stress, and adversity, leading them to learn faster and improve intellectual performance. The small scaffolds that learners receive outside class will surely help them to build up their out-of-class self-efficacy, which results in heightening their speaking proficiency overall, in addition to in-class self-efficacy.

3.6 Conclusion

In this study, analyzing various dimensions of in-class and out-of-class self-efficacies, learners' speaking proficiency levels, and the four sources of self-efficacy information made it clear that several points should be considered in order to enhance learners' overall English-speaking proficiency.

To summarize all the findings in the study, three outstanding features can be presented as follows:

1. In-class and out-of-class self-efficacies reflect clearly differentiated dimensions of learner beliefs.

2. Learners' ME and ES correlate significantly to in-class and out-of-class self-efficacies, but only in-class self-efficacy predicts English-speaking proficiency.

3. Shedding more light on out-of-class self-efficacy might enhance learners' overall speaking self-efficacy.

Taking the findings into consideration, instructors are expected to establish in-class learning environments in which they can boost their students' ME and ES, while also paying attention to the influence of VE and VP on students' self-efficacy. In addition, teachers should provide as many speaking opportunities as possible so that students can obtain hands-on experiences of speaking English in natural settings, such as through language learning programs or short homestay programs abroad, which may lead students to raise their motivation. Meanwhile, students should be encouraged to participate in speaking class willingly and make great efforts to complete provided tasks. Every small step that they make will help them accumulate successful experiences (= ME), followed by encouragement and feedback they receive from teachers (= VP) and striving to catch up with their speaking models (= VE), resulting in enhanced motivation and lessened anxiety in practicing English-speaking (= ES). On the other hand, students should make good use of their opportunities to speak English outside of class. There are various opportunities around them to get exposed to English, such as visiting places to communicate with native speakers, and participating in ESS, potluck parties, a short-term study abroad, or other language programs. It is proved in several studies that students who often utilized English-speaking places with native speakers greatly enhanced their self-efficacy compared to those who did not (e.g., Liu, 2013).

In summary, instructors' and students' establishing scaffolds of speaking English in class as well as outside of class might surely result in improving students' overall speaking self-efficacy.

CHAPTER 4

THE IMPACT OF A STUDY ABROAD PROGRAM ON COLLEGE STUDENTS' SELF-EFFICACY IN ENGLISH-SPEAKING (PART I)

4.1 Introduction

In Chapter 3, the results showed that in-class and out-of-class self-efficacies reflected different dimensions of learners' beliefs and that only in-class self-efficacy predicted their English-speaking proficiency. The reason why out-of-class self-efficacy did not predict English-speaking self-efficacy might have been related to the fact that most of the participants had not had enough experiences of staying or studying abroad. It might have been difficult for the participants to think about actual situations of out-of-class settings, where they were supposed to interact with native speakers of English. This reflection led the author to investigate the impact of speaking self-efficacy among college undergraduates in an English training program in the United States. In study abroad settings, such as attending a language school or a homestay program, it is expected that students' self-efficacies can be improved. There is also a probability that their self-efficacies may change drastically, which cannot be seen in their home country.

This study investigates how students' English-speaking self-efficacies changed through participation in a three-week language training program in the United States. For this, 17 Japanese first- and second-year undergraduates were asked to respond to a 37-item questionnaire on speaking self-efficacy inside and outside the classroom.

4.1.1 Positive Effects of Study Abroad on the Participants and Their Self-Efficacy

According to the increase of study abroad programs, the amount of empirical research on the benefits of foreign sojourns has soared (e.g., Cubillos & Ilvento, 2012;

Hernandez, 2010; Kauffmann, Martin, Weaver, & Weaver, 1992; Martinsen, 2010; Milstein, 2005). Among them, several studies have begun to link learners' self-efficacy beliefs with study abroad programs, implying that self-efficacy could be an antecedent to cross-cultural adaptation (e.g., Harrison, Chadwick, & Scales, 1996; Palthe, 2004).

Recent studies have focused on positive outcomes of sojourns, such as increased intercultural awareness (Edmonds, 2010; Hansel & Grove, 1985), enhancement of global mindedness (Kehl & Morris, 2008), increase in self-esteem, self-confidence, and autonomy (Kauffmann et al., 1992) and general personal growth (Dwyer, 2004; Ingraham & Peterson, 2004).

It seems that a study abroad experience can strengthen students' self-efficacy beliefs regardless of its length. Cubillos and Ilvento (2012) found in their empirical study that short-term sojourners gained significant self-efficacy through the program, regardless of their limited language proficiency. Tanaka and Ellis (2003) examined changes in 166 Japanese university students' beliefs concerning language learning after a 15-week study-abroad program in the United States, where they found significant changes in the students' beliefs, including language learning, self-efficacy and confidence. Furthermore, Amuzie and Winke (2009) revealed in their study the change of learner beliefs on learner autonomy among participants who studied English abroad, regardless of length.

Given that study-abroad experiences generally help enhance learners' self-efficacy beliefs, the next question to be asked is how this happens. Past studies provide several clues to answer this question.

Firstly, it is assumed that through sojourns, the four sources of self-efficacy information can be activated. As Cubillos and Ilvento (2012) illustrated, study abroad programs enable FL learners to develop self-efficacy beliefs significantly. They pointed

out that this is because the sojourn environment can provide opportunities for learners to practice their language skills (= ME), to observe others engaged in similar linguistic tasks (= VE), and to gain feedback from conversational partners (= VP). It is also possible that these events influence learners' emotions either positively or negatively (= ES).

Secondly, it is expected that students can gain higher language proficiency through sojourns, which in turn would help them improve their self-efficacy. Martinsen (2010) asserted in his quantitative research on Spanish L2 learners that significant oral proficiency improvements were demonstrated by the majority of participants through a short-term study-abroad program. Hernández (2010) also affirmed in his experimental study that students improved their L2 oral proficiency during a one-semester long study-abroad program. Moreover, Segalowitz et al. (2004) found in their study on Spanish L2 learners that students who studied in Spain for a semester demonstrated significant gains in speaking proficiency. This might be because, as Cubillos and Ilvento (2012) claim, sojourns can provide students with ample opportunities to check and improve their language skills. As aforementioned in Chapter 2, quite a few studies have found strong relationships between self-efficacy and academic achievement (e.g., Asakereh & Dehghannezhad, 2015). Therefore, it can safely be said that gaining higher English proficiency is linked to boosting one's self-efficacy.

Lastly, students are expected to heighten their self-efficacy while communicating with local people in the target culture. Cubillos and Ilvento (2012) asserted that the quantity and quality of communication with the host community members could play a key role in raising self-efficacy beliefs among sojourners. Therefore, it can safely be mentioned that the extent to which participants can interact with the local people might influence self-efficacy gains.

Considering the three aspects above, it can be stated that study abroad experiences will enable the participants to gain self-efficacy by having them utilize four sources of self-efficacy information, and to raise linguistic proficiency and communicative competence, all of which may be linked to developing their personal growth.

4.1.2 Opportunities for Japanese Students to Study Abroad

In Japan, many people seem to believe that they cannot speak English well even though they have studied the language for more than 10 years in school. This situation has led Japanese people to think that it is necessary to study abroad if they want to enhance their speaking skills. A number of researchers have provided similar statements, saying that instructors and students tend to regard studying abroad as one of the most effective ways to learn a foreign language, especially when it comes to improving speaking ability (Brecht, Davidson, & Ginsberg, 1995; DeKeyser, 2007; Tanaka & Ellis, 2003).

Due to globalization and intense business competition, a lot of Japanese universities have recently started to provide students with study-abroad programs. Especially popular are the programs with a duration of less than one month. According to Japan Student Services Organization (JASSO, 2017), the number of students who went abroad for less than one month has increased drastically in the past decade, from 5,924 in 2004 to 29,933 in 2014. This shows that it has become easier for Japanese students to obtain opportunities to study abroad and expose themselves directly to the target language and its community.

Despite the increasing popularity of study-abroad programs, relatively few empirical studies have examined the relationships between Japanese students' speaking self-efficacy and their study-abroad experiences. One such study is that of Tanaka and Ellis (2003), where they found significant changes in students' beliefs relating to self-efficacy and confidence in L2 learning. However, more studies are needed to investigate

the relationships between Japanese students' speaking self-efficacy and study-abroad programs.

4.2 Objectives and Research Questions

The aim of this current study is to examine the change in the participants' English-speaking self-efficacy through a study-abroad program, derived from the four sources of self-efficacy information. It is especially helpful to divide self-efficacy into in-class and out-of-class self-efficacies when analyzing the data, because these two study environments are obviously different. Considering the aforementioned, the following research questions were designed:

1. How do in-class and out-of-class self-efficacies change through the program?

2. How is the correlation between in-class and out-of-class self-efficacies different on the post-survey from the pre-survey?

3. Which sources of self-efficacy information correlate significantly with the gain in in-class self-efficacy and that in out-of-class self-efficacy?

4.3 Methods

4.3.1 Participants

The participants used to assess self-efficacy and the four sources were 17 sophomore and junior Japanese undergraduates who majored in English and joined a summer homestay program in 2016. They stayed in Minnesota, in the United States, for three weeks. While staying with their host families, they attended morning classes at a university with other foreign students and in the afternoon went sightseeing or shopping.

4.3.2 Instrument

The questionnaire was first designed by referring to similar scale items found in other research papers (e.g., Asakereh & Dehghannezhad, 2015; Idrus et al., 2011; Liu,

2013). Then, the questionnaire was improved and redesigned by the author, so that it would correspond to real situations in the United States. The questionnaire used for the current study was written in Japanese (Appendix B).

The pre-survey questionnaire comprised 12 items, including 6 items regarding in-class self-efficacy and another 6 items regarding out-of-class self-efficacy. The post-survey questionnaire consisted of 12 items used in the pre-survey, plus another 25 items concerning the four sources of self-efficacy information: 7 items for ME, 6 items each for VE, VP and ES. An 11-point Likert scale ranging from zero (*cannot do at all / entirely inapplicable*) to ten (*certainly can do / completely applicable*) was utilized. All the items were related to specific tasks, as Bandura (1997) suggested (p. 42).

4.3.3 Procedures

The participants were provided with the pre-survey questionnaire (12 items) in their study-abroad preparation class, 13 days before the program's departure time. Then, on the day when they returned to Japan from the United States, the post-survey questionnaire (37 items) was distributed on the bus going to the university from the airport. All the participants cooperated with the author to complete the pre- and post-survey questionnaires.

4.3.4 Data Analysis

This study was conducted with a comparably small sample size ($N = 17$), largely restricting the kinds of statistical analyses that can be used.[1] Therefore, only correlational analyses and a paired-samples t-test were employed. The paired-samples t-test is argued to be appropriate for a small sample of this size (de Winter, 2013). Cronbach's alpha was adopted to estimate the reliability of the questionnaire items. To investigate the relationship between the variables, a correlation analysis (Pearson's r) was carried out.

The paired-samples *t*-test was conducted to examine how in-class and out-of-class self-efficacies had changed after the program (Research Question 1). Then, the correlation between in-class and out-of-class self-efficacies on pre- and post-surveys was analyzed (Research Question 2). Lastly, each individual's self-efficacy gain was calculated for in-class and out-of-class self-efficacies, which was examined in terms of the correlation with the four sources of self-efficacy information (Research Question 3). SPSS 23.0 was used for all the statistical analyses.

4.4 Results

Reliability coefficients (Cronbach's α) for in-class and out-of-class self-efficacy subscales on the pre-survey were .87 and .96, respectively, while those for in-class and out-of-class self-efficacy sub-scales on the post-survey were .94 and .88, respectively. The reliability coefficients (Cronbach's α) for ME, VE, VP, and ES were .91, .85, .85, and .89, respectively.

Table 4.1 demonstrates the correlations among in-class self-efficacy, out-of-class self-efficacy, and the four sources of self-efficacy information. Several outstanding features can be detected. First, the correlation between pre- and post-surveys in in-class self-efficacy is .78, while that between pre- and post-surveys in out-of-class self-efficacy is .63. This appears to indicate greater timewise variability for out-of-class self-efficacy than in-class self-efficacy, which may be due to the real use of English in the local community.

Secondly, both in-class and out-of-class self-efficacies on the pre-survey correlate significantly with ME ($r = .61$, $r = .58$), VP ($r = .75$, $r = .74$) and ES ($r = .70$, $r = .60$), while they correlate nonsignificantly with VE ($r = .33$, $r = .22$). Similarly, both in-class and out-of-class self-efficacies on the post-survey correlate significantly with ME ($r = .84$,

$r = .89$), VP ($r = .81$, $r = .75$), and ES ($r = .84$, $r = .89$), while they correlate nonsignificantly with VE ($r = .11$, $r = .15$). The low correlation of VE with in-class and out-of-class self-efficacies on the pre-survey ($r = .33$, $r = .22$) reveals that students who possessed initially high self-efficacy did not necessarily have experiences that built up their self-efficacy derived from specific speaking models during their stay abroad, nor were they conscious of the presence of such models. Meanwhile, the low correlations of VE with in-class and out-of-class self-efficacies on the post-survey ($r = .11$, $r = .15$) demonstrate that during their stay in the United States, VE did not necessarily help enhance the participants' self-efficacy, exerting little to no influence on them.

Table 4.1

Correlations Among In-Class Self-Efficacy, Out-of-Class Self-Efficacy, and the Four Sources of Self-Efficacy Information, on the Pre- and Post-Surveys

	pre-ICSE	pre-OCSE	post-ICSE	post-OCSE	ME	VE	VP	ES	*M*	*SD*
pre-ICSE	1	—	—	—	—	—	—	—	4.86	1.66
pre-OCSE	.78***	1	—	—	—	—	—	—	4.49	1.30
post-ICSE	.78***	.69**	1	—	—	—	—	—	5.73	1.76
post-OCSE	.69**	.63**	.92***	1	—	—	—	—	6.04	1.93
ME	.61**	.58*	.84***	.89***	1	—	—	—	6.9	2.02
VE	.33	.22	.11	.15	.17	1	—	—	8.35	1.56
VP	.75***	.74**	.81***	.75**	.77***	.14	1	—	5.41	2.03
ES	.70**	.60*	.84***	.89***	84***	.19	.85***	1	6.63	1.87

Note. $N = 17$. pre-ICSE = In-class self-efficacy on the pre-survey, pre-OCSE = Out-of-class self-efficacy on the pre-survey, post-ICSE = In-class self-efficacy on the post-survey, post-OCSE = Out-of-class self-efficacy on the post-survey. ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states.

*p < .05, ** p < .01, ***p < .001.

Research Question 1 asked how in-class and out-of-class self-efficacies changed through the program. The means of in-class self-efficacy on the pre- and post-surveys were 4.86 and 5.73, respectively. Meanwhile, the means of out-of-class self-efficacy on the pre- and post-surveys were 4.49 and 6.04, respectively. Figure 4.1. shows the relations between the pre- and post-surveys. It is evident from Figure 4.1. that the gain in out-of-class self-efficacy (1.55) is larger than that in in-class self-efficacy (.87). The paired-

samples *t*-test was carried out, and the effect size *d* was calculated.[2] The result is shown in Table 4.2.
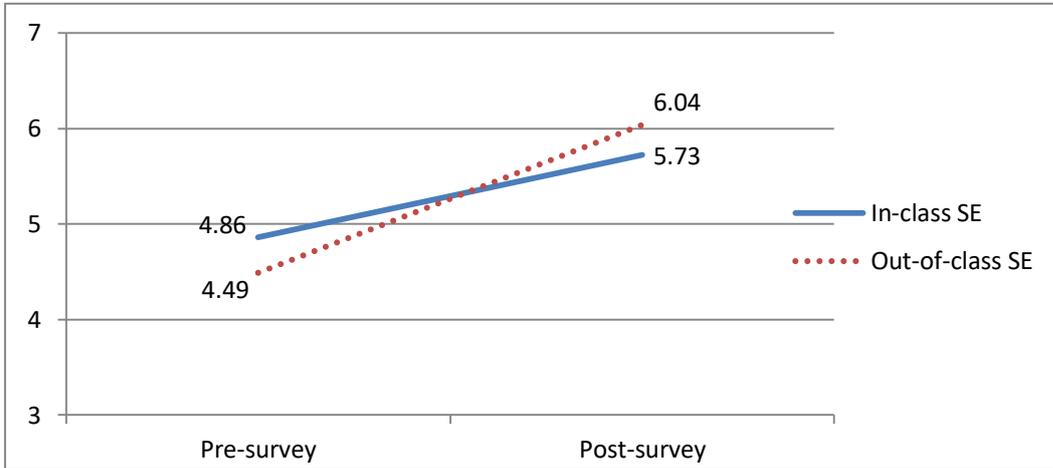
Figure 4.1. The mean differences in self-efficacies between the pre- and post-surveys, concerning in-class and out-of-class self-efficacies.

Table 4.2
The Results of Paired-Samples T-Tests

	Mean difference	*t*	*df*	*p*	effect size *(d)*
pre-ICSE – post-ICSE	-.87	-3.14	16	.006	-.50
pre-OCSE – post-OCSE	-1.55	-4.23	16	.001	-.94

Note. N= 17. pre-ICSE = In-class self-efficacy on the pre-survey, pre-OCSE = Out-of-class self-efficacy on the pre-survey, post-ICSE = In-class self-efficacy on the post-survey, post-OCSE = Out-of-class self-efficacy on the post-survey.

Research Question 2 asked how the correlation was different between in-class and out-of-class self-efficacies on the post-survey from the pre-survey. This aims to see whether the program affected the integration between the two self-efficacy subtypes. A strong correlation between in-class and out-of-class self-efficacies would show that they are well-linked, while a weak correlation between in-class and out-of-class self-efficacies might demonstrate that they are not. The correlations between in-class and out-of-class

self-efficacies on the pre- and post-surveys are .78, and .92, respectively (Table 4.1). This demonstrates that in-class self-efficacy became more integrated with out-of-class self-efficacy in the post-survey than in the pre-survey, making the two better-synthesized.

Research Question 3 asked which sources of self-efficacy information correlated significantly with the gains in in-class and out-of-class self-efficacies. For this, the gains in in-class and out-of-class self-efficacies were calculated for each participant. The gains were then correlated with the four sources of self-efficacy information scores. Through this measurement, it becomes clear which sources of self-efficacy information have greater influence on self-efficacy gains than others. Higher correlations indicate stronger impacts of information sources on self-efficacy gains and lower correlations indicate weaker impacts. The result is shown in Table 4.3.

Table 4.3

Correlations Between the Gains in In-Class/Out-of-Class Self-Efficacies and the Four Sources of Self-Efficacy Information

	g-ICSE	g-OCSE
g-ICSE	1	—
g-OCSE	.61**	1
ME	.40	.63**
VE	-.32	.001
VP	.16	.33
ES	.28	.62**

Note. $N = 17$. g-ICSE = Gain in in-class self-efficacy, g-OCSE = Gain in out-of-class self-efficacy. ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states.
** $p < .01$.

Regarding the correlation between the gain in in-class self-efficacy and the four sources of self-efficacy information, ME shows a considerably stronger correlation than the other three sources. Interestingly, however, VE shows a negative, though

nonsignificant, correlation with the gain in in-class self-efficacy ($r = -.32$). The hidden aspects of this negative correlation will be discussed in 4.5 Discussion. Meanwhile, the gain in out-of-class self-efficacy correlates significantly with ME and ES ($r = .63, r = .62$), while the relation is much weaker with VE and VP. Overall, Table 4.3 revealed that both ME and ES show stronger and more positive correlations with the gains in in-class and out-of-class self-efficacies than VE and VP.

4.5 Discussion

Concerning Research Question 1, the results of paired-samples t-tests reveal that the gain in out-of-class self-efficacy is larger than that in in-class self-efficacy, as demonstrated by the larger value of d for out-of-class self-efficacy (Table 4.2). This may be because out-of-class self-efficacy, unlike in-class self-efficacy, was derived from the participants' real experiences in the community, which might have boosted their self-efficacy, leading to its higher average. DeKeyser (1991) claims that participants in study-abroad programs can be provided with plenty of comprehensible input and speaking practice by spending a lot of time in the real native-speaking surroundings, which contributes to their motivation. DeKeyser also notes that sojourners can acquire practical communication skills by interacting informally with native speakers, which rarely occurs in the classroom environment. Meanwhile, in the classroom environment, students are always surrounded by Japanese peers and are taught English in a regular classroom environment, where the teaching style seems to be the same in both Japan and the United States. This can relate to the result of this study (Figure 4.1.) in that there was not so much mean difference in in-class self-efficacies between pre- (Japan) and post-surveys (U.S.). It can be assumed that the gain in out-of-class self-efficacy was larger

than that in in-class self-efficacy, due to the distinct difference between in-class and out-of-class surroundings.

Regarding Research Question 2, the correlation between in-class and out-of-class self-efficacies on the pre-survey was .78, while that on the post-survey was .92, revealing a stronger correlation on the post-survey. From this, it can be inferred that through the real, hands-on experiences of using English in the United States, in-class and out-of-class self-efficacies became integrated with each other, which heightened the correlation on the post-survey. The participants may have perceived that what they learn in class is directly and positively related to what they do outside of class.

As for Research Question 3, in terms of the correlation between the gain in in-class self-efficacy and the four sources of self-efficacy information (Table 4.3), both ME ($r = .40$) and ES ($r = .28$) showed higher positive correlation than VE and VP, though all these relations were nonsignificant. Meanwhile, with regard to the correlation between the gain in out-of-class self-efficacy and the four sources of self-efficacy information, both ME ($r = .63$) and ES ($r = .62$) demonstrated a moderate but significant correlation. Considering the results in Table 4.3, it can be confirmed that ME and ES had stronger impacts on self-efficacy gains than the other two sources. Several researchers also found similar findings in their empirical studies: ME and ES predicted students' self-efficacy beliefs better than the other two sources (Klassen, 2004a; Lopez & Lent, 1992; Usher & Pajares, 2006a).

The reason why ME and ES have stronger influences can be explained in several ways. There are a number of opportunities abroad for the participants to practice their speaking skills in authentic ways, which leads to their accumulating successful or unsuccessful experiences. Students studying abroad can be pioneers and regularly

encounter situations where survival—from eating a fast-food lunch to visiting an emergency hospital—is dependent upon speaking intelligible authentic English. Therefore, successful experiences may contribute to their confidence while unsuccessful ones act as learning experiences, usually accompanied by emotional fluctuations, such as elation or discouragement, implying comparable changes in ES. Meanwhile, the influences of VE and VP on self-efficacies are weaker than ME. This is in keeping with other studies (e.g., Bandura, 1977; Schunk, 1984). Schunk (1984) explains this as due to the short-duration of VE and VP, which are easily affected and negated by subsequent unsuccessful performances. This short-lasting, easily-forgotten nature of VE and VP might provide the participants with weaker influence on self-efficacy than ME and ES. Compared with the weak and indirect influence of VE and VP provided by others, ME and ES are based on the participants' direct and authentic experiences, which are more likely to affect self-efficacy.

The correlation between VE and the gain in in-class self-efficacy and that in out-of-class self-efficacy were -.32 and .001, respectively (Table 4.3). The negative correlation between VE and the gain in in-class self-efficacy may indicate that VE did not work as effective role models for speaking, but rather the students with high VE and stronger admiration for speaking models might have felt intimidated or lost confidence when observing the models. This can happen more typically in the in-class than the out-of-class settings, because speaking models in the classroom are usually Japanese peers, not native speakers, and observing superior Japanese peers can provoke a sense of inferiority. Meanwhile, Japanese students in the United States mainly interact with native speakers of English outside the classroom, so even if the students observe them, they might not compare themselves with such L2 community members with the same

standard, which may not lead them to lose confidence. This difference may be the reason why the correlation between VE and the gain in in-class self-efficacy is negative, while that in out-of-class self-efficacy is not.

The correlation between VP and the gain in in-class self-efficacy and that in out-of-class self-efficacy was .16 and .33, respectively (Table 4.3). These relatively low correlations may come from the weak influence of VP on self-efficacy, reported in other studies aforementioned. The higher correlation between VP and the gain in out-of-class self-efficacy relative to that in in-class self-efficacy might indicate that encouragement and feedback from native people and the host family could have a more positive effect on the students than from the Japanese peers or teachers in the in-class settings.

4.6 Conclusion

Research Questions 1 through 3 exposed several findings with future implications. Concerning Research Question 1, the gain in out-of-class self-efficacy after the program was larger than that in in-class self-efficacy. This may be because out-of-class self-efficacy was drawn from the participants' authentic experiences abroad, which boosted their self-efficacy in real communications. Regarding Research Question 2, the correlation between in-class and out-of-class self-efficacies was stronger on the post-survey than on the pre-survey. This might confirm that by accumulating practical experiences in the L2 community, the students' confidence in the in-class environment contributed to that in the out-of-class environment. As for Research Question 3, the correlations between the gains in in-class/out-of-class self-efficacies and the four sources of self-efficacy information clarified that ME and ES correlated highly with both in-class and out-of-class self-efficacy gains, while VE and VP correlated weakly with them. This result may prove that ME and ES have stronger influence on forming the students' self-

efficacy than VE and VP. Moreover, the correlation between VE and the gain in in-class self-efficacy turned out to be negative. In in-class settings, ideal Japanese peers may not have worked as role models, but might have caused a sense of inferiority among some of the students.

The higher gain in out-of-class self-efficacies (Research Question 1) and the stronger correlation between in-class and out-of-class self-efficacies on the post-survey (Research Question 2) demonstrate that the authentic experiences of interacting with local people in the U.S. community worked effectively to establish the participants' self-efficacy to use English outside the classroom, building links between their classroom experiences and their confidence in the real use of English outside of class. Experiences in a different cultural background are often stimulating and vividly remembered in learners' memories throughout their lives, whether they are successful or not. This is because their survival experiences in the target language community provide learners with ample opportunities to practice speaking English, increase their sense of fulfillment, and help them gain confidence and self-efficacy, all of which may lead to further motivation to continue studying. DeKeyser (1991) asserts that words and phrases heard in the target language community are linked to the memory of each event, which can be stored as a long-term memory.

Considering the result of Research Question 3, in which both ME and ES correlated more strongly with the gain in out-of-class self-efficacy than the gain in in-class self-efficacy, it can safely be said that students need to accumulate successful experiences not only from in-class settings but also through out-of-class settings if they seek to develop their self-efficacy in English-speaking further. In order for this to happen, even a short-term study-abroad program can be very effective. Hansel and Grove (1986) affirm that

students who participated in a short summer program adapted to the target language community better than those in a year-long program, returning home feeling elated by a sense of accomplishment. Meanwhile, instructors should shed more light on the effects of out-of-class self-efficacy, instead of focusing on enhancing learners' in-class self-efficacy. Instructors can utilize various activities outside the classroom, such as English camps, study abroad programs, potluck parties, and so on, creating environments in which learners can interact informally with native speakers of English.

To summarize all the findings in this present study, three outstanding features can be presented as follows:

1. A greater increase was revealed in the gain in out-of-class self-efficacy than that in in-class self-efficacy.

2. In-class and out-of-class self-efficacies became more integrated with each other through the program participation.

3. ME and ES exercised more influence on self-efficacy gains than VE and VP.

It might be possible that the background cause of the findings above lie in the new, stimulating and practical experiences outside the classroom, not in the ordinary experiences in the classroom, which are regarded as almost the same both in Japan and in the United States. For this reason, study abroad programs should be recommended more strongly.

Notes

1. This study was applied to another 14 students, who participated in the same study abroad program in 2017. In total, the data of 31 students including 17 students in 2016 and 14 students in 2017 were gathered and re-analyzed, which seemed to reveal almost

the same result. The details are shown in Appendix C. Reliability coefficients (Cronbach's α) for in-class and out-of-class self-efficacy subscales on the pre-survey were .94 and .89, respectively, while those for in-class and out-of-class self-efficacy subscales on the post-survey were .95 and .88, respectively. The reliability coefficients (Cronbach's α) for ME, VE, VP, and ES were .92, .91, .84, and .90, respectively.

2. The Shapiro-Wilk test of normality showed $p = .04$ for the pre-survey in-class self-efficacy, $p = .39$ for the pre-survey out-of-class self-efficacy, $p = .35$ for the post-survey in-class self-efficacy, and $p = .58$ for the post-survey out-of-class self-efficacy, indicating all but the pre-survey in-class self-efficacy are normally distributed. The pre-survey in-class self-efficacy, however, had a skewness of .68, which is within the acceptable range of normal distribution (between -1.0 and 1.0).

CHAPTER 5

THE IMPACT OF STUDY ABROAD PROGRAM ON COLLEGE STUDENTS' SELF-EFFICACY IN ENGLSH-SPEAKING (PART II)

5.1 Introduction

Chapter 4 examined how the speaking self-efficacy of 17 participants who stayed in the United States for three weeks changed as a result of the program. The results revealed that the participants had greater gains in out-of-class self-efficacy than in in-class self-efficacy and that in-class and out-of-class self-efficacies correlated more strongly in the post-survey than in the pre-survey. Moreover, the gain in out-of-class self-efficacy showed significant correlations with ME and ES while in-class self-efficacy did not. These results are not surprising due to the stronger impact of out-of-class settings where the participants were exposed to authentic English in more exciting, stimulating, and natural surroundings. Considering the results found in Chapter 4, a more thorough examination was necessary to shed light on the inner aspects of the students' experiences based on self-efficacy beliefs. Both qualitative and quantitative methods were used. The qualitative method used interviews and open-ended questions. Specifically, this study focuses on differences in in-class versus out-of-class self-efficacies among three student groups divided by a cluster analysis in terms of self-efficacy and the four sources of self-efficacy information.

5.2 Objectives and Research Questions

This research aims to examine deeply the relationship between the participants' experiences abroad and their self-efficacy, using both quantitative and qualitative analyses of the survey results, interviews and open-ended responses. To this end, a cluster

analysis was employed to group the participants with similar self-efficacy traits. The following research questions were investigated:

RQ. 1 How do the student groups divided by a cluster analysis differ regarding the four sources of self-efficacy information?

RQ. 2 How do the student groups divided by a cluster analysis differ regarding in-class and out-of-class self-efficacies?

5.3 Methods

5.3.1 Participants

The participants were the same as those in the previous study: 17 sophomore and junior undergraduates who took part in a three-week language training program in Minnesota in 2016. They were all English majors at a private university in the western part of Japan. All applicants willing to join the program were accepted. They took preparation lessons once a week at their university in Japan to learn about the US culture, lifestyle, and homestay before the program started. While staying with their host families, they attended morning classes at a university with other foreign students and in the afternoon went sightseeing or shopping.

5.3.2 Instrument

The data came from the questionnaire used in the quantitative research in Chapter 4 (Appendix B). The pre-survey questionnaire, which was conducted 2 weeks before the sojourn, was composed of 12 items, which included 6 items measuring in-class self-efficacy (e.g., "In class activities, I can answer correctly what I am asked in English.") and another 6 items regarding out-of-class self-efficacy (e.g., "I can communicate with a foreigner in English when spoken to."). The post-survey questionnaire, conducted just after the sojourn, consisted of the same 12 items in the pre-survey, plus another 25 items

concerning the four sources of self-efficacy information: 7 items for ME (e.g., "I could talk about TV programs in English with my host family."), 6 items each for VE (e.g., "I respect my friends who express their opinions in English."), VP (e.g., "I am often praised about my speaking ability."), and ES (e.g., "The mere thought of speaking English makes me feel excited."). Reliability coefficients (Cronbach's α) for ME, VE, VP, and ES were .91, .85, .85, and 89, respectively. An 11-point Likert scale ranging from zero (*cannot do at all / entirely inapplicable*) to ten (*certainly can do / completely applicable*) was utilized.

At the end of the post-survey questionnaire, two open-ended questions were included, asking students to reflect their own experiences in the United States. The additional questions were as follows:

1. Please write about the situations which raised your confidence in English proficiency through the language training program.
2. Please write about the situations which diminished your confidence in English proficiency through the language training program.

The participants' statements were written in Japanese and later translated into English by the author (Appendix D).

5.3.3 Interviews

Interview data were obtained from the participants with their permission. A semi-structured interview was adopted to provide the participants with the same four questions in the same order as shown below, to make it easier for the researcher to compare and examine the responses. The open-ended questions comprised four topics:

1. During your stay in the United States, in what kind of situations did you succeed in interacting with native speakers? (= ME)

2. During your stay in the United States, did you have any role models for speaking English? (= VE)

3. During your stay in the United States, did you receive any encouraging words or feedback from others about your English? (= VP)

4. During your stay in the United States, how did speaking English affect you physiologically or emotionally? (= ES)

5.3.4 Procedures

Before conducting the qualitative research, the participants were divided by a cluster analysis into several groups with similar self-efficacies and related experiences based on the four sources of self-efficacy information. The resultant clusters reflect typical combinations of highs and lows on these variables among the participants. Comparisons across clusters make it possible to see how the typical student groups report their experiences differently, thus, making the interpretation of the interview results easier than comparisons between individual students.

A face-to-face interview, about 25-minutes long, was held in Japanese two months after the sojourn. The aim of the interview was to explore the participants' experiences abroad in a more direct way than through quantitative analyses. The aim and procedure were examined carefully by the university ethics committee, and permission was granted to the author. Thirteen out of seventeen students agreed to the interview, responding to the author by e-mail. Seven students were juniors and the rest were sophomores. All the interview responses were recorded on a voice recorder with the students' permission. Recordings were transcribed, and the transcripts were later confirmed by the author two

or three times to increase accuracy.

5.3.5 Data analysis

SPSS version 23.0 was utilized in analyzing the quantitative data to divide the participants into several groups with similar traits. A cluster analysis and a correlational analysis were conducted. For analyzing the qualitative data (in response to Research Question 1 and 2), face-to-face interviews and open-ended questions were employed so as to obtain deeper insights into the participants' self-efficacy gains and to examine how these gains were produced.

5.4 Results of Quantitative Analysis

In a cluster analysis, Ward's method (with square Euclidean distance) was utilized, and the analysis was based on in-class/out-of-class self-efficacies on the pre-/post-surveys, and the four sources of self-efficacy information on the post-survey.
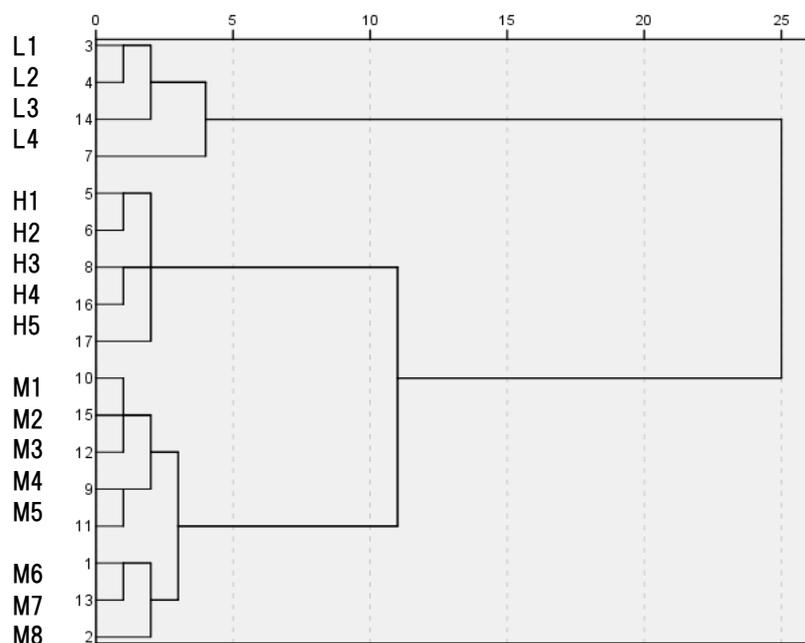
Figure 5.1. Dendrogram using Ward's method. L, M, and H represent a student in each cluster group based on self-efficacy; L = Low SE student, M = Middle SE student, and H = High SE student.

Figure 5.1. shows the dendrogram using Ward's method, which suggests that the whole participants can be divided into three clusters.

Table 5.1

Subscale Means for Each Self-Efficacy Group

Cluster	*n*	pre-ICSE	pre-OCSE	post-ICSE	post-OCSE	ME	VE	VP	ES
Cluster 1	4	3.33	3.08	3.33	3.5	3.93	8.13	2.7	4.41
Cluster 2	5	7.13	5.67	7.57	7.9	8.46	9.33	7.2	8.53
Cluster 3	8	4.21	4.46	5.77	6.15	7.41	7.85	5.65	6.54

Note. N = 17. Cluster 1 = Low SE group, Cluster 2 = High SE group, and Cluster 3 = Middle SE group. Pre-ICSE = Pre-survey in-class self-efficacy, Pre-OCSE = Pre-survey Out-of-class self-efficacy, post-ICSE = Post-survey in-class self-efficacy, post-OCSE = Post-survey out-of-class self-efficacy.
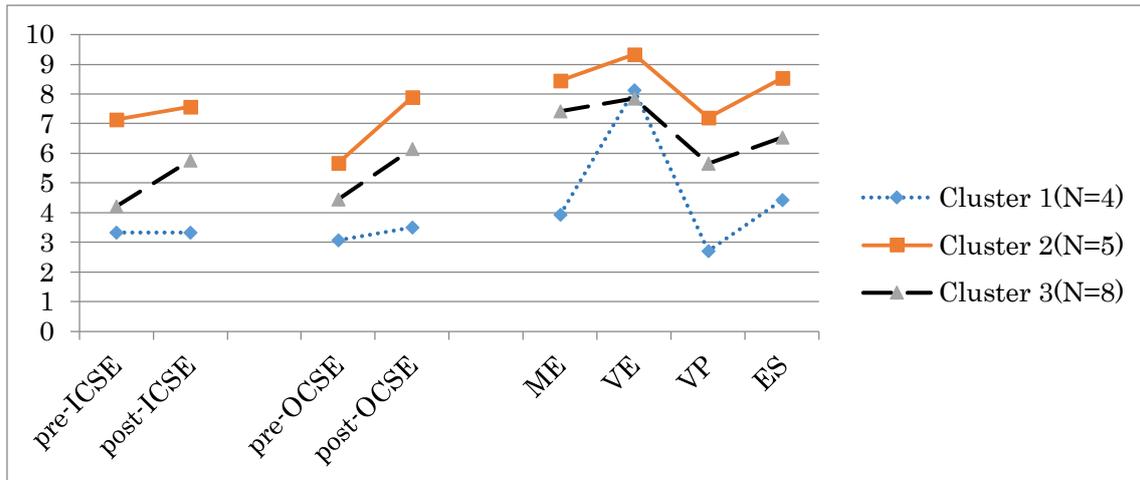
Figure 5.2. Means of in-class/out-of-class self-efficacies on the pre- and post-surveys and the four sources of self-efficacy information in each self-efficacy group. Cluster 1 = Low SE group, Cluster 2 = High SE group, and Cluster 3 = Middle SE group. Pre-ICSE = Pre-survey in-class self-efficacy, Post-ICSE = Post-survey in-class self-efficacy, Pre-OCSE = Pre-survey out-of-class self-efficacy, Post-OCSE = Post-survey out-of-class self-efficacy. ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states.

Table 5.1 shows subscale means for each self-efficacy group, with a graphical display in Figure 5.2. The three groups are named the High SE group (cluster 2), Middle SE group (cluster 3), and Low SE group (cluster 1), based on the means of self-efficacies on the pre-/post-surveys and the four sources of self-efficacy information.

Table 5.2 shows in-class/out-of-class self-efficacy scores and their gains for individual participants. Table 5.1, Figure 5.2., and Table 5.2 show that the High SE group possessed initially higher self-efficacy, especially concerning in-class self-efficacy (7.13), than the lower self-efficacy groups (4.21 and 3.3). However, the gain in in-class self-efficacy in the High SE group (0.44) was much smaller than that in the Middle SE group (1.56). With regard to the four sources of self-efficacy information, the Low SE group revealed almost the same mean of VE (8.13) as the other two groups (Table 5.1) though the other 3 sources (ME, VP, and ES) were apparently lower than those in the other two

SE groups. This suggests that the Low SE group possesses almost the same level of admiration as the other SE groups for desirable speaking models.

Taking Table 5.2 into consideration, it is notable that the High SE group showed only a slight gain in in-class self-efficacy (0.44), but showed a larger gain in out-of-class self-efficacy on the post-survey (2.23). The Middle SE group shows gains in both in-class (1.56) and out-of-class self-efficacies (1.69). The Low SE group revealed almost no gain in both in-class (0.00) and out-of-class self-efficacy (0.42).

Table 5.2

Self-Efficacy Scores and Their Gains for Individual Participants

Cluster Student	ICSE		OCSE		Ave-SEs		G-ICSE	G-OCSE	Ave-Gs
	Pre-sur.	Post-sur.	Pre-sur.	Post-sur.	Pre-sur.	Post-sur.	ICSE gain	OCSE gain	Ave. of G-ICSE + G-OCSE
H1	6.33	8.17	4.33	7.83	5.33	8.00	1.84	3.50	2.67
H2	7.33	7.50	4.67	8.50	6.00	8.00	0.17	3.83	2.00
H3	7.00	8.00	6.17	8.83	6.58	8.42	1.00	2.66	1.84
H4	7.00	6.50	6.83	7.67	6.92	7.08	-0.50	0.84	0.16
H5	8.00	7.67	6.33	6.67	7.17	7.17	-0.33	0.34	0.00
H.Ave.	**7.13**	**7.57**	**5.67**	**7.90**	**6.40**	**7.73**	**0.44**	**2.23**	**1.33**
M1	3.00	5.17	3.17	5.67	3.08	5.42	2.17	2.50	2.34
M2	4.17	4.33	3.83	4.50	4.00	4.42	0.16	0.67	0.42
M3	4.00	6.00	4.00	6.33	4.00	6.17	2.00	2.33	2.17
M4	3.83	6.33	4.33	7.50	4.08	6.92	2.50	3.17	2.84
M5	4.50	6.00	4.33	7.17	4.42	6.58	1.50	2.84	2.16
M6	4.00	6.50	5.17	6.17	4.58	6.33	2.50	1.00	1.75
M7	4.67	6.00	4.67	7.00	4.67	6.50	1.33	2.33	1.83
M8	5.50	5.83	6.17	4.83	5.83	5.33	0.33	-1.34	-0.50
M.Ave	**4.21**	**5.77**	**4.46**	**6.15**	**4.33**	**5.96**	**1.56**	**1.69**	**1.63**
L1	3.00	1.50	2.67	1.67	2.83	1.58	-1.50	-1.00	-1.25
L2	3.33	4.00	2.50	3.33	2.92	3.67	0.67	0.83	0.75
L3	3.83	4.17	3.00	4.50	3.42	4.33	0.34	1.5	0.91
L4	3.17	3.67	4.17	4.50	3.67	4.08	0.50	0.33	0.41
L.Ave.	**3.33**	**3.33**	**3.08**	**3.50**	**3.21**	**3.42**	**0.00**	**0.42**	**0.21**

Note. *N* = 17. ICSE = In-class self-efficacy, OCSE = Out-of-class self-efficacy, Ave-SEs = Average of in-class plus out-of-class self-efficacies on each pre- and post-survey, G-ICSE = Gain in in-class self-efficacy, G-OCSE = Gain in out-of-class self-efficacy, Ave-Gs = Average of gains in in-class plus out-of-class self-efficacies. H = High SE student, M = Middle SE student, L = Low SE student.

Table 5.3

Correlations Between In-Class/Out-of-Class Self-Efficacies on the Pre-Survey and the Four Sources of Self-Efficacy Information as Well as the Gains in In-Class/Out-of-Class Self-Efficacies

	Pre-ICSE	Pre-OCSE
ME	.61**	.58*
VE	.33	.22
VP	.75***	.74**
ES	.70**	.60*
G-ICSE	-.25	-.07
G-OCSE	.20	-.06

Note. $N = 17$. Pre-ICSE = Pre-survey in-class self-efficacy, Pre-OCSE = Pre-survey out-of-class self-efficacy, G-ICSE = Gain in in-class self-efficacy, G-OCSE = Gain in out-of-class self-efficacy.

*$p < .05$, ** $p < .01$, *** $p < .001$.

Table 5.3 shows the correlations between in-class/out-of-class self-efficacies on the pre-survey and the four sources of self-efficacy information as well as the gains in in-class/out-of-class self-efficacies. The correlations between self-efficacies on the pre-survey and the other subscales reveal several intriguing features. Firstly, ME, VP, and ES had moderate to high correlations with pre-survey in-class/out-of-class self-efficacies, which means that the students with higher initial self-efficacy had more beneficial experiences to heighten their self-efficacy than those with lower initial self-efficacy. In contrast, VE correlated weakly with pre-survey in-class/out-of-class self-efficacies. This might reflect the result shown in Table 5.1 that the Low SE group strongly admired their role models and accordingly marked a relatively high score on VE.

Table 5.3 also shows that the correlations between pre-survey in-class/out-of-class self-efficacies and their gains turned out to be negative and low ($r = -.25$, $r = -.06$, respectively). These results indicate that students with higher initial self-efficacy tended to make smaller gains than those with lower initial self-efficacy.

Considering these results above, it becomes clear that these SE groups showed zero to outstanding gains in both in-class and out-of-class self-efficacies, from 0.00 to 2.23 (Table 5.2). Among the three groups, the Low SE group revealed the smallest gain in both in-class and out-of-class self-efficacies. However, the negative, though weak, correlations between pre-survey in-class/out-of-class self-efficacies and the gains (Table 5.3) mean that students with initially low self-efficacy made slightly larger gains than high self-efficacy students on an individual basis. This negative correlation seems worth exploring more thoroughly from a qualitative perspective. This will be discussed in 5.6 Results of Qualitative Analysis (Research Question 2).

The following is the summary of the quantitative analyses:

1. The Low SE group possessed relatively high means of VE, which might have led to the overall low correlations between VE and pre-survey in-class/out-of-class self-efficacies.

2. ME, VP, and ES showed moderate to high correlations with both pre-survey in-class and out-of-class self-efficacies.

3. The correlations between pre-survey in-class/out-of-class self-efficacies and their gains turned out to be slightly negative.

4. The Low SE group made smaller gains in self-efficacy than the higher SE groups.

5. SE gain in the High SE group is not necessarily larger than that in the other two groups.

The background causes of the above results will be explored in the next sections. In the next section, analyses based on a qualitative data will be discussed.

5.5 Results of Qualitative Analysis (Research Question 1)

Research Question 1 asked how the student groups divided by a cluster analysis

differed in terms of the four sources of self-efficacy information.

Regarding ME and ES (Chapter 4), their correlation with the gain in self-efficacy was relatively strong. In Table 4.3 in Chapter 4, ME and ES demonstrated slightly stronger correlation with the gain in in-class self-efficacy ($r = .40$, $r = .28$) than the other two sources though they were nonsignificant. However, they correlated significantly with the gain in out-of-class self-efficacy ($r = .63$, $r = .62$). In Table 5.3, ME and ES showed moderate to high correlations with pre-survey in-class ($r = .61$, $r = .70$) and pre-survey out-of-class self-efficacies ($r = .58$, $r = .60$). This reveals that those who have high initial self-efficacy tend show higher ME and ES as well as larger self-efficacy gain than those who have low initial self-efficacy. With these results in mind, the interview started with ME and ES. The interview was conducted in Japanese, and the interview excerpts below are translated into English by the author.

5.5.1 Mastery Experiences (Interview Results and Responses to Open-Ended Questions)

ME is derived from successful performances which in turn can predict one's future trajectory, and is regarded as the most influential source (e.g., Bandura, 1997, p. 80). Table 5.1 shows higher ME for the High and the Middle SE groups than for the Low SE group, where the High SE group shows slightly higher ME than the Middle SE group. Investigations into the interview responses found the following:

Though the High SE group first felt diffident, they seemed to have interacted willingly not only with their host family but also with local people. This allowed them to accumulate substantial successful experiences (see also Appendix D). The following are two High SE students' accounts:

First, I was talking with my host family because I had to, but later I tried to

convey what I wanted to, even though I could not make myself understood.

Gradually, I came to talk with them about a more difficult topic such as

politics in Japan and the United States. I realized that I could make it if I

had high motivation. (H5)

When I saw that people understood what I said, I realized that I could make

myself understood in English. As time went by, I learned to speak English

more and more, while using responses and nodding frequently. (H3)

Meanwhile, the Middle SE group seemed to have succeeded in shopping or talking

with their host family or Chinese friends, which raised their confidence, as shown in their

responses to open-ended questions (Appendix D). They easily talked to people in English

without worrying about grammatical errors. One student talked about his experience:

Within a week, I was able to convey what I wanted to, word by word, and I

felt a sense of attainment, while enjoying conversation. (M4)

The Low SE group also succeeded in communicating with their host family or local

people (see also Appendix). However, they seemed to lack confidence in their English

skills, and sometimes had difficulty interacting with local people. The following is one

student's account:

I could not make myself understood when I asked a native speaker the way to the coffee shop because of my poor pronunciation. She was kind enough to correct my pronunciation. Around the end of the program, I was able to ask the way by myself. (L1)

This particular student L1, in fact, did not always feel successful, but had considerable difficulty, as demonstrated by her comments shown in 5.5.2 Emotional States (Interview Results) and 5.5.3 Vicarious Experiences (Interview Results), and later in 5.6 Results of Qualitative Analysis (Research Question 2).

In summary, the High SE group had extensive and successful experiences to build up their self-efficacy while the Middle SE group gradually became accustomed to speaking English. With regard to the Low SE group, even though they had several successful experiences, these experiences did not seem to be strong enough to boost their self-efficacy.

5.5.2 Emotional States (Interview Results)

ES is defined as emotional arousal through physiological reactions that a person experiences while performing an academic task (e.g., Britner & Pajares, 2006).

As for the High SE group, their initial anxiety from speaking English decreased as time went by, and eventually this same activity came to be seen as fun. This is how one student explained it:

When I came to the United States, I was nervous, but by talking and communicating with local people, my worries disappeared and I felt it was fun to communicate with native speakers. (H4)

Another student in the High SE group stayed positive even in a difficult situation. During the second week, she was struggling with the natural speed at which local people spoke. Her host mother noticed her disappointment and encouraged her, saying that she was doing pretty well using L2, which became a big relief to her. The student said:

I wanted to return to Japan, not because I felt homesick but because I wanted to brush up my English skills. I realized my current level of English, so I wanted to go back to Japan, study English harder, gain more confidence, and come back again. Of course, I felt depressed at that time, but I had no choice but to stand up, so I changed my mind in a positive way. (H5)

These two accounts reveal that the High SE group seems to possess strong confidence in their capacity, viewing adverse conditions favorably and assigning positive emotions.

Regarding the Middle SE group, their initial anxiety when speaking English decreased as time passed, and after three weeks they were able to communicate with local people in a more natural way. The following is one student's account:

First, I was nervous, but I got used to my life sooner than I had expected. I was able to interact more naturally by the end of the program, rather than feeling forced to speak English. (M8)

As for the Low SE group, they felt bewildered by speaking English, compared with the other groups. One of the three Low SE participants whom the author interviewed

maintained the same feeling throughout the entire program. Her anxiety about speaking English did not diminish over time. The following is her narrative:

I was scared at first, wondering if I could make myself understood. But actually I had no choice but to speak English, so around the end of this program, I tried hard to speak English with a dictionary in my hand, but it was difficult... (L1)

Another student in the Low SE group talked about her physiological states clearly, provoked by her speaking anxiety:

Well, when I went to the United States, for a while, I was nervous because I had to use English in all situations. I was at a loss what to do, and I sweated a little with fear. Anyway, the first week was really tough for me. (L2)

Her condition might be related to Schunk's idea (1995, p. 282) that physical symptoms triggered by anxiety imply students lack skills.

In brief, it can be inferred that those in the High SE group overcame difficult situations by finding something positive in them. Thus raising their motivation through interacting with local people, which further contributed to their self-efficacy gains. The Middle SE group also seems to have enjoyed interacting with local people over time. Concerning the Low SE group, it is evident that their speaking anxiety prevented them from gaining confidence.

The accounts above support the results of the quantitative analyses that ME and ES influence self-efficacy.

5.5.3 Vicarious Experiences (Interview Results)

VE is defined as observers' self-comparison with how well their selected models perform (e.g., Usher & Pajares, 2008). Generally, VE tends to reveal an unstable and weak influence on the students' self-efficacy beliefs (e.g., Bandura, 1977).

In this present study, VE correlated weakly with pre-survey in-class ($r = .33$) and out-of-class self-efficacy ($r = .22$), indicating that initially high self-efficacy does not guarantee high VE in the subsequent study-abroad program. Table 5.1 shows that this is mainly because the Low SE group marked fairly high on VE. An interview analysis suggested what high VE implies, as discussed below. It should also be remembered that in Table 4.3 in Chapter 4, VE had negative low correlation with the gain in in-class self-efficacy ($r = -.32$) and showed almost no correlation with the gain in out-of-class self-efficacy ($r = .001$), indicating that high VE does not necessarily produce large gains in self-efficacy. These two results, that together appear to deny the causal link of initial self-efficacy $\rightarrow$ VE $\rightarrow$ gain in self-efficacy, need to be explained. An answer was sought in the interview records.

The High SE group seems to have acquired confidence by looking at numerous people they interacted with, such as their host family and teachers at the host university, selecting them as their models. These two students' narratives demonstrate this:

Looking at my host family who spoke to me using easy English words, I realized that I could communicate in simple English. (H4)

I cannot hit upon a certain person as my speaking model, but maybe, my host family or teachers at the University in the U.S., who I thought were good at

nodding or listening to others. (H2)

On the other hand, one Middle SE student regarded his Japanese friends as his role models. This is what he stated:

In the host university, looking at my Japanese friends talking and interacting

with the teachers, I realized that I could mimic some phrases they used in their

conversation. (M7)

As for the Low SE group, anyone other than themselves could be their models due to their lower confidence in English proficiency. The following is one student's account for this:

Well, I don't have a good command of English, compared with my classmates.

I didn't understand the lectures at all. Everyone except me asked questions

willingly in class, but I could not… (L1)

This statement suggests that the Low SE group thought of their Japanese classmates as good role models to mimic, but that admiration for these models worked ineffectively and sometimes negatively for them because they felt intimidated and overwhelmed. Table 5.2 reveals that student L1 is the only student who lowered both in-class and out-of-class self-efficacies among all the students. This result implies that she did not have meaningful experiences to build up her confidence abroad, which was indicated by her repeated remark in the interview, "I am not good at English at all." It is notable here that she

marked the highest score, 10.0, on VE, indicating that vicarious experiences, though large in quantity, were dominantly negative experiences of intimidation by better speakers, particularly her peers, in the English-only environment. Regarding the other three students in the Low SE group, they also marked relatively high scores on VE (6.3, 7.0, and 9.2). Therefore, the average score of VE in this Low SE group is not so different from that of the other SE groups. Table 5.2 also shows that the Low SE group showed the lowest average of in-class self-efficacy (3.21) and out-of-class self-efficacy (3.42) as well as the smallest gain in in-class self-efficacy (0.00) and out-of-class self-efficacy (0.42). In short, while the Low SE group revealed almost the same score on VE as the other two groups, they showed the lowest self-efficacy and the lowest self-efficacy gains. This, together with the case of L1 mentioned above, suggests that although VE may work effectively for many language learners, they can have adverse effects on learners with initially low self-efficacy by making them think their English is poor and consequently intimidates them.

Taking both the means of VE in the three SE groups (Table 5.1 and Figure 5.2.) and the interviews into consideration, it can be implied that the High and Middle SE groups had beneficial hands-on experiences based on VE, but the Low SE group did not, despite their high mean value of VE. In other words, the Low SE group's high mean of VE demonstrated their strong admiration for speaking models. This difference can be seen in the interviews. The High SE group students seemed to make better use of what they learned from their host family and local people. In contrast, the Middle SE group student seemed to regard his Japanese peers as models because he felt that Japanese peers were more similar to him and might have learned more from them than from local people.

Similarly, the Low SE group student used her Japanese friends as speaking models too, but seems to have felt overwhelmed by their superiority and lost confidence.

In summary, VE's negative or low correlations with the gains in in-class/out-of-class self-efficacies in Chapter 4 and VE's low correlations with pre-survey in-class/out-of-class self-efficacies in this current study might have been derived from two inner aspects of the students. First, the Low SE group scored surprisingly high on VE due to mere admiration for role models, but this initial admiration might have turned out to work negatively as it led to feelings of intimidation and inferiority. Second, judging from the interviews, it seems that most of the students did not identify particular role models to learn from. Their perception about role models is vague, and there was always silence for 3 to 5 seconds before they could identify their role models. This may prove that VE possesses weaker effects on the participants than the other sources. This corresponds to other findings that VE possesses weaker effects on self-efficacy (e.g., Britner & Pajares, 2006). Therefore, these two inner aspects may have combined to produce the negative and low correlations with the gains in in-class/out-of-class self-efficacies and with pre-survey in-class/out-of-class self-efficacies in both studies.

5.5.4 Verbal Persuasion (Interview Results and Responses to Open-Ended Questions)

VP denotes positive feedback from significant others such as parents and teachers about an academic performance (Usher & Pajares, 2008). Similar to VE, VP alone does not become an influential source of self-efficacy (e.g., Britner & Pajares, 2006) because of its weak influence and being easily negated by unsuccessful results (Schunk, 1995, p. 282).

Concerning VP, there was an interesting result in Chapter 4 and in this study. In Table 4.3 in Chapter 4, VP did not correlate significantly with the gains in in-class and out-of-class self-efficacies ($r = .16$, $r = .33$), demonstrating weaker correlations than with ME and ES. On the other hand, in Table 5.3 in the current study, VP correlated significantly and highly with pre-survey in-class and out-of-class self-efficacies ($r = .75$, $r = .74$, $p < .001$, respectively). These significantly high correlations reveal that students with initially high self-efficacy had more substantial VP experiences to boost their self-efficacy relative to other studies. This was demonstrated in their interviews and responses to open-ended questions.

The High SE group reported receiving a greater deal of praise and positive feedback from their host family or university teachers in the United States (see also Appendix D), as shown in the higher mean of VP than those of the other two groups in Table 5.1. This is what one student said:

What delighted me most was my teacher's remark, "Your English is beautiful." What's more, I received a letter from my host family, saying that I can communicate well using simple English. I am now more and more eager to study English. (H3)

Regarding the Middle SE group, two students stated that they were praised by their host mothers, saying "Your English is getting better." but the others did not mention anything special. This result shows that the members in the Middle SE group might have received fewer encouraging words and less positive feedback than those in the High SE group.

With regard to the Low SE group, there was no mention of any particular positive feedback from local people, demonstrating their struggle with speaking English.

The students' written statements (Appendix D) also revealed that the amount of positive feedback provided varied significantly among the three self-efficacy groups. The High SE group received more encouraging words about their English from various people, including their host family, their teachers at the university, and local people. It was interesting that three out of five students in the High SE group referred to praise as a crucial event which gave them confidence. Two out of eight students in the Middle SE group were also given praise, but it was limited to their host family. Meanwhile, none of the Low SE group reported any encouraging feedback.

The interviews and responses to open-ended questions reveal that the higher the students' initial self-efficacy, the more positive feedback they were provided, helping them establish greater confidence. In particular, the praise given by local people seems to be particularly motivating. The results above accord with other results from this study that VP correlated strongly with pre-survey in-class/out-of-class self-efficacies.

On the other hand, VP had a low correlation with the gain in in-class and out-of-class self-efficacies in Chapter 4 (Table 4.3). This result needs to be interpreted along with the data from the interviews and open-ended questions. The interviews and open-ended questions reveal that students with initially high self-efficacy seemed to have obtained substantial experiences based on VP, but these ample experiences may not have led to self-efficacy gains. This is probably because of the weak impact of VP on self-efficacy as discussed in Chapter 2 referring to past studies (e.g., Schunk, 1984).

5.5.5 Summary of Research Question 1

Research Question 1 asked how the student groups divided by a cluster analysis

differ in terms of the four sources of information. Concerning the High and Middle SE groups, it was demonstrated that the higher the students' initial self-efficacies, the more beneficial experiences they obtained to increase their self-efficacy. This correlation was made stronger by the High SE group's higher means of the four sources of self-efficacy information compared to those of the Middle SE group (Table 5.1 and Figure 5.2.). With regard to the high means of VE with these two groups, it can be assumed that the students in these two groups are eager to imitate their role models to improve their speaking skills. Judging from the qualitative results, both the High and Middle SE groups seemed to have numerous experiences based on the four sources of self-efficacy information, which contributed to their self-efficacy gain. However, the High SE group showed more extensive and meaningful self-efficacy boosting than the Middle SE group, which may have resulted from their high initial self-efficacy.

The Low SE group demonstrated much lower means of ME, VP and ES than the High and Middle SE groups. In contrast, they showed high means of VE (Table 5.1, Figure 5.2.), which was found to work negatively in the interview data. The qualitative results also demonstrated that limited English proficiency kept them from accumulating self-efficacy gains, derived from the four sources of self-efficacy information, which might have made them feel diffident throughout the study abroad program.

In other words, students who originally possessed high self-efficacy accumulated more successful and meaningful experiences from interacting with native speakers (= ME), acquired more positive influence from speaking models (= VE), obtained more opportunities to be praised by others (= VP), and accordingly gained more confidence and a greater sense of fulfilment (= ES) than the lower self-efficacy students. This process is a virtuous cycle of self-efficacy. Meanwhile, students who initially possessed low self-

efficacy failed to accumulate successful interpersonal experiences (= ME), tended to have a negative influence from speaking models, (= VE), even though the amount of VE they had was almost equal to the other two groups. They also received less encouragement from local people than higher self-efficacy students (= VP), which resulted in reducing their confidence and motivation (= ES). This cycle may be referred to as the vicious cycle of self-efficacy.

5.6 Results of Qualitative Analysis (Research Question 2)

Research Question 2 raised the question of how the groups divided by a cluster analysis differed in terms of in-class and out-of-class self-efficacies.

In Chapter 4, the result of a paired-samples *t*-test revealed that the gain in out-of-class self-efficacy was larger than that in in-class self-efficacy (Figure 4.1. and Table 4.2 in Chapter 4). Furthermore, in Chapter 4, the correlation between in-class and out-of-class self-efficacy on the pre-survey was .78, while that on the post-survey was .92, which reveals that a much higher correlation existed in the post-survey. As already discussed in 4.6 Summary in Chapter 4, the reasons for this might be that the participants stayed where their target language was spoken, and realized that they could confidently interact with local people. In addition, the students could connect their classroom learning to what they did outside of class. Accumulating such successful experiences in the United States resulted in more gains in out-of-class self-efficacy and the higher correlation between in-class and out-of-class self-efficacies on the post-survey in Chapter 4.

In the current study, correlations between self-efficacies on the pre-survey and their gains turned out to be negative though the relationships are weak (Table 5.3). This indicates that students with initially high self-efficacy did not necessarily make more gains in self-efficacy than those with low initial self-efficacies, despite their substantial

experiences. This result needs to be examined in combination with that of the interviews. In analyzing each SE group (Table 5.2, Figure 5.2.), it was seen that the High and Middle SE groups enhanced their self-efficacies more than the Low SE group. The interview excerpts below help confirm that the High and Middle SE groups maintained higher confidence and self-efficacy even two months after the program than the Low SE group. The following are three students' accounts:

When my host family told me that I could speak English well, using grammar and vocabularies that I learned in my home country, I thought that I actually could. They made me realize that I was doing pretty well using L2, which has given me a lot of confidence. (H5)

The other day I had a chance to talk with a native English teacher. He asked me some difficult questions, such as, how I felt if other subjects were taught in English. Experiences in the United States enabled me to answer his questions voluntarily, and have become a source of confidence for me. (M7)

Actually, there were many things I felt were difficult. I could not communicate well with my host family, nor could I understand them even though they talked to me a lot, so I felt sorry for them. I felt staying in Japan is more comfortable. (L1)

These accounts may reveal that the higher the students' self-efficacies, the more experiences they had to boost their self-efficacies. Therefore, considering both the quantitative and qualitative results above, it would be difficult to conclude only from the

negative correlation on Table 5.3 that the students with initially high self-efficacy actually made smaller gains.

In addition, there were several students who lowered their self-efficacies on the post-survey: H4 and H5, M8 and L1 (Table 5.2). Students H4 and H5 showed almost no additional gains through the program despite their positive interview remarks about experiences abroad. As aforementioned, there was only a slight gain in in-class self-efficacy (0.44) with the High SE group. Students H4 and H5 lowered their in-class self-efficacy on the post-survey, -0.50 and -0.33, respectively. This might be because their original self-efficacy on the pre-survey was high, 7.00 and 8.00, so it might have been difficult for them to assess still higher self-efficacies on the post-survey questionnaire. Freed (1990) claims that students in the higher self-efficacy group are situated closer to the upper limit of the scores, so they might have less headroom to present their further growth.

As for student M8, her out-of-class self-efficacy dropped on the post-survey (-1.34). It can be thought that she had fewer experiences to boost her self-efficacy than she expected. However, she talked about her useful experiences quite positively in the interview. What can be inferred from the open-ended questions is that she had difficulty with poor pronunciation (Appendix D), which she said prevented her from being understood. This may be the reason why she obtained lower out-of-class self-efficacy on the post-survey and underestimated her own self-efficacy. Concerning student L1, her peculiar situation was already analyzed in 5.5.3 Vicarious Experiences (Interview Results), and therefore additional explanation is omitted here.

As a result of the interviews and considering possible reasons why several exceptional students lowered their self-efficacy score on the post-survey, it seems that the

High SE group kept their self-efficacy high while the Low SE group continued to feel inferior ability.

5.7 Discussion

In the quantitative analysis, pre-survey in-class/out-of-class self-efficacies had negative and weak correlation with their gains, ($r = -.25$, $r = -.06$, respectively), as shown in Table 5.3. Moreover, the gain in in-class self-efficacy was particularly low with the High SE group. These results show that the High SE group does not always have a larger self-efficacy gain than lower SE groups, but this point needs to be examined more carefully.

The quantitative result also showed that the high mean of VE in the Low SE group (Table 5.1) did not contribute to self-efficacy gain. Rather, the qualitative result suggests that this high mean of VE shows high admiration for desirable speaking models, which makes the Low SE group feel intimidated or overwhelmed by such models. This finding can also be drawn from the result of low and nonsignificant correlation of VE with pre-survey in-class/out-of-class self-efficacies in Table 5.3 and interview results in 5.5.3 Vicarious Experiences (Interview Results). VE might work negatively toward the Low SE group in the study abroad setting, comparing themselves with their superior models, and making them feel demotivated.

Conflicting arguments between studies have been found concerning self-efficacy gain. Some claim that high self-efficacy or highly motivated groups had a larger gain (e.g., Isabeli, 2000) and some claim the opposite result (e.g., Cubillos & Ilvento, 2012). Isabelli (2000) found in her research on motivation and SLA in a study abroad context that learners who were highly motivated interacted with local people more extensively using L2 than those who were not, which correlated with their linguistic gains. On the other

hand, Cubillos and Ilvento (2012) demonstrated that students who possessed initially higher speaking self-efficacy showed lower gains, regardless of the length of the program. This current study suggests that students should first cultivate basic language proficiency and confidence before studying abroad to make for meaningful communication with the L2 community and high self-efficacy gain. Higher language proficiency is related to higher self-efficacy (e.g., Asakereh & Dehghannezhad, 2015). If students went abroad without sufficient language proficiency, they will likely not be able to enhance their self-efficacy sufficiently during the sojourn and in fact even worsen it.

The results of face-to-face interviews and responses to open-ended questions including the four sources of self-efficacy information showed that students with initially high self-efficacy had more meaningful experiences to boost their self-efficacy. It is likely that the higher quantity and quality of interactions that the High and Middle SE students had with local people were the main cause of their larger gains of self-efficacy as opposed to the Low SE students (Table 5.2).

The negative correlations with pre-survey in-class/out-of-class self-efficacies and gains might be attributed to the ceiling effect, which could also explain the results of Cubillos and Ilvento (2012) mentioned above. In Results of Quantitative Analysis, it was pointed out that the High SE group showed only a slight gain in in-class self-efficacy (0.44), but showed a larger gain in out-of-class self-efficacy on the post-survey (2.23). This might be because their pre-survey in-class self-efficacy score was already high (7.13) and their pre-survey out-of-class self-efficacy score was relatively low (5.67). It might be difficult for the High SE students to mark even higher scores on the post-survey in-class self-efficacy scale because they have already reached almost the highest score on the pre-survey, with less headroom to show more growth. This is consistent with Freed's (1990)

assertion that lower-level students are likely to demonstrate more linguistic gains than high-level students due to the limiting ceiling effect. Though Freed's study is about linguistic gains, and not about self-efficacy, this could happen with any measurement if the initial value is considerably high.

Considering aforementioned findings, it might be inferred that the small gain in self-efficacy in the High SE group was due to the ceiling effect. Therefore, it is possible that the High SE group may have experienced a larger gain in self-efficacy than demonstrated by the questionnaire.

Summarizing the quantitative and qualitative data, research questions, and other researchers' findings, five main findings result from this study.

1. Interviews and responses to open-ended questions reveal that the students with initially high self-efficacy had more experiences associated with the four sources of self-efficacy information, especially ME, VP and ES, than those with initially low self-efficacy.

2. Students with initially high self-efficacy may have experienced greater improvement of self-efficacy than those with low initial self-efficacy.

3. It is possible that students with initially low self-efficacy lessen their self-efficacy even more through study abroad programs.

4. VE can work negatively for low self-efficacy students.

5. It is desirable to acquire sufficient language proficiency before studying abroad.

5.8 Limitations

This study has a few limitations that should be resolved by future studies. First, the qualitative part of the analyses relied on a limited number of comments from only a few selected participants. This was done because this study is composed of quantitative and

qualitative analyses, where the qualitative part was examined referring to the quantitative results. Therefore, several interview excerpts were selected based on the results of the quantitative analysis. Still, the generalizations made here should be read with reservations, and should be verified by future studies. Second, the author was not in a position to join the study-abroad program with the participants. This prevented the author from obtaining more detailed data about the participants' own experiences in the U.S. Had the author joined the program, the study could have included memos or diary entries of day-to-day experiences of the participants. Perhaps this can be done in future studies.

5.9 Conclusion

Exploring research Question 1 and 2 demonstrated that students with initially high self-efficacy had more meaningful experiences boosting their self-efficacy more than those with initially low self-efficacy. The negative effect of VE on the Low SE group was especially noteworthy.

The results show that students planning to study abroad should first enhance their language proficiency to sufficiently interact with local people. Though numerical data concerning English proficiency was not measured in this study, improving one's language proficiency might be regarded important for heightening language self-efficacy. This might explain why other researchers insisted on the importance of acquiring initial language skills. Segalowitz et al. (2004) affirmed that threshold levels of linguistic skills might be required for students who study abroad to develop their speaking skills. Furthermore, Schunk (1995, p. 283) asserted that even highly self-efficacious students cannot perform well if they lack necessary knowledge and skills.

However, this does not deny the positive effects of study abroad even for low self-efficacy students with initially lower language proficiency. Study-abroad programs are

not only beneficial for advanced and intermediate level students but also for novice level students. Martinsen (2010) pointed out that significant oral proficiency gains were found by the majority of participants in a short-term study abroad program. Nevertheless, it may also be true that students will not be able to interact enthusiastically with people of the target language unless they possess certain levels of language skills. Therefore, raising L2 proficiency in their home country will contribute not only to sojourners' further gains in their self-efficacy but to their confidence and willingness to interact with the people and culture of the target language.

CHAPTER 6

GENDER DIFFERENCES IN ENGLISH-SPEAKING SELF-EFFICACY AMONG JAPANESE HIGH SCHOOL STUDENTS

6.1 Introduction

Chapter 5 examined the inner aspects of 17 participants who stayed in the United States for three weeks, using both a qualitative and a quantitative analyses. Interviews and open-ended questions were adopted, which helped investigate deeper aspects of the participants' self-efficacy beliefs.

The experiments from Chapter 3 to Chapter 5 were conducted among Japanese undergraduates. The results from these three studies led the author to continue studying speaking self-efficacy focusing on senior high school students, who were thought to have fewer English-speaking experiences and practices.

This study investigates the relationships among learners' speaking self-efficacy, gender, and Bandura's (1997, p. 79) hypothesized four sources of self-efficacy information: ME, VE, VP, and ES. Japanese first-year high school students ($N = 229$) responded to a 36-item questionnaire about speaking self-efficacy beliefs.

6.1.1 Gender Differences in Self-Efficacy

Generally male students seem to be better at math- and science-related subjects than female students, whereas female students are believed to be stronger in language- and arts-related subjects. This is confirmed by several researchers' claims that male students are more likely to show confidence in math and science (Betz & Hackett, 1983; Hackett & Betz, 1989; Pajares, 2002; Wigfield, Eccles, & Pintrich, 1996, p. 156), while female students are apt to reveal stronger self-efficacy in their ability in language and arts

(Pajares & Valiante, 1997, 2001, 2006; Wigfield et al., 1996, p. 156).

Regarding foreign language learning, it might be said that the role and influence that gender plays can be critical. This is because gender difference may pose a strong influence on motivation in FL learning (Schmidt, Boraie, & Kassagby, 1996). Several researchers have revealed that females possess a more favorable tendency for FL learning. Wright (1999) found in her experimental study on learner attitudes towards foreign language and culture that females demonstrated a more positive attitude in learning French than males. Schmidt et al. (1996) demonstrated in their study on FL motivation that female students seemed more intrinsically motivated while male students were more extrinsically motivated in learning foreign languages.

Usher and Pajares (2008) show a list of studies that have reported gender differences in learners' self-efficacy beliefs in FL learning. These differences are FL reading- and listening-related (e.g., Mills, Pajares, & Herron, 2006), and writing-related (Pajares & Valiante, 1997, 2006; Pajares, Johnson, & Usher, 2007; Pajares, Miller, & Johnson, 1999). However, there are almost no studies to be found which have examined the relationship between speaking self-efficacy and gender.

6.1.2 Collaborative Work and Gender Difference in High School English Classrooms

Over the past several decades, English lessons in junior and senior high schools in Japan have been shifting from teacher-centered grammar-translation methods to student-centered communicative language teaching (Nishino, 2011), where pair- and group-work are frequently adopted for dealing with learning tasks. The reason why such collaborative work is introduced in English classes is that it may help students to lessen their anxiety or stress. In English-speaking lessons in the EFL environment, students are more likely to feel anxious than in other subjects conducted in Japanese, because

interacting with limited L2 skills might make it difficult for students to express themselves or understand their classmates (Horwitz et al., 1986). Cheng et al. (1999) also assert that perceived low self-confidence leads to anxiety in speaking. However, introducing cooperative and collaborative work in English lessons may often work positively to reduce this stress. Burden (2004) argues in his empirical study on Japanese undergraduates that teachers' use of communicative strategies including pair- and group-work lessened students' speaking anxiety and raised their motivation. In addition, Cutrone (2009) found in his study that group-work activities enabled Japanese learners who were reluctant to speak in front of others to speak more willingly.

Other researchers also emphasized the positive effects of collaborative work on learning and motivation in the classroom (e.g., Slavin, 1986, 1990, 1996). In EFL learning settings, it may easily be inferred that a wide gap might exist among the students with regard to their self-efficacy beliefs. While high self-efficacy students can actively deal with provided tasks using effective learning strategies and accomplish their goals, low self-efficacy students tend to demonstrate the opposite. In order to deal with this situation, introducing pair- or group-work might work effectively to fill the gap. Slavin (1996) affirms that group-work could encourage students to tackle given tasks and exchange information with their peers, finally receiving evaluation and feedback as a group. It can safely be said that this kind of collaborative work would contribute to establishing good relationships in the classroom as Slavin (1990, 1996) claims, lessening anxiety toward studying, and raising students' confidence.

However, it seems that not many instructors are conscious of gender differences in collaborative work and their impact on lessons with class sizes of forty or more students. It is possible to assume that there exists gender difference in self-efficacy beliefs in

English classes. Therefore, shedding light on how each gender differs in establishing self-efficacy could lead to more effective use of collaborative work in classrooms.

6.2. Objectives and Research Questions

The purpose of this study is to examine the relationships among learners' speaking self-efficacy, the four sources of self-efficacy information, and gender. For this, the following research questions were designed:

RQ.1 What gender differences can be found in terms of the relationships between in-class/out-of-class self-efficacies and the four sources of self-efficacy information?

RQ.2 What gender differences can be found in the means for in-class/out-of-class self-efficacies and the four sources of self-efficacy information?

6.3 Methods

6.3.1 Participants

The original participants of this current study were 229 Japanese first-graders at a senior high school located in the western part of Japan, where the majority enter university. In particular, this high school focuses on nurturing students' interactive skills and encourages output-related activities in English. For example, the school introduces not only exams such as EIKEN (recommended) or GTEC for STUDENTS[1] (obligatory) for all grades but also speaking activities including a debate contest and a skit contest. Concerning GTEC, the total average score of the participants of this study was 419 out of 810, which was slightly higher than the national average score through the past three years, 407 (MEXT, 2015a). Comparing this result with the standard of CEFR, the result of the participants of this study corresponded to A1 level. Moreover, even in usual English lessons the students are frequently required to ask and answer questions in English in pairs or in a group. Speaking proficiency is evaluated through a speaking test at the end

of each term by an assistant language teacher (ALT) and Japanese teachers of English (JTE). In addition, the school provides an immersive English camp for three days and a homestay program in Australia for two weeks during summer vacation so that many students have been exposed to English in natural settings. Therefore, it can be said that the students in this high school may have more English-speaking experiences than those in other high schools.

All the first graders tackle English-speaking practice to prepare for an English debate contest and a skit contest held in the second semester. Therefore, the questionnaire data for this study was obtained at the end of the second term, in December 2016, after all the students had experienced these speaking-related events.

It is difficult for most students who have not experienced English-speaking practices to answer the questionnaire, because the questionnaire is composed of speaking-related items. Therefore, it was considered suitable to employ students from this particular school that had more speaking practices as participants in this study.

6.3.2 Procedures

In this study, a quantitative approach was employed. The participants were asked to answer a 36-item self-efficacy questionnaire and open-ended questions in their usual English Expression class. It took about 7 minutes for them to finish answering the questionnaire. At the beginning, the participants were told that the questionnaire was anonymous and not linked to any grade. Almost all of them cooperated with the author to answer the questionnaire, reflecting on their English-related activities.

Among the participants, there were several students who missed marking some items, skipped a page, or misunderstood the directions. These data were regarded as invalid and omitted. Taking these things into consideration, 19 forms were excluded

from the data, and in total, 210 (90 male and 120 female) out of 229 collected forms were analyzed.

6.3.3 Instrument

6.3.3.1 Speaking Self-Efficacy

This study used the same questionnaire as the one used in Chapter 3 (Appendix A) for assessing speaking self-efficacy beliefs. This was written referring to the past studies (e.g., Asakereh & Dehghannezhad, 2015; Betz, 1978; Cheng et al., 1999) and the educational background of the Japanese students. The reliability coefficients (Cronbach's α) for in-class and out-of-class self-efficacy sub-scales based on the current data were .93 and .95.

6.3.3.2 Sources of English-Speaking Self-Efficacy Information

To examine the four speaking sources of self-efficacy information, four sub-scales were designed based on Bandura's (1997) description of self-efficacy scales. The questionnaire used in this study was the same as that used in Chapter 3 (see Appendix A). The participants were asked to respond to 24 items composed of the four sources of self-efficacy information in the questionnaire: 6 items each for ME, VE, VP, and ES. As noted in Chapter 3 (3.2.4.3), two items, one each in VP (No. 30) and ES (No. 33), were excluded for the purpose of improving reliability. It was assumed that the negative wording of these 2 items confused the participants and lowered the reliability. However, there were another 3 items with negative wording included in the scale, but they were adopted because they did not seem to cause any problems to the participants' response. Reliability coefficients (Cronbach's α) of the four sub-scales were .94 (ME), .89 (VE), .70 (VP) and .78 (ES). In total, a 34-item questionnaire was adopted, including 12 items concerning in-class and out-of-class self-efficacy scales.

6.3.4 Data Analysis

Statistical Packages for Social Sciences (SPSS) version 23.0 was utilized to analyze the quantitative data. A correlation analysis, a multiple regression analysis, and an independent samples t-test were applied. After the correlational analysis was carried out, the multiple regression analysis was conducted for each gender to assess the independent contribution of the four sources of self-efficacy information to the prediction of in-class and out-of-class self-efficacies (RQ. 1). Then, the independent samples t-test was conducted to examine what gender differences could be found in the means of in-class/out-of-class self-efficacies and the four sources of self-efficacy information (RQ. 2).

6.4 Results

Table 6.1 shows the correlations between in-class/out-of-class self-efficacies and the four sources of self-efficacy information for the total sample. Several outstanding features can be found. First, the correlation between in-class and out-of-class self-efficacies is $r = .68$, $p < .001$, which means that the correlation is moderate. The correlations between in-class/out-of-class self-efficacies and the four sources of self-efficacy information are all significant. Among the four sources, ME shows the strongest correlations with in-class and out-of-class self-efficacies ($r = .84$, $r = .74$), followed by ES ($r = .63$, $r = .64$), VP ($r = .47$, $r = .51$) and VE ($r = .41$, $r = .41$).

Table 6.1

Correlations Between In-Class/Out-of-Class Self-Efficacies and the Four Sources of Self-Efficacy Information

	1	2	3	4	5	6	*M*	*SD*
1. ICSE	1	—	—	—	—	—	4.93	1.61
2.OCSE	.68***	1	—	—	—	—	4.20	2.04
3. ME	.84***	.74***	1	—	—	—	4.80	1.71
4. VE	.41***	.41***	.51***	1	—	—	6.90	2.07
5. VP	.47***	.51***	.56***	.69***	1	—	5.61	1.81
6. ES	.63***	.64***	.64***	.41***	.52***	1	5.14	2.03

Note. $N = 210$. ICSE = In-class self-efficacy, OCSE = Out-of-class self-efficacy, ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states.

*** $p < .001$.

6.4.1 Research Question 1

Research Question 1 asked what gender differences can be found in the relationships between in-class/out-of-class self-efficacies and the four sources of self-efficacy information. A series of multiple regression analyses were conducted, where in-class and out-of-class self-efficacies were employed as dependent variables, and the four sources of self-efficacy information were employed as independent variables. First, in order to investigate which variables could account for in-class self-efficacy for each gender, a multiple regression analysis was carried out separately for males and females. Multicollinearity was not detected among the four sources in either gender, male students' variance inflation factor (VIF) indicating ME =1.74, VE = 2.35, VP = 2.74, ES = 1.72, and female students' VIF indicating ME = 2.46, VE = 2.12, VP = 2.10, ES = 1.92, which were all smaller than 10.0.

Regarding male students' in-class self-efficacy and the four sources of self-efficacy information, the multiple correlation coefficient is .81 ($R^2 = .66$) and the adjusted R^2 is .65, which indicates that 65 % of the variance for in-class self-efficacy can be predicted from a combination of the predictors. The moderately high percentage of prediction might be attributed to a strong correlation between in-class self-efficacy and the four sources of self-efficacy information. The result of ANOVA demonstrates that the regression model is significant and valid, $F(4, 85) = 41.50$, $p < .001$.

Concerning female students' in-class self-efficacy and the four sources of self-efficacy information, the multiple correlation coefficient is .88 ($R^2 = .77$) and the adjusted R^2 is .76, which indicates that 76 % of the variance for in-class self-efficacy can be predicted from the combination of the predictors aforementioned. Compared with male students, the higher percentage of prediction indicates that there may exist a stronger relationship between in-class self-efficacy and the four sources of self-efficacy information with female students. The result of ANOVA demonstrates that the regression model is significant and valid, $F(4, 115) = 95.52$, $p < .001$.

Table 6.2

Standard Multiple Regression of the Four Sources of Self-Efficacy Information on In-Class Self-Efficacy for Each Gender

	Unstandardized coefficients		Standardized coefficients			Correlations		
	B	Std. error	beta	*t*	*p*	Zero order	Partial	Part
Male								
ME	.72	.08	.78	9.3	<.001	.80	.71	.59
VE	-.08	.07	-.11	-1.1	.272	.28	-.12	-.07
VP	-.03	.11	-.03	-.30	.768	.39	-.03	-.02
ES	.13	.07	.15	1.83	.071	.55	.20	.12
Female								
ME	.67	.07	.71	10.08	<.001	.86	.69	.45
VE	.04	.05	.04	.65	.515	.57	.06	.03
VP	-.02	.05	-.02	-.31	.757	.55	-.03	-.01
ES	.16	.05	.21	3.36	.001	.69	.30	.15

Note. $n = 90$ (male) and 120 (female). Dependent variable = In-class self-efficacy. ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states.

Table 6.2 shows the results of a standard multiple regression of the four sources of self-efficacy information on in-class self-efficacy for each gender. As for male students, ME ($\beta = .78$, $t = 9.3$, $p < .001$) is the only significant predictor of in-class self-efficacy. VE, VP, and ES are nonsignificant, though ES shows a *p*-value close to the significance level. In respect to female students, ME ($\beta = .71$, $t = 10.08$, $p < .001$) and ES ($\beta = .21$, $t = 3.36$, $p < .01$) are significant predictors of in-class self-efficacy, while VE and VP are not.

Next, in order to investigate which variables might be able to account for out-of-class self-efficacy for each gender, another set of multiple regression analyses were performed. Multicollinearity was not found there, as aforementioned.

With regard to male students, the multiple correlation coefficient is .77 ($R^2 = .59$) and the adjusted R^2 is .57, which indicates that 57 % of the variance in out-of-class self-

efficacy can be predicted from the combination of the predictors aforementioned. It illustrates that the four sources together account for a moderate portion of the variance in out-of-class self-efficacy, where students are required to communicate with native speakers in English. The result of ANOVA demonstrates that the regression model is significant and valid, $F(4, 85) = 30.21$, $p < .001$).

In terms of female students, the multiple correlation coefficient is .78 ($R^2 = .61$) and the adjusted R^2 is .60, which indicates that 60 % of the variance in out-of-class self-efficacy can be predicted from the combination of the predictors aforementioned. It also shows that the four sources together explain a moderate portion of the variance in out-of-class self-efficacy, almost the same result as male students. The result of ANOVA shows that the regression model is significant and valid, $F(4, 115) = 44.88$, $p < .001$).

Table 6.3

Standard Multiple Regression of the Four Sources of Self-Efficacy Information on Out-of-Class Self-Efficacy for Each Gender

	Unstandardized coefficients		Standardized coefficients			Correlations		
	B	Std. error	beta	t	p	Zero order	Partial	Part
Male								
ME	.64	.10	.58	6.34	<.001	.74	.57	.44
VE	.13	.10	.15	1.38	.173	.44	.15	.10
VP	-.10	.14	-.08	-.72	.471	.46	-.08	-.05
ES	.22	.09	.22	2.42	.018	.59	.25	.17
Female								
ME	.66	.12	.52	5.69	<.001	.74	.47	.33
VE	-.12	.09	-.11	-1.24	.216	.45	-.12	-.07
VP	.17	.09	.16	1.92	.058	.55	.18	.11
ES	.28	.08	.28	3.46	.001	.67	.31	.20

Note. $N = 90$ (male) and 120 (female). Dependent variable = Out-of-class self-efficacy. ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states.

Table 6.3 shows the standard multiple regression of the four sources of self-efficacy information on out-of-class self-efficacy for each gender. As for male students, ME (β = .58, t = 6.34, p < .001) and ES (β = .22, t = 2.42, p < .05) are significant predictors of out-of-class self-efficacy, ME showing the stronger influence. VE and VP do not contribute to the prediction of out-of-class self-efficacy significantly. Regarding female students, ME (β = .52, t = 5.69, p < .001) and ES (β = .28, t = 3.46, p < .01) are significant predictors of out-of-class self-efficacy, ME also showing a stronger influence. On the other hand, VE and VP show nonsignificant effects on out-of-class self-efficacy.

6.4.2 Research Question 2

Research Question 2 asked what gender differences can be found in the means of in-class/out-of-class self-efficacies and the four sources of self-efficacy information. As shown in Table 6.4 and Figure 6.1. below, male students showed higher scores on both in-class and out-of-class self-efficacies, ME, and ES than female students, while female students demonstrated higher scores on VE and VP than male students.

Table 6.4

Subscale Means and Standard Deviations of In-Class/Out-of-Class Self-Efficacies and the Four Sources of Self-Efficacy Information for Each Gender

		ICSE		OCSE	
Gender	*n*	*M*	*(SD)*	*M*	*(SD)*
Male	90	5.06	(1.65)	4.44	(1.96)
Female	120	4.82	(1.57)	4.02	(2.08)
Average		4.93	(1.61)	4.20	(2.04)

Note. N = 210. ICSE = In-class self-efficacy, OCSE = Out-of-class self-efficacy

		ME		VE		VP		ES	
Gender	*n*	*M*	*(SD)*	*M*	*(SD)*	*M*	*(SD)*	*M*	*(SD)*
Male	90	4.95	(1.78)	6.39	(2.17)	5.44	(1.60)	5.34	(1.99)
Female	120	4.69	(1.65)	7.28	(1.91)	5.74	(1.95)	4.98	(2.06)
Average		4.80	(1.71)	6.90	(2.07)	5.61	(1.81)	5.14	(2.03)

ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states.
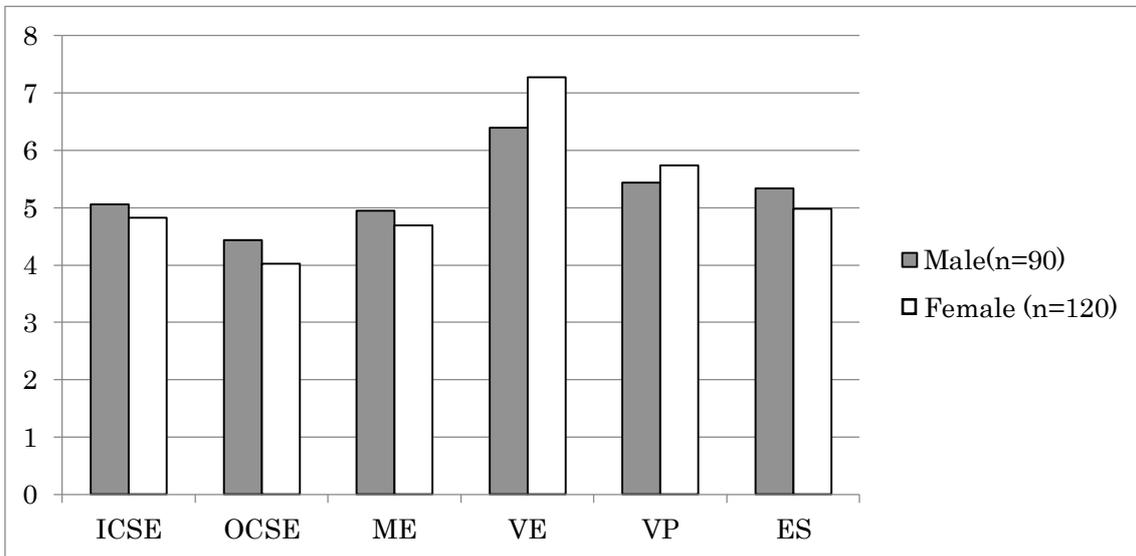
Figure 6.1. Means of in-class/out-of-class self-efficacies and the four sources of self-efficacy information for each gender. ICSE = In-class self-efficacy, OCSE = Out-of-class self-efficacy, ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states.

An independent samples *t*-test was carried out as well to see mean differences between genders, and the effect size *d* was calculated. The result is shown in Table 6.5. The result reveals that the effect size *d* for VE (-.44) is larger than that of the other variables. The result also shows that the difference in VE is significant between male and female students, while in-class/out-of-class self-efficacies, ME, VP, and ES do not show significant differences.

Table 6.5

The Results of Independent Samples T-Tests Across Genders

	Mean difference (Male-Female)	*t*	*df*	*p*	*effect size (d)*
ICSE	.24	1.08	208	.282	.15
OCSE	.42	1.49	208	.139	.20
ME	.25	1.06	208	.289	.15
VE	-.89	-3.17	208	.002	-.44
VP	-.30	-1.20	208	.230	-.17
ES	.363	1.28	208	.201	.18

Note. *N*= 210. M = Male, F = Female. ICSE = In-class self-efficacy, OCSE = Out-of-class self-efficacy, ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states.

6.5 Discussion

Research Question 1 addressed the question of what gender differences can be found in terms of the relationships between in-class/out-of-class self-efficacies and the four sources of self-efficacy information. Overall, the result of the Pearson correlation analysis illustrated that ME had the strongest correlation with in-class/out-of-class self-efficacies, followed by ES, VP, and VE (Table 6.1).

A series of multiple regression analyses revealed different results for each gender. As for in-class self-efficacy (Table 6.2), male students' ME was a significant predictor,

while VE, VP, and ES were not, though ES was close to significant p-value level (p = .071). Meanwhile, female students' ME and ES were significant, while VE and VP were not. In terms of out-of-class self-efficacy (Table 6.3), both male and female students' ME and ES were significant, while VE and VP were not.

It can generally be summarized from the results above that male and female students had similar traits, that is, ME and ES are strong predictors of in-class and out-of-class self-efficacies, while VE and VP are not. The same result was also found in Chapter 3 (Table 3.7 and Table 3.9), in which the subjects were English-major undergraduates who had more speaking experiences than high school students. Considering these results, this tendency for ME and ES to become stronger predictors of in-class and out-of-class self-efficacies than VE and VP, could be said to be general, regardless of learners' speaking experiences. This may be because ME is often accompanied by ES. In other words, successful experiences may contribute to students' confidence, usually accompanied by emotions such as elation, which would lead to heightening self-efficacy. In addition to this, ME and ES are based on students' direct and authentic experiences, which are more likely to develop self-efficacy, compared with VE and VP, derived from indirect and weak influence from others.

One interesting finding was that male students' ES did not provide significant influence on in-class self-efficacy (p = .071), though it was close to significance in p-value. However, the values of beta are higher for ME and ES than for VE and VP (Table 6.2), with both male and female students. Judging from this result, it can safely be said that ME and ES are two main contributors to in-class self-efficacy for both male and female students.

Research Question 2 discussed what gender differences can be discovered in in-

class/out-of-class self-efficacies and the four sources of self-efficacy information. First, concerning self-efficacy means, Table 6.4 and Figure 6.1. demonstrate that male students show higher means on in-class/out-of-class self-efficacies, ME, and ES, while female students demonstrate higher means on VE and VP. The independent samples *t*-tests revealed that the difference in VE is significant between male and female students, while the differences in in-class/out-of-class self-efficacies, ME, VP, and ES are not (Table 6.5). The results of the mean difference and the independent samples *t*-test indicate several interesting differences in each gender. With regard to male students' higher means of ME and ES, as well as female students' higher means of VE and VP, the results might indicate that male students are more likely to be independent from others and focus on the results of their experiences whether successful or unsuccessful, while female students tend to show stronger admiration for role models and are more sensitive to encouragement and feedback from others. Concerning female students' higher means of VE and VP, other researchers also mentioned this tendency. In Lopez et al.'s (1997) empirical study on high school students' math self-efficacy, female students had more experiences based on VE and VP than male students. Zeldin and Pajares (2000) assert that female students are more likely to rely on others' evaluation of their capacities, than on accomplishments of their own. Pajares and Zeldin (1999) also insist in their qualitative study on women's math-related careers that the influence from others might play an important role in forming women's self-efficacy. This nature, peculiar to females, and easily affected by others, might contribute to their higher values of VE and VP.

Compared with male students, female students may be less confident in their capabilities and tend to underestimate their self-evaluation on self-efficacy scales (Table 6.4 and Figure 6.1.), which has been referred to in other studies. Wigfield et al. (1996, p.

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156) asserted that females tend to possess lower perceptions of their ability than males do. Pajares and Valiante (2006) claimed that even though female students are praised more frequently by their teachers for their better academic performance than male students, females tend to express lower levels of confidence. On the other hand, male students are more likely to be overconfident of their skills than female students (Pajares, 2002). These statements might prove that female students show lower perceived self-efficacy beliefs by nature than male students. This tendency can be found in the result of GTEC, where female students scored higher (436/810) than male students (400/810), but their self-efficacy overall was lower than that of male students. This test was held separately from this study three weeks before the questionnaire of this study was conducted. Although the test did not include a speaking test and the total number of subjects ($N = 227$) was a little larger than that of this study ($N = 210$), it shows that female students scored higher on English proficiency than male students.

Klassen (2004a) asserts that cultural dimensions could strongly influence the way self-efficacy beliefs are formed. In the category of cultural dimensions, Asian cultures including Japan are regarded as more collectivist while Western cultures are more individualistic, and that self-efficacy beliefs may work differently depending on these cultural differences (Klassen, 2004a, 2004b). In collectivist cultures, harmonious relations with others tend to be emphasized over oneself in one's behavior, while in individualistic cultures, independence from others is more likely to be the focus (Markus & Kitayama, 1991). Klassen (2004a) claims that the indirect self-efficacy sources of VE and VP may have more influence on people in collectivist cultures, while the direct and authentic self-efficacy sources of ME and ES might have more influence on those in individualistic cultures. In the present study, this tendency was seen in gender differences.

Male students demonstrated stronger ME and ES, which might demonstrate that they are more likely to be independent and influenced by their own selves. On the other hand, female students revealed stronger VE and VP, which may indicate that they are more likely to be harmonious and influenced by others.

The significant gender differences found in VE might prove that females' strong admiration for ideal models is conducive to the higher mean of VE, but this may also lead to inferior perceptions of ME, by comparing themselves to such capable models. In other words, females may strive to get closer to their ideal selves looking at such models, but at the same time, they might lose confidence when noticing the gap between the models and what their own abilities are, leading them to underestimate their capabilities. On the other hand, male students have a tendency to emphasize and pursue the results of their own efforts in isolation, being more independent from others, and therefore they may be less influenced by vicarious models. For them, models are just others, not themselves, which might explain their weaker admiration for models, lowering the mean of VE.

However, there is further space to be considered about other individual factors such as each gender's learning style, motivation, English proficiency, or personality trait, which should be investigated more thoroughly in analyzing gender differences.

6.6 Conclusion

The findings of Research Questions 1 and 2 reveal several noteworthy things for future implications. Concerning Research Question 1, overall, ME and ES could be strong predictors of in-class and out-of-class self-efficacies in both male and female students. This result suggests that teachers with in-class settings should focus on building up students' self-efficacy, having them accumulate successful experiences in class (= ME), and providing them with optimally challenging tasks based on each student's level, which

could lead to heightening their motivation and lowering their anxiety (= ES). As for the out-of-class environment, instructors should urge students to participate in as many English-related activities as possible, such as English seminars, English camps, or study-abroad programs. Through authentic, hands-on experiences outside of class (= ME), students are likely to increase their motivation or develop a sense of fulfilment (= ES), which will lead to an increase of out-of-class self-efficacy.

With regard to Research Question 2, there was an outstanding trait between males and females concerning the means for in-class/out-of-class self-efficacies and the four sources of self-efficacy information. Male students showed higher means of in-class/out-of-class self-efficacies, ME, and ES, while females demonstrated higher means of VE and VP. In addition, significant gender difference in VE was also found, which demonstrates that female students are more likely to be influenced by their ideal models than male students.

Considering what was found in Research Question 2, instructors should strive to raise female students' confidence in class. As aforementioned, female students tend to be more modest and express weaker confidence in their academic proficiency than male students. Therefore, considering female students' higher means of VE and VP, teachers should show as many ideal role models as possible to raise their VE. For example, instructors can make opportunities for female students to interact with various students in pairs or in groups, so that they can notice each individual's advantageous point. At the same time, teachers should pay special attention when organizing a pair or a group, considering each female student's traits, personal character, and English proficiency. For lower-level students, middle- or upper-level peers can be their role models, and for upper-level students, the JTE or ALT could be their partner or one of their group members.

Teachers can also bring in and introduce desirable role models from outside of class or senior students to the class, in order to be good vicarious models. Sometimes it may work better to introduce a third party as a model, because students are more likely to feel a sense of inferiority when they compare themselves with superior Japanese peers (Miyauchi, 2017). In addition to this, in order to heighten female students' VP, instructors should provide more positive feedback and encouragement for female students. Females are more concerned with their relationships with others, and therefore teachers need to establish good relationships with them, by interacting with them more often and taking more time to understand them. These procedures to heighten female students' VE and VP might be conducive to building up their self-efficacies.

Other researchers also mention the positive effect of pair- and group-work which could enhance students' self-efficacy. Woodrow (2006) argues in her empirical study on L2 learning that VE and VP could be facilitated through collaborative work and teachers' positive feedback. It can easily be surmised that the more opportunities students obtain to observe peers' performances and to receive positive feedback from teachers, the more confident and motivated they would be.

To summarize the findings in the present study, three outstanding features can be presented as follows:

1. ME and ES are stronger overall predictors of in-class and out-of-class self-efficacies for both male and female students than VE and VP.

2. Male students tend to show higher in-class/out-of-class self-efficacies, ME, and ES, while female students express higher VE and VP.

3. A significant gender difference was found in VE, female students showing higher VE than male students.

In conclusion, this study clarified different mechanisms of building speaking self-efficacy in each gender. It might be recommended that instructors should take these gender differences into consideration in English-speaking class and enhance students' self-efficacy.

Note

1. GTEC evaluates students' listening, reading and writing skills. The total score of the test is 810, composed of listening (320), reading (320), and writing (170). A speaking test component is to be included in the test from 2018 with the help of a recording device on a tablet PC. GTEC is especially regarded as effective for measuring junior and high school students' current English skills and its official score is adopted by many universities for their entrance exams. About 1 million students took the test in Japan in 2017 (GTEC, 2018).

CHAPTER 7

EXAMINING TWO TYPES OF SELF-EFFICACY INFORMATION

DERIVED FROM LEARNERS' OWN EXPERIENCES

7.1 Introduction

Chapter 6 investigated the relationships between 210 high school students' speaking self-efficacy and Bandura's (1997, p. 79) hypothesized four sources of self-efficacy information: ME, VE, VP, and ES, in light of gender differences.

The results revealed that ME and ES significantly predicted male and female students' self-efficacies in general, except that male students' ES did not show significant influence on in-class self-efficacy. An independent samples *t*-test demonstrated that there was a significant gender difference in VE. Afterwards, a unique trait of mean difference in terms of in-class and out-of-class self-efficacies, the four sources of self-efficacy information, and gender differences were discussed.

Considering the results obtained in Chapter 6 and in other studies from Chapter 3 through Chapter 5, this final empirical study focuses on VE and VP, and compares them with more personalized types of self-efficacy information sources, cognitive self-modeling (CSM) and self-persuasion (SP), that derive directly from learners' own cognitive appraisals. CSM is regarded as one type of Bandura's (1997) hypothesized vicarious experiences, in which people imagine themselves accomplishing a challenging task successfully (p. 95). SP is interpreted as providing encouraging feedback for oneself, which has been used in studies related to sports as self-talk (e.g., Chase, 1998; Feltz & Riessinger, 1990). Usher and Pajares (2008) see CSM and SP as subtypes of VE and VP that reflect more self-dependent dimensions of VE and VP.

As previously mentioned, VE indicates an observers' self-comparison with the performances and outcomes of their models (e.g., Usher & Pajares, 2008). VP is interpreted as feedback or encouragement from significant others such as parents and teachers about one's academic performance (Usher & Pajares, 2008). VP, similar to VE, tends to produce only a modest influence on self-efficacy beliefs possibly because it does not involve the learners' own experiences like ME does (Bandura, 1997, p. 80). Usher and Pajares (2008) and Schunk (1984) also claim that VP as well as VE do not have long lasting effects on self-efficacy because they are easily negated and influenced by subsequent unsuccessful performances.

The results of experimental studies shown in Chapter 3 to Chapter 6 demonstrated that overall both VE and VP exercised weaker influences on self-efficacy than ME and ES. Taking this into consideration, it was assumed that it might make a difference if VE and VP were measured incorporating CSM and SP which refer to more self-derived types of information than VE and VP. It is possible that imagining oneself succeeding in a provided task would raise one's self-efficacy more effectively than just watching others succeeding in it and that persuading oneself that one can do something well might improve one's self-efficacy better than being persuaded by others that one can do it.

7.1.1 Problematic Aspects of the Four Sources of Self-efficacy Information

Regarding the measurement of self-efficacy, three problems have been reported. Usher and Pajares (2008) point to these problems in constructing self-efficacy measurement. They assert that one problematic aspect of examining ME is that researchers tend to use students' objective results, such as test scores, as an indicator of ME, which is at odds with Bandura's (1997) conceptualization of ME which refers to perceptions and interpretations of one's experiences (p. 81). They also claim that in the

case of VE, it is very difficult for researchers to design an appropriate measurement due to its complicated nature, such as the difficulty in deciding who exercises the greatest influence on the subjects. With regard to VP, they assert that the target people from whom students receive feedback or encouragement are usually limited to parents, teachers or peers, which is not sufficient for a thorough investigation of this source because students might have more influential appraisers. Lastly, in examining ES, anxiety and negative moods are more likely to be the focus while students' positive moods have yet to be fully examined (Usher & Pajares, 2008). In recent years, however, several studies can be found which examined ES mostly from positive sides (e.g., Asakereh & Dehghannezhad, 2015; Idrus et al., 2011; Liu, 2013).

VE and VP, in particular, are different from ME and ES, in that VE and VP basically reflect experiences of other people. It might be possible to expand them by incorporating information that reflect more self-derived dimensions of VE and VP, such as CSM and SP. Bandura (1997) asserts that all types of VE, including observing effective models, videotaped self-modeling, symbolic modeling, and cognitive self-modeling can help improve one's self-efficacy and thus lead to a better performance (p. 95). He also affirms that people will be more confident in their capabilities when they can depend on self-appraisals rather than on the judgment of others such as is represented by VP because most people understand themselves better than others might (pp. 104–105).

Usher and Pajares (2008) suggest that future researchers should design more precise measurements of the four sources of self-efficacy information that reflect such diverse perspectives as mentioned above.

7.1.2 Assessing VE and VP Based on One's Own Experiences

With regard to VE, Usher and Pajares (2008) assert that cognitive self-modeling

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(CSM) could become one type of vicarious experiences that enhances students' self-efficacy, suggesting that scale items in which students can visualize their own success should be developed. Bandura (1997) also affirms that "cognitive self-modeling serves as another means of enhancing efficacy beliefs" (p. 95). Feltz and Riessinger (1990) adopted CSM in their empirical study on self-efficacy among college students and found that students who had imagined themselves winning against rivals gained higher self-efficacy and stronger performances than those who had not.

Concerning VP, Usher and Pajares (2008) regard self-persuasion (SP) as another effective means of boosting self-efficacy, where students provided persuasive messages to themselves, instead of from others. SP can be interpreted as sending persuasive messages toward oneself, as opposed to receiving them from other people. Feltz and Riessinger (1990) addressed SP in their empirical study, using scale items such as "I told myself that I could do it." Chase (1998) insists that using SP in a positive manner should be emphasized more by instructors when they teach students.

CSM and SP, both of which are believed to be able to help enhance students' self-efficacy beliefs, have been used frequently in sports (e.g., Chase, 1998; Feltz & Riessinger, 1990), but have not spread to other academic areas.

7.2 Objectives and Research Questions

This study compares traditional VE and VP with CSM and SP by examining which sources of self-efficacy information exert stronger influences on forming students' self-efficacy. To this end, two research questions were designed as follows:

RQ. 1: How do VE and CSM compare in their contribution to the prediction of in-class and out-of-class self-efficacies in speaking English?

RQ. 2: How do VP and SP compare in their contribution to the prediction of in-class and

out-of-class self-efficacies in speaking English?

7.3 Methods

7.3.1 Participants

The participants of this study were 233 Japanese freshmen at a senior high school in the western part of Japan, where the majority enter university. This senior high school was used in Chapter 6, too, though the participants were different. This high school focuses on nurturing students' interactive skills and encourages output-related activities in English. For example, in regular English lessons, students are often required to write about their thoughts on a specified topic, expressing their opinions in English in pairs or in groups, and sometimes presenting them in front of the classroom. After the presentations, students are asked several questions in English by their peers. An assistant language teacher (ALT) and Japanese teachers of English (JTE) evaluated their speaking proficiency each term. In addition to the English-related activities in regular lessons, all the first-year students tackle English-speaking practice to prepare for both an English debate and a skit contest held in December. The questionnaire data for this study was obtained in January, after all the students had experienced these speaking-related events.

This school has also introduced commercial English exams such as EIKEN (recommended) and GTEC for STUDENTS (obligatory) to all students. The total average GTEC score of the participants of this study was 453 out of 810, higher than the national average of 407. The overall result of the participants corresponds to A1 level in the standard of CEFR (MEXT, 2015b).

7.3.2 Instrument

The questionnaire was composed of 36 items in total, including 6 items each for in-class and out-of-class self-efficacies, and 6 items each for VE, CSM, VP and SP. The

scale items except CSM and SP were the same as those in Chapter 3 shown in Appendix A. The scale items for CSM were designed referring to Bandura's (1997, p. 95) definition of CSM as well as the items in Feltz and Riessinger's (1990) empirical study. They were then improved and redesigned by the author in order to correspond to the context of the subjects in the present study. The scale items for SP were constructed by referring to several other studies (Chase, 1998; Feltz & Riessinger, 1990; Usher & Pajares, 2008). The questionnaire used for the current study was written in Japanese (Appendix E). Example items are as follows: "I respect a person who is talking with a native speaker fluently" for VE, "I envision myself communicating with a native teacher of English smoothly" for CSM, "I was motivated by the teacher's comments toward my speaking" for VP, and "I believe that I can improve my English-speaking skill" for SP. Because two items (No, 28 and No. 30, Appendix A) were found to greatly lower the reliability of VP, they were excluded from the scale. It is likely that the negative wording of these items affected the reliability. This left 34 items in the scale.

The reliability coefficients (Cronbach's α) for in-class and out-of-class self-efficacy sub-scales based on the current data were .94 and .93, while those for VE, CSM, VP, and SP were .89, .94, .85, and .91, respectively.

7.3.3 Procedures

Participants were asked to complete a 36-item self-efficacy questionnaire. The questionnaire was administered during the first homeroom class of 2018, immediately after the opening ceremony of the third term. After a short explanation during which the participants were told that the questionnaire was anonymous and not linked to any grade, and that participation was voluntary, they were given 5-10 minutes to complete the questionnaire. Students were also asked to reflect on their English-related activities in the

first year. It was later found that 22 students failed to mark some items, skipped a page, or misunderstood the directions. These data were regarded as invalid and thus omitted. In total, 211 (86 male and 125 female) out of 233 collected forms were analyzed.

7.3.4 Data Analysis

Statistical Packages for Social Sciences (SPSS) version 23.0 was utilized to analyze the data. After the correlational analysis, hierarchical multiple regression analyses were conducted separately for Research Question 1 and Research Question 2. For Research Question 1, in-class and out-of-class self-efficacies were used as dependent variables, and VE and CSM as independent variables. For Research Question 2, in-class and out-of-class self-efficacies were used as dependent variables, and VP and SP as independent variables. This was done to assess the additional contribution of the second independent variable to the prediction of self-efficacy beyond the prediction afforded by the first independent variable.

7.4 Results

Table 7.1 shows the correlations between in-class/out-of-class self-efficacies, VE, CSM, VP, and SP for the total sample. Several noteworthy features can be found. The correlation between in-class and out-of-class self-efficacies is moderate ($r = .64$, $p < .001$). The correlations between in-class/out-of-class self-efficacies and VE ($r = .32$, $r = .39$, $p < .001$), CSM ($r = .39$, $r = .41$, $p < .001$), VP ($r = .38$, $r = .47$, $p < .001$), and SP ($r = 52$, $r = 47$, $p < .001$) are low to moderate. CSM correlated with in-class/out-of-class self-efficacies slightly more than VE, indicating a more direct influence on self-efficacy. SP correlated with in-class self-efficacy more strongly than VP, also suggesting its direct influence on self-efficacy. However, SP had the same correlation as VP with out-of-class self-efficacy. (This will be discussed in 7.5. Discussion.) Among the four sources, SP

shows stronger correlations with in-class/out-of-class self-efficacies, relative to the other three sources, though the correlations were moderate.

Table 7.1

Correlations Between In-Class/Out-of-Class Self-Efficacies, VE, CSM, VP, and SP

	1	2	3	4	5	6	*M*	*SD*
1. ICSE	1	—	—	—	—	—	4.77	1.71
2.OCSE	.64***	1	—	—	—	—	3.97	1.96
3. VE	.32***	.39***	1	—	—	—	6.71	2.03
4. CSM	.39***	.41***	.67***	1	—	—	5.66	2.22
5. VP	.38***	.47***	.61***	.73***	1	—	5.26	1.98
6. SP	.52***	.47***	.54***	.65***	.73***	1	4.92	1.92

Note. N = 211. ICSE = In-class self-efficacy, OCSE = Out-of-class self-efficacy, VE =Vicarious experiences, CSM = Cognitive self-modeling, VP = Verbal persuasion, SP = Self-persuasion.

*** $p < .001$.

7.4.1 Research Question 1

Research Question 1 asked how VE and CSM compare in their contribution to the prediction of in-class and out-of-class self-efficacies in speaking English. Hierarchical multiple regression analyses were conducted separately for in-class and out-of-class self-efficacies with VE and CSM as independent variables, entering VE first into the model followed by CSM at the second step. Multicollinearity was not detected between the independent variables (VIF = 1.81).

Table 7.2 shows the results with in-class self-efficacy as the dependent variable, displaying the unstandardized and standardized regression coefficients and the *p*-values after the entry of the two independent variables, as well as R^2 and R^2 change at each step.

The beta weights and the *p*-values show that CSM contributes significantly to the prediction of in-class self-efficacy while VE does not, indicating that CSM is more strongly linked to English-speaking self-efficacy in the classroom than VE. The R^2 changes show that the addition of CSM as a predictor results in a statistically significant increase of 6 percent in the amount of variability explained by the model.

Table 7.2

Hierarchical Multiple Regression of VE and CSM on In-Class Self-Efficacy

	Unstandardized coefficients		Standardized coefficients			R^2	Adjusted R^2	R^2 change (*p*)
	B	Std. error	beta	*t*	*p*			
VE	.08	.07	.10	1.14	.257	.10	.10	.10 (<.001)
CSM	.25	.07	.33	3.82	<.001	.16	.15	.06 (<.001)

Note. *N* = 211. Dependent variable = In-class self-efficacy. VE =Vicarious experiences, CSM = Cognitive self-modeling.

Table 7.3 shows the results with out-of-class self-efficacy as the dependent variable. The beta weights and the *p*-values show that CSM is a slightly better predictor of out-of-class self-efficacy though both VE and CSM contribute significantly to the prediction. The R^2 changes show that the addition of CSM results in a minimal, though statistically significant, increase of 4 percent in the amount of variability explained by the model.

Table 7.3

Hierarchical Multiple Regression of VE and CSM on Out-of-Class Self-Efficacy

	Unstandardized coefficients		Standardized coefficients			R^2	Adjusted R^2	R^2 change (*p*)
	B	Std. error	beta	*t*	*p*			
VE	.20	.08	.21	2.45	.015	.15	.15	.15 (<.001)
CSM	.24	.07	.27	3.22	.001	.19	.18	.04 (.001)

Note. *N* = 211. Dependent variable = Out-of-class self-efficacy. VE =Vicarious experiences, CSM = Cognitive self-modeling.

7.4.2 Research Question 2

Research Question 2 asked how VP and SP compare in their contribution to the prediction of in-class and out-of-class self-efficacies in speaking English. Hierarchical multiple regression analyses were conducted separately for in-class and out-of-class self-efficacies with VP and SP as independent variables. VP was entered first to the model followed by SP at the second step. Multicollinearity was not detected between the independent variables (VIF = 2.12).

Table 7.4 shows results with in-class self-efficacy as the dependent variable. The beta weights and the p-values show that SP is a much stronger predictor of in-class self-efficacy than VP. SP also contributes significantly to the prediction of the dependent variable, while VP does not. This relates the results shown in Table 7.2. The R^2 changes show that the addition of SP results in a statistically significant increase of 13 percent in the amount of variability explained by the model.

Table 7.4

Hierarchical Multiple Regression of VP and SP on In-Class Self-Efficacy

	Unstandardized coefficients		Standardized coefficients			R^2	Adjusted R^2	R^2 change (p)
	B	Std. error	beta	t	p			
VP	.01	.07	.01	.09	.931	.15	.14	.15 (<.001)
SP	.46	.08	.51	5.96	<.001	.27	.26	.13 (<.001)

Note. $N = 211$. Dependent variable = In-class self-efficacy. VP = Verbal persuasion, SP = Self-persuasion.

Table 7.5 shows results with out-of-class self-efficacy as the dependent variable. The beta weights and the p-values show no difference between VP and SP. The R^2 changes show that the addition of SP results in a minimal, though statistically significant, increase of 4 percent in the amount of variability explained by the model.

Table 7.5

Hierarchical Multiple Regression of VP and SP on Out-of-Class Self-Efficacy

	Unstandardized coefficients		Standardized coefficients			R^2	Adjusted R^2	R^2 change (p)
	B	Std. error	beta	*t*	*p*			
VP	.27	.09	.27	3.09	.002	.22	.21	.22 (<.001)
SP	.28	.09	.27	3.13	.002	.25	.25	.04 (.002)

Note. $N = 211$. Dependent variable = Out-of-class self-efficacy. VP = Verbal persuasion, SP = Self-persuasion.

7.5 Discussion

Research Question 1 asked how VE and CSM compare in their contribution to the prediction of in-class and out-of-class self-efficacies in speaking English. The result of the Pearson correlation analysis illustrated that VE and CSM showed low correlations with in-class/out-of-class self-efficacies, ranging from $r = .32$ to $r = .41$ (Table 7.1). Hierarchical multiple regression analyses revealed that CSM ($\beta = .33$, $t = 3.82$, $p < .001$) was a significant predictor of in-class self-efficacy, while VE was not. The result of hierarchical multiple regression analyses also showed that both VE ($\beta = .21$ $t = 2.45$, $p < .05$) and CSM ($\beta = .27$, $t = 3.22$, $p < .01$) were significant predictors of out-of-class self-efficacy, with CSM showing a slightly stronger influence on out-of-class self-efficacy (Table 7.3). These findings show that CSM is a better predictor of English-speaking self-efficacy and that this is more in evidence in classroom settings than in out-of-class settings. As shown in R^2 changes, CSM also provides some additional contribution to the prediction of self-efficacies, though the increments are small.

Research Question 2 addressed how VP and SP compare in their contribution to the prediction of in-class and out-of-class self-efficacies in speaking English. The result of the Pearson correlation analysis illustrated that VP and SP had low to moderate correlations with in-class/out-of-class self-efficacies, ranging from .38 to .52 (Table 7.1).

Hierarchical multiple regression analyses revealed that SP ($\beta = .51$, $t = 5.96$, $p < .001$) was a significant predictor of in-class self-efficacy, while VP was not. The result of hierarchical multiple regression analyses also showed that both VP ($\beta = .27$, $t = 3.09$, $p < .01$) and SP ($\beta = .27$, $t = 3.13$, $p < .01$) were significant predictors of out-of-class self-efficacy, with almost the same level of influence on out-of-class self-efficacy. These findings show that SP is a considerably better predictor of English-speaking self-efficacy in in-class settings than VP, but that such a difference was not found in out-of-class settings. R^2 changes show that SP makes a much greater contribution to the prediction of self-efficacy in in-class self-efficacy than in out-of-class self-efficacy.

Considering the findings from Research Question 1 and 2, it can be said that both CSM and SP are better predictors of self-efficacy than VE and VP, especially in in-class settings ($\beta = .33$ and .51 for CSM and SP). This implies that self-derived sources of information exert stronger influence on self-efficacy than indirect source of information derived from others. Therefore, imagining oneself achieving a difficult task works more effectively than observing others accomplishing a provided task, due to its direct self-derived influence on self-efficacy. Also, persuading oneself to be confident in their ability works more strongly than being persuaded to believe in oneself by other people. This might be because people have more confidence in their abilities if they can rely more on self-appraisals than on others' judgments as most people know about themselves better than others might (Bandura, 1997, pp. 104–105). Saying to oneself "I can do it" may be able to encourage and motivate learners when they try a difficult task.

The findings also reveal that students are more likely to be self-influenced rather than influenced by others especially in in-class settings. On the other hand, this difference was not found in the influence on out-of-class self-efficacy. This is because in out-of-

class settings, high school students may not have enough opportunities to communicate with native speakers, which might prevent them from having sufficient speaking experiences outside school.

It may be that VE, CSM, VP, and SP in out-of-class settings are not assessed correctly because students might have to depend on their imagination about their role models or feedback they may be given outside the classrooms. Accumulating sufficient speaking experiences outside the classroom might be important for high school students to formulate ideas about their ability.

7.6 Conclusion

This study compared CSM and SP with Bandura's (1997, pp. 86–106) hypothesized traditional sources, VE and VP. Investigations into Research Questions 1 and 2 found several general tendencies concerning the self-dependent types of information, that is, CSM and SP.

To summarize the findings in this present study, three outstanding features can be presented as follows:

1. In general, the influence of self-dependent types of information (CSM and SP) is larger when forming self-efficacy than that of traditional information dependent on others (VE and VP).

2. The above tendency is more noticeable with in-class self-efficacy than with out-of-class self-efficacy.

3. In out-of-class settings, the difference of influence between self-derived CSM/SP and traditional VE/VP on self-efficacy may become obscure due to students' insufficient real experiences outside the classroom.

In conclusion, this study suggested that students help enhance their self-efficacy by

visualizing themselves accomplishing a difficult task and persuading themselves that they can do something well. Therefore, students may have to train themselves to believe in their ability and to rely on themselves. Furthermore, instructors should pay more attention to the way they help students persuade themselves to be confident of their ability. Encouraging students to trust their capability and enhancing their self-efficacy will lead them to be autonomous efficacious speakers of English.

CHAPTER 8

CONCLUSION

This chapter summarizes all the results and findings of this empirical study and provides a summary of findings, limitations, future implications, and a conclusion.

8.1 Summary of Findings

Chapter 3 investigated the relationships among 180 undergraduates' speaking self-efficacies, their speaking proficiency levels, and Bandura's (1997) hypothesized four sources of self-efficacy information, ME, VE, VP, and ES (p. 79). The participants responded to a 36-item questionnaire on speaking self-efficacy beliefs. A factor analysis demonstrated that in-class and out-of-class self-efficacies formed separate factors. A multiple regression analysis revealed that ME and ES were significant predictors of in-class and out-of-class self-efficacies and that only in-class self-efficacy contributed to the prediction of the learners' speaking proficiency levels. It was found that in-class self-efficacy was a significant predictor of Japanese undergraduates' speaking proficiency levels, where ME especially showed a strong influence. Considering the results of this study, four outstanding features can be presented:

1. In-class and out-of-class self-efficacies reflect clearly differentiated dimensions of learner beliefs.

2. Learners' ME and ES correlate significantly with in-class and out-of-class self-efficacies.

3. In-class self-efficacy, but not out-of-class self-efficacy, predicts learners' English-speaking proficiency.

4. Connecting out-of-class self-efficacy to speaking proficiency might be needed

for Japanese English-major undergraduates.

Chapter 4 examined how 17 university undergraduates' English-speaking self-efficacies changed through their participation in a three-week language training program in the United States. The results of a paired-samples t-test and correlation analyses revealed three things. First, the participants showed greater gains in out-of-class self-efficacy than in in-class self-efficacy. Second, the correlation between in-class and out-of-class self-efficacies in a post-survey was much stronger than that in a pre-survey. Finally, in general, ME and ES had stronger correlations with in-class/out-of-class self-efficacy gains than VE and VP, but this pattern was especially evident regarding out-of-class self-efficacy gain. Taking the results of this study into consideration, three outstanding features can be illustrated as follows:

1. A greater increase was found in out-of-class self-efficacy than in in-class self-efficacy.

2. In-class and out-of-class self-efficacies became more integrated with each other throughout the program participation.

3. ME and ES had stronger influences on self-efficacy gains than VE and VP, particularly on out-of-class self-efficacy.

Chapter 5 reexamined how attending a three-week study abroad program in the United States affected the participants' speaking self-efficacies from a qualitative perspective. Specifically, this qualitative study focused on how the student groups, divided by a cluster analysis, differed in terms of the four sources of self-efficacy information and their in-class and out-of-class self-efficacies. This study attempted to reveal what the participants really experienced in terms of self-efficacy beliefs as presented in Chapter 4. The interview results and responses to open-ended questions

revealed that the High and Middle self-efficacy groups obtained more beneficial experiences to enhance their self-efficacy, especially in ME, VP, and ES than the Low self-efficacy group. Though the Low self-efficacy group showed much lower means of ME, VP, and ES than the High and Middle self-efficacy groups, they demonstrated almost the same means of VE as the High and Middle self-efficacy groups. The greater means of VE in the Low self-efficacy group indicated that their admiration for models was strong but it negatively affected their speaking self-efficacy. In addition, the interview confirmed that the High and Middle self-efficacy groups enhanced their self-efficacies more than the low self-efficacy group, though correlations between pre-survey in-class/out-of-class self-efficacies and their gains were slightly negative. Five main findings from this case study are as follows:

1. Students with initially high self-efficacy may have more beneficial experiences associated with the four sources of self-efficacy information, especially ME, VP and ES, than those with initially low self-efficacy.

2. Students with initially high self-efficacy may improve their self-efficacy better than those with initially low self-efficacy.

3. Students with initially low self-efficacy may lessen their self-efficacy even more through study abroad programs.

4. VE can work negatively for students with low self-efficacy.

5. Acquiring sufficient language proficiency is recommended before studying abroad.

Chapter 6 investigated the relationships among high school students' speaking self-efficacy, gender difference, and Bandura's (1997) hypothesized four sources of self-efficacy information, ME, VE, VP, and ES (p. 79). Two hundred and ten Japanese high

school freshmen answered a 36-item questionnaire about speaking self-efficacy beliefs. The results of a Pearson correlation analysis showed that correlations among in-class and out-of-class self-efficacies, and the four sources of self-efficacy information were all significant. Multiple regression analyses revealed that ME and ES overall significantly predicted male and female students' self-efficacies, with the exception that ES did not predict in-class self-efficacy for male students, though it was close to significant p-value. A unique trait of mean difference in terms of in-class and out-of-class self-efficacies and the four sources of self-efficacy information was found for each gender. An independent samples *t*-test demonstrated that there was a significant gender difference in VE. The three main findings of this study are as follows:

1. ME and ES could predict in-class and out-of-class self-efficacies for both male and female students more strongly than VE and VP.

2. Male students are apt to show higher means of in-class/out-of-class self-efficacies, ME, and ES, while female students showed higher means of VE and VP.

3. A significant gender difference was detected in VE, indicating that female students had stronger admiration for role models than male students.

Lastly, Chapter 7 focused on Bandura's (1997, p. 79) traditional sources of self-efficacy information, VE and VP, and compared them with cognitive self-modeling (CSM) and self-persuasion (SP), which feature more self-derived experiences than traditional VE and VP dependent on others. As aforementioned, both VE and VP tend to possess weaker influences on self-efficacy due to their less authentic and less direct nature, compared with ME and ES. The results of the studies in Chapter 3 through Chapter 6 also showed this pattern of influences on self-efficacy. Given the Usher and Pajares's (2008)

suggestion that VE and VP could be expanded to include dimensions that reflect self-influences, that is, CSM and VP, Chapter 7 compared traditional VE and VP with CSM and VP. The results of hierarchical multiple regression analyses showed that both CSM and SP, which derive from one's own experiences, can become significant predictors of in-class/out-of-class self-efficacies. The results of this study presented three specific features as follows:

1. In general, the influence of self-dependent types of information (CSM and SP) is larger when forming self-efficacy than that of traditional information dependent on others (VE and VP).

2. The above tendency is more noticeable with in-class self-efficacy than with out-of-class self-efficacy.

3. In out-of-class settings, the difference of influence between self-derived CSM/SP and traditional VE/VP on self-efficacy may become obscure due to students' insufficient real experiences outside the classroom.

8.2 Limitations and Future Implications

The participants of this study were university English majors (Chapter 3, 4 and 5) and senior high school students whose English classes heavily focused on English-speaking skills (Chapter 6 and 7). These participants were likely to be more motivated to speak English than those who were majoring in other subjects in university or who had fewer English-speaking experiences in high school. Therefore, if the current study had included more varied participants, different results may have been found.

The size of the data collected for the two studies was small, as there were fewer than twenty participants in Chapter 4 and Chapter 5. However, the same experiment conducted in Chapter 4 was carried out again with the participants for the next year.

Adding these new participants to the original participants brought the total number to 31, where almost the same results were obtained (Appendix C). Still, a future study should include a larger sample.

The length of the study abroad program was three weeks, and therefore, it might be premature to provide conclusive findings based on these results alone. Though Cubillos and Ilvento (2012) claimed that sojourners gain self-confidence regardless of the length of stay, a certain minimum length of the sojourn, for example one semester, might be needed to present more valid data.

Lafford and Collentine (2006) assert that while pre- and post-survey procedures were frequently used in analyzing the effects of study abroad (e.g., Cubillos & Ilvento, 2012; Hernández, 2010; Martinsen, 2010; Segalowitz et al., 2004), none of them continued conducting post-surveys after an interval of a few months or years. In Chapter 5, qualitative data were examined in interviews two months after the study-abroad program. However, this was done mainly to elicit the participants' experiences in the host country that happened two months prior. It might be beneficial to assess the long-term effects on self-efficacy by carrying out post-surveys after a longer interval.

Lastly, more extensive research should be carried out from the viewpoint of pedagogical applications to enhance students' cognitive self-modeling and self-persuasion. Future instructors should explore ways to enhance students' self-efficacy by providing students with instructions to be confident of their ability, telling them to visualize themselves speaking English well and to persuade themselves that they can speak English fluently.

8.3 Conclusion

Two purposes were presented at the beginning of this thesis. One is to investigate

the relationships between learners' speaking self-efficacy and the four sources of information that Bandura (1977, 1997) advocated. The other is to draw some hints from the findings as to what is needed for Japanese English speakers to enhance their speaking self-efficacy. These two will be discussed together.

Empirical studies from Chapter 3 through Chapter 7 found a general tendency that ME and ES are more valid predictors of both in-class and out-of-class self-efficacies than VE and VP. This might be because ME and ES were derived from students' direct and authentic experiences, not from indirect experiences from others. This result suggests that teachers with in-class settings should focus on building students' self-efficacy, having them accumulate numerous successful experiences in class (= ME), and providing them with optimally challenging tasks based on each student's level, which could lead to heightening their motivation and lowering their anxiety (= ES). As for the out-of-class environment, instructors should urge students to participate in as many English-related activities as possible, such as English seminars, English camps, or study-abroad programs. Through authentic, successful hands-on experiences outside of class (= ME), students are more likely to increase their motivation or develop a sense of fulfilment (= ES), which will lead to an increase in out-of-class self-efficacy.

Instructors should bear in mind that gender differences exist in the formation of self-efficacy. Male students had higher means of ME and ES, while female students showed higher means of VE and VP regarding speaking self-efficacy. A significant gender difference in VE reveals that female students tend to have stronger admiration for models than male students do. On the other hand, male students tended to be overconfident in their skills, while female students showed less confidence. Considering

these results, instructors need to develop female students' confidence in class, trying to show them ideal role models and also provide encouragement and sufficient feedback.

The weaker indirect influence of VE and VP on one's self-efficacy led to a study focusing on cognitive self-modeling (CSM) and self-persuasion (SP) derived from one's personalized experiences. It was found that CSM and SP were significant predictors of self-efficacy, especially for in-class settings, which implies that students could be more self-efficacious by visualizing themselves speaking English more as opposed to imagining someone superior to them as their role models. Students could persuade themselves with phrases such as "Yes, you can speak English well" rather than by being told so by others. Such practices will help learners build confidence, heightening their speaking self-efficacy.

Furthermore, the college students who studied in the United States for three weeks showed higher gains in out-of-class self-efficacies than for in-class self-efficacies, and there was a stronger correlation between in-class and out-of-class self-efficacies on the post-survey than on the pre-survey. This result demonstrates that real interactive experiences with native speakers abroad contributed to the participants' self-efficacy to use English outside the classroom, building scaffolds between classroom experiences and confidence in real uses of English outside of class. Therefore, instructors should urge students to accumulate sufficient experiences not only for in-class settings but also through out-of-class settings to heighten students' self-efficacy in English-speaking.

Lastly, though study-abroad experiences can be effective in improving self-efficacy, students who are planning to study abroad should first enhance their language proficiency to a level sufficient for interaction with native speakers. This will contribute to further self-efficacy gains and confidence, especially through ME and ES once they are in the

host country. Other researchers also refer to the importance of acquiring initial language skills (e.g., Brecht et al., 1995; Segalowitz et al., 2004; Tanaka, 2007). Even if students possess higher self-efficacy, they may not be able to perform well under conditions where they lack necessary linguistic knowledge and skills (Schunk, 1995, p. 283). Without sufficient language proficiency and confidence, it is difficult for low self-efficacy students to accumulate beneficial experiences associated with the four sources of self-efficacy information. Particularly, learners with both low English proficiency and self-efficacy may experience problems on VE, being intimidated by observing excellent models. It may also be true that students will not be able to interact willingly and confidently with people of the target language unless they possess a certain minimum level of language skill. Therefore, raising students' L2 proficiency in their home country is linked not only to sojourners' further gains in their self-efficacy but to their confidence and willingness to interact with the people and culture of the target language.

Acquiring a second language takes time and patience, and particularly when it comes to speaking. If Japanese students learn strategies to enhance English-speaking self-efficacy, it would greatly help them improve their speaking skills. So far, few empirical studies have examined the relationships between Japanese learners' self-efficacy and English-speaking. This encourages further research into this topic.

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APPENDIX A

SELF-EFFICACY QUESTIONNAIRE (CHAPTER 3 and CHAPTER 6)

Part ① 現在の貴方の力で、英語のスピーキングに関して、以下のことがどの程度できると感じますか。経験したことがない内容でも、そのような状況になったと仮定して、答えてください。下の尺度の 0 から 10 までで、一番当てはまる数字に〇をしてください。

<u>（注意）数字と数字の間を選ばないこと！</u>

Part ① With regard to speaking, to what extent do you think you can do the following things, as of today? Even if you have not experienced them, please answer supposing that you were in that situation. Please circle one number in the scale, from zero to ten.

<u>**Please Do Not choose between numbers!**</u>

0	1	2	3	4	5	6	7	8	9	10
全くできない					ほどほどにできる				確実にできる	
(Cannot do at all)					(Moderately can do)				(Certainly can do)	

授業中の活動 (In-class activities)（1－6）

1 事前に準備したスピーチを、授業中にうまく英語で行うことができる。

(I can smoothly deliver a speech in English which I have prepared beforehand.)

2 授業中に英語で質問されたことに対して、きちんと答えることができる。

(I can answer correctly what I am asked in English.)

3 授業中に相手の話を聞いて、うまく英語で質問をすることができる。

(I can ask some questions in English while listening to my partner.)

4 授業中に原稿の内容を忘れても、英語でスピーチを続けることができる。

(I can continue my speech in English even if I forget the content.)

5 授業中に相手に伝わる英語で、スピーチを行うことができる。

(I can deliver a speech in English for my partner to understand well.)

6 授業中に決められた時間を一杯に使って英語でスピーチを行うことができる。

(I can deliver a speech in English using the time fully.)

授業外の活動 (Out-of-class activities)（7－12）

7 見知らぬ外国人に英語で話しかけられた時に、対応できる。

(I can correspond with a foreigner in English when spoken to.)

8 見知らぬ外国人が困っている時には、英語で助けを申し出ることができる。

(I can offer help in English to a foreigner if he/she is in trouble.)

9　見知らぬ外国人とも、英語で自然なコミュニケーションをとることができる。

(I can communicate smoothly with a foreigner in English.)

10　外国人と、積極的に友人になることができる。

(I can easily make friends with foreigners.)

11　覚えた英語表現を、外国人との会話の中で自然に使うことができる。

(I can smoothly use the English expressions I have learned in conversations with foreigners.)

12　顔見知りの外国人と会った時に、英語で挨拶をすることができる。

(When I meet foreigners that I know, I can greet them in English.)

Part ②　英語のスピーキングに関して、以下のことがどの程度貴方に当てはまると感じますか。下の尺度の　0　から　10　までで、一番当てはまる数字に〇をしてください。

（注意）数字と数字の間を選ばないこと！

Part ②　With regard to speaking, how certain do you feel the things below are applicable to you? Please circle one number in the scale, from zero to ten.

Please Do Not choose between numbers!

0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
全く当てはまらない				ほどほどに当てはまる				完全に当てはまる		
(Entirely inapplicable)				(Moderately applicable)				(Completely applicable)		

Mastery experiences

13　授業中に、相手とうまく英語で話すことができた。

(In class activities, I could talk with my partner in English well.)

14　覚えた英語表現を、授業中にうまく使うことができた。

(In class activities, I could use English expressions effectively.)

15　授業中に、相手から出された質問にうまく英語で答えることができた。

(In class activities, I could correctly answer what I was asked in English.)

16　英語が通じない時には、別の表現で言い換えて対処することができた。

(I could use another expression when I could not make myself understood in English.)

17　同級生の前で、満足のいくスピーキングができた。

(I could make a good speech in front of my classmates.)

18　授業中に、相手にうまく英語で質問をすることができた。

(In class activities, I could ask my partner some questions in English.)

Vicarious experiences

19 ネィティブスピーカーと流暢に会話をしている人を見ると、尊敬する。

(I respect a person who is talking with a native speaker fluently.)

20 同級生がうまく英語で話しているのを見ると、励みになる。

(I am motivated to see my classmates speaking English well.)

21 英語の上手な先生を見ると、刺激を受ける。

(I am stimulated to see teachers who speak English fluently.)

22 英語の発音がうまい同級生を見ると、憧れる。

(I admire my classmates whose English pronunciation is excellent.)

23 同級生がスピーキングの練習を頑張っている姿を見ると、励みになる。

(It is encouraging to see my classmates practicing English-speaking hard.)

24 スピーキングが上達した友人を見ると、自分もできると思う。

(When I see my friends who have improved their speaking skills, I think I can do it, too.)

Verbal persuasion

25 自分のスピーキングに対する先生からのコメントで、やる気が出た。

(I was motivated by the teacher's comments toward my speaking.)

26 友人から自分のスピーキングを褒められて、嬉しかった。

(I was glad to be praised by my friends for my speaking.)

27 先生から「もっと英会話が上手になる」と励まされて、意欲がわいた。

(I was motivated by my teacher who said that I would be better at speaking.)

*28 先生から英語力のなさを指摘されて、意欲が落ちた。

(I was disappointed when the teacher pointed out my lack of English-speaking skill.)

29 親は、私がスピーキング力を高めることができると信じているようだ。

(My parents seem to believe that I can enhance my speaking skill.)

*30 スピーキングの改善点を人から指摘され、落ち込むことがある。

(Sometimes I feel disappointed when people tell me to improve my speaking.)

Emotional states

31 英語を使ったペアやグループ活動等を、意欲的に楽しく行えている。

(I am really enjoying pair and group activities using English.)

32 英語で会話をすることを考えるだけで、わくわくする。

(The mere thought of conversing in English makes me feel excited.)

*33 人前で英語を話す時には、緊張しておなかが痛くなる。

(I feel nervous and have a stomachache while speaking English in front of others.)

34 英語を話すことは、楽しい。

(It is fun to speak English.)

*35 英語教師から突然発言を求められて、動揺して言葉が出ない時がある。

(I sometimes get upset and cannot utter words when suddenly asked to express my opinions in English by my English teacher.)

*36 英語で会話をすることを考えただけで、不安になる。

 (The mere thought of conversing in English makes me feel nervous.)

Note. An asterisk is attached to the negative-meaning scale item. The labeling of the four sources of self-efficacy information is not shown in the actual questionnaire sheet.

Part ③ 1か月以上の海外滞在歴があれば、国名と、期間を書いてください。

Part ③ If you have experiences of staying abroad for more than one month, please write the country and the length of it.

１．国名（   ）   期間（   ヶ月/ 年）

(Country)   (Length)   (month(s) / year(s))

２．国名（   ）   期間（   ヶ月/ 年）

(Country)   (Length)   (month(s) / year(s))

３．国名（   ）   期間（   ヶ月/ 年）

(Country)   (Length)   (month(s) / year(s))

SELF-EFFICACY QUESTIONNAIRE (CHAPTER 4)

Part ① 現在の貴方の力で、英語のスピーキングに関して、以下のことがどの程度できると感じますか。経験したことがない内容でも、そのような状況になったと仮定して、答えてください。下の尺度の ０ から 10 までで、一番当てはまる数字に〇をしてください。

<div align="right">**（注意）数字と数字の間を選ばないこと！**</div>

Part ① With regard to English-speaking, to what extent do you think you can do the following things, as of today? Even if you have not experienced them, please answer, supposing that you were in that situation. Please circle one number in the scale, from zero to ten. **<u>Please Do Not choose between numbers!</u>**

0	1	2	3	4	5	6	7	8	9	10
全くできない					ほどほどにできる				確実にできる	
Cannot do at all					Moderately can do				Certainly can do	

授業中の活動（In-class activities）（１～６）

1 事前に準備したことを、授業中にうまく英語で表現することができる。

(In class activities, I can express well in English what I have prepared beforehand.)

2 授業中に英語で質問されたことに対して、きちんと答えることができる。

(In class activities, I can answer correctly what I am asked in English.)

3 授業中に相手の話を聞いて、うまく英語で質問をすることができる。

(In class activities, I can ask some questions in English while listening to my partner.)

4 授業中に即興で、様々な話題について英語で話すことができる。

(In class activities, I can talk about various topics in English on the spot.)

5 授業中に相手に伝わる英語で、会話をすることができる。

(In class activities, I can talk with my partner in English well enough.)

6 授業中に一文程度以上の長さの英語で、話しをすることができる。

  (In class activities, I can speak English with more than one sentence.)

授業外での活動（Out-of-class activities）（７～１２）

7 見知らぬ外国人に話しかけられても、英語で対応できる。

(I can communicate with a foreigner in English when spoken to.)

8 見知らぬ外国人が困っている時には、英語で助けを申し出ることができる。

(I can offer help in English to a foreigner if he/she is in trouble.)

9 現地での買い物で、必要なことを英語で伝えることができる。

(I can convey necessary things in English when shopping abroad.)

10 外国人と友人になる機会を、最大限に活かすことができる。

(I can make use of the opportunities that become available by making foreign friends.)

11 覚えた英語表現を、外国人との会話の中で自然に使うことができる。

(I can naturally use some English phrases that I have learned in the conversation with foreigners.)

12 顔見知りの外国人と会った時に、英語で挨拶をすることができる。

(When I meet my foreign friends, I can greet them in English.)

Part ② 英語のスピーキングに関して、以下のことがどの程度貴方に当てはまると感じますか。下の 尺度の ０ から 10 までで、一番当てはまる数字に〇をしてください。

(注意)数字と数字の間を選ばないこと！

Part ② With regard to English-speaking, how certain do you feel the things below are applicable to you? Please circle one number in the scale, from zero to ten.

Please Do Not choose between numbers!

0	1	2	3	4	5	6	7	8	9	10
全く当てはまらない					ほどほどに当てはまる				完全に当てはまる	
Entirely inapplicable					Moderately applicable				Completely applicable	

Mastery experiences

13 ホストファミリーと、打ち解けて英語で会話をすることができた。

(I could have a comfortable conversation in English with my host family.)

14 ホストファミリーと、テレビ番組の内容について英語で話すことができた。

(I could talk about TV programs in English with my host family.)

15 ホストファミリーに、日本や熊本のことについて英語で説明することができた。

(I could explain about Japan or Kumamoto in English to my host family.)

16 買い物をする時に、店員とうまく英語でコミュニケーションをとることができた。

(While shopping, I could communicate well with a salesperson in English.)

17 ファーストフード店などで、英語で注文することができた。

(I could order meals in English at a fast food restaurant.)

18 普通の速さで話しかけてくるネイティブスピーカーと、うまく会話ができた。

(I could communicate well with a native speaker, who spoke to me at a natural speed.)

19 ホストファミリーに、必要な要件を英語で伝えることができた。

 (I could convey necessary information to my host family in English.)

Vicarious experiences

20 友人が自分の意見を英語で述べているのを見ると、尊敬する。

(I respect my friends who express their opinions in English.)

21 日本人学生がどのようにしてスピーキング力を伸ばしていったかを聞いて、意欲がわいたことがある。

(I have been motivated by a Japanese student, who enhanced his/her speaking skills.)

22 英語の上手な先生を見ると、刺激を受ける。

(I am stimulated by teachers who are good at speaking English.)

23 同級生が流暢に英語でネイティブスピーカーと話すのを見ると、刺激になる。

(It is stimulating to see my classmates talking with a native speaker fluently in English.)

24 友人が、会話力を伸ばそうと努力している姿を見ると、自分もやる気になる。

(It is motivating to see my friends trying to enhance their conversation skills.)

25 スピーキング力が優れている友人から、刺激をうけている。

(I am motivated by my friends whose speaking skills are excellent.)

Verbal persuasion

26 英語のスピーキング力の高さを、人からよく褒められる。

(I am often praised about my speaking ability.)

27 周りの人から、英語を積極的に話す姿勢があると言われる。

(I am often said that I have a positive attitude toward speaking English.)

28 先生から、英語でのコミュニケーション能力が高いと褒められた。

(I was praised by my teacher for my splendid communication skill.)

29 ホストファミリーから、英語がうまくなったと言われて意欲が高まった。

(I was motivated by my host family telling me that my speaking skills had improved.)

30 親は、海外研修で私の英語力が伸びると信じているようだ。

(My parents seem to believe that I can enhance my speaking skills during the study abroad program.)

31 先生たちは、海外研修で私の英語力が伸びると信じているようだ。

(My teachers seem to believe that I can enhance my speaking skills during the study abroad program.)

Emotional states

32 英語で話すことは楽しい。

(It is fun to speak English.)

33 見知らぬ人外国人から話しかけられると、嬉しくなる。

(I feel good when spoken to by a foreigner.)

34 緊張せずに、ネイティブスピーカーと英語で会話をすることができる。

(I can talk to a native speaker in English without being nervous.)

35 英語で会話をしようと考えるだけで、わくわくする。

(The mere thought of speaking English makes me feel excited.)

36 恥ずかしがらずに、英語で会話をすることができる。

(I can converse in English without being embarrassed.)

37 不安を感じずに、英語を人前で話せる。

 (I can speak English in front of others without feeling anxious.)

Note. In the pre-survey, Part ① was conducted. In the post-survey, both Part ① and Part ② were carried out.

**THE RESULT OF 31 STUDENTS WHO PARTICIPATED
IN THE STUDY ABROAD PROGRAM**

Table 4.1 revised with 31 participants, Figure 4.1. revised with 31 participants, Table 4.2 revised with 31 participants, and Table 4.3 revised with 31 participants show the integrated results of the participants in the study abroad program ($N = 31$), composed of 17 participants in 2016 and 14 participants in 2017.

Table 4.1 revised with 31 participants

Correlations Among In-Class Self-Efficacy, Out-of-Class Self-Efficacy, and the Four Sources of Self-Efficacy Information, on the Pre- and Post-Surveys

	pre-ICSE	pre-OCSE	post-ICSE	post-OCSE	ME	VE	VP	ES	*M*	*SD*
pre-ICSE	1	—	—	—	—	—	—	—	4.80	1.52
pre-OCSE	.81***	1	—	—	—	—	—	—	4.55	1.50
post-ICSE	.74***	.65***	1	—	—	—	—	—	5.17	1.69
post-OCSE	.66***	.63***	.89***	1	—	—	—	—	5.60	1.75
ME	.63***	.62***	.82***	.87***	1	—	—	—	6.41	1.92
VE	.22	.24	.15	.26	.32	1	—	—	8.31	1.70
VP	.74***	.70***	.78***	.76***	.79***	.31	1	—	5.26	1.85
ES	.62***	.54***	.82***	.89***	.84***	.31	.82***	1	6.02	1.77

Note. $N = 31$. pre-ICSE = In-class self-efficacy on the pre-survey, pre-OCSE = Out-of-class self-efficacy on the pre-survey, post-ICSE = In-class self-efficacy on the post-survey, post-OCSE = Out-of-class self-efficacy on the post-survey. ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states. *** $p < .001$.
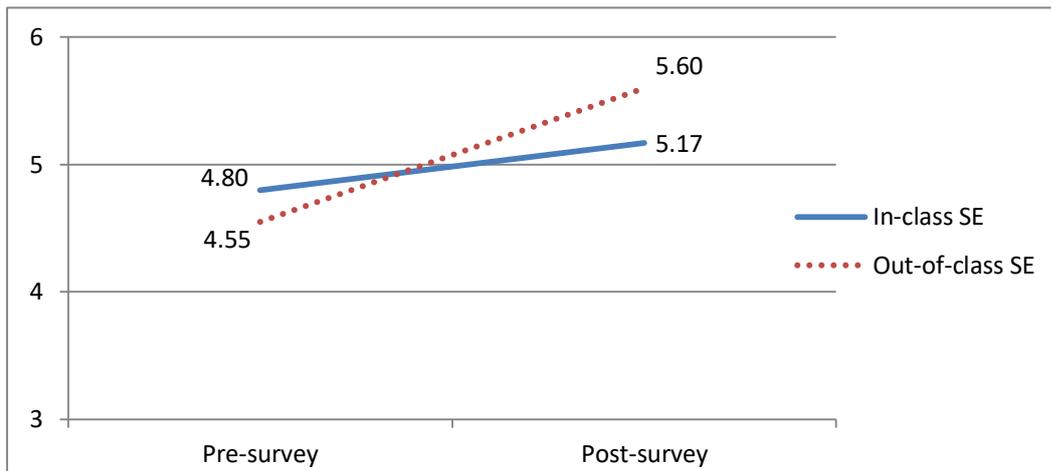
Figure 4.1. revised with 31 participants. The mean differences in self-efficacies between the pre- and post-surveys, concerning in-class and out-of-class self-efficacies.

Table 4.2 revised with 31 participants

The Result of a Paired-Sample T-test

	Mean difference	*t*	*df*	*p*	effect size *(d)*
pre-ICSE – post-ICSE	-.37	-1.77	30	.087	-.23
pre-OCSE – post-OCSE	-1.05	-4.10	30	<.001	-.65

Note. N= 31. pre-ICSE = In-class self-efficacy on the pre-survey, pre-OCSE = Out-of-class self-efficacy on the pre-survey, post-ICSE = In-class self-efficacy on the post-survey, post-OCSE = Out-of-class self-efficacy on the post-survey.

Table 4.3 revised with 31 participants

Correlations Between the Gains in In-Class/Out-of-Class Self-Efficacies and the Four Sources of Self-Efficacy Information

	g-ICSE	g-OCSE
g-ICSE	1	—
g-OCSE	.64**	1
ME	.37*	.42*
VE	-.06	.07
VP	.16	.20
ES	.38*	.53**

Note. $N = 31$. g-ICSE = Gain in in-class self-efficacy, g-OCSE = Gain in out-of-class self-efficacy. ME = Mastery experiences, VE = Vicarious experiences, VP = Verbal persuasion, ES = Emotional states.

*$p < .05$, ** $p < .01$.

APPENDIX D (CHAPTER 5)

WRITTEN STATEMENTS OF THE HIGH, MIDDLE, AND LOW
SELF-EFFICACY STUDENTS

Open-ended Questions:

1. Please write about the situations which raised your confidence in English proficiency through the language training program.

2. Please write about the situations which diminished your confidence in English proficiency through the language training program.

Appendix (Responses to Open-Ended Questions)

Ⓟ **(Positive) means gained confidence and** Ⓝ **(Negative) means lost confidence.**

Group	Written Statements
Cluster 2 **High** **SE group**	Ⓟ I was praised by the teacher, my host family, and other native speakers for my English proficiency. Ⓝ I could not communicate well with clerks, nor understand conversations between native speakers because they spoke really fast.(H1)
	Ⓟ I could mostly understand the lecturers at university except fast speakers. I asked them many questions. Ⓝ My awful pronunciation prevented me from making myself understood in English.(H2)
	Ⓟ I was praised by the teacher and my host family for my English ability. Ⓝ I could not make my partner understand my English.(H3)
	Ⓟ I enjoyed talking with the teachers at university as well as my host family. I gained confidence from understanding what others said in English. Ⓝ I sometimes had to ask my partner to repeat what he/she told me.(H4)
	Ⓟ I gained confidence from speaking English when I was praised by my host family. Ⓝ I could not convey in English what I wanted to, nor understand the clerks.(H5)
Cluster 3	Ⓟ I could understand what the native speakers said. Ⓝ I could not keep up with the speed at which native speakers spoke.(M1)
	Ⓟ My host family praised me for my improving English-speaking. They answered my questions honestly. Ⓝ I could not understand what clerks said at all.(M2)
	Ⓟ I could do some shopping. I made some Chinese friends. Ⓝ I could not keep up with the speed at which native speakers spoke.(M3)

Middle SE group	Ⓟ I talked voluntarily without worrying about grammatical mistakes. Ⓝ I could not understand what the clerks said because they spoke really fast.(M4)
	Ⓟ I could improve my listening skills. I got confidence when my host family told me that my speaking was improving. Ⓝ I could not make myself understood in English, nor understand what the clerks said at all.(M5)
	Ⓟ I enjoyed talking with my host family a lot. Ⓝ I could not understand what my partner said.(M6)
	Ⓟ I could not gain a lot of confidence, but I enjoyed talking with my host family and learned to use new words. Ⓝ My awful pronunciation and lack of vocabulary prevented me from making myself understood in English.(M7)
	Ⓟ I could understand the contents of movies. I enjoyed talking with my host family. Ⓝ I couldn't make myself understood by native speakers due to my poor pronunciation.(M8)
Cluster 1 **Low SE group**	Ⓟ At last three weeks passed and the training program was over. I was relieved. Ⓝ I could not speak English at all nor understand when others spoke in English.(L1)
	Ⓟ I could talk with native speakers other than my host family. Ⓝ I could not explain in English what I wanted to convey. (L2)
	Ⓟ I gained confidence from speaking English. I talked with my host family a lot. Ⓝ I could not find suitable words when speaking.(L3)
	Ⓟ I could listen to what others said in English. Ⓝ I found my English grammar and pronunciation were not good.(L4)

Note. N = 17. Brackets at the end of each statement correspond to the students in Table 5.2.

SELF-EFFICACY QUESTIONNAIRE (CHAPTER 7)

Items in Part ① (No. 1 to No. 12 for in-class and out-of-class self-efficacies), items for vicarious experiences (No. 13 to No. 18), and items for verbal persuasion (No. 25 to No. 30) are not shown here because they are the same as the items shown in Appendix A.

Part ② 英語のスピーキングに関して、以下のことがどの程度貴方に当てはまると感じますか。下の尺度の ０ から 10 までで、一番当てはまる数字に〇をしてください。 （注意）数字と数字の間を選ばないこと！

Part ② With regard to English-speaking, how certain do you feel the things below are applicable to you? Please circle one number in the scale, from zero to ten.

〈**Please Do Not choose between numbers!**〉

0	1	2	3	4	5	6	7	8	9	10
全く当てはまらない				ほどほどに当てはまる				完全に当てはまる		
(Entirely inapplicable)				(Moderately applicable)				(Completely applicable)		

Vicarious experiences

Scale items from No. 13 to No. 18 are omitted here. See Appendix A, from No. 19 to No. 24.

Cognitive self-modeling

19 ネィティブスピーカーの先生と会話が弾んでいる、自分の姿に憧れる。

(I envision myself communicating with a native teacher of English smoothly.)

20 ペアやグループ内での発表が上達した、自分の姿を思い描くことがある。

(I imagine myself having improved English presentations in pairs or in groups.)

21 スピーキングテストで、上手に話せている自分に憧れる。

(I admire myself when I can speak English fluently on a speaking test.)

22 相手の質問にうまく英語で答えられている自分を、思い浮かべることがある。

(I imagine myself answering my partner's questions well.)

23 英語スキットで練習の成果を発揮できた時は、励みになる。

(It is encouraging when I present fully what I practiced in an English skit contest.)

24 伝えたいことを英語でうまく表現できている、自分の姿に憧れる。

(I admire myself when I can convey well what I want to in English.)

Verbal persuasion

Scale items from No. 25 to No. 30 are omitted here. See Appendix A, from No. 25 to No. 30.

Self-persuasion

31 自分の英語のスピーキング力は、向上すると信じている。

(I believe that I can improve my English-speaking skill.)

32 ネィティブスピーカーの先生に話しかける時には、伝わるはずだと信じている。

(When I talk to a native teacher of English, I believe that I can express myself well.)

33 相手と英語で質疑応答をする時には、上手くできると自分に言い聞かせる。

(When I exchange questions and answers in English with my partner, I convince myself that I can do it well.)

34 ディベートの試合の時には、英語で相手を説得できると信じている。

(In an English debate contest, I believe that I can persuade my opponent in English.)

35 英語スキットを発表する時には、上手くできると自分に言い聞かせる。

(When I present our English skit, I convince myself that I can do it well.)

36 英語のスピーキングテストでは、自信を持てと自分に言い聞かせる。

(On an English speaking test, I convince myself to be confident.)