

Assessing Intercultural Competence:
A Comparative Study of Japanese Students
in Study Abroad Programs

by

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Leadership, Higher and Adult Education
Ontario Institute for Studies in Education
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Abstract

This study explores the elements of study abroad programs that contribute to cultivating intercultural competence in Japanese students. Through an empirically based quantitative and qualitative examination of 344 Japanese students on short and medium-term study abroad programs in Canada and the United States, the research attempts to gain an understanding of the factors that enhance the development of intercultural competence.

The primary findings show that the impact of study abroad programs can be heightened by arranging pre-departure orientations for all students according to specific student and program factors. Sending students abroad without carefully designed institutional arrangements to facilitate the development of intercultural competence is shown to be ineffective. This study looks at three student factors - gender, prior international experience and prior foreign language proficiency and five program factors - program duration, program type, stay type, destination and pre-departure orientation. The findings clearly demonstrate the importance of providing students with pre-departure orientations and both foreign language training and intercultural education. Furthermore, understanding students' intercultural competence in the pre-study abroad period is essential to determine program duration. This study indicates that both short and medium-term study abroad programs are effective for students whose intercultural competence is at the lower level prior to departure, while medium-term programs are more effective for students whose intercultural competence is at a higher level.

At the national level, the Japanese Ministry of Education is advised to encourage universities to develop guidelines to increase the effectiveness of study abroad programs and a policy on developing appropriate personnel for cultivating students' intercultural competence.

The study has not only identified concrete empirical factors in study abroad programs that impact changes in students' intercultural competence, but also elaborated policy implications at the institutional and national levels that would enhance the development of intercultural competence for Japanese students in study abroad programs.

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Chapter One: Introduction

Background Contexts

Internationalization of higher education has changed higher education modalities. It has encouraged national policy makers, higher education institutions, and individual faculty and students to look at domestic higher education from an international perspective. For example, policy makers in many countries realize the importance of raising research, teaching quality and administration of domestic higher education institutions to a world-class level, in order to attract competitive human resources and foster economic and social development (Altbach, Reisberg, & Rumbley, 2009). It is also true that greater numbers of students study abroad, enrolling in foreign higher education institutions to seek higher education degrees that are internationally reputable and competitive in international labor markets. According to IDP Education Australia, the number of students who study abroad is expected to increase from 2 million in 2003 to 7.6 million people by 2025 (Böhm, 2003). Because of the drastic expansion in the number of international students, student mobility is a highly significant trend in the internationalization of higher education.

In the literature on the internationalization of higher education, student mobility is seen as an important dimension of internationalization. Knight (2008) indicated that internationalization of higher education has two significant aspects: cross-border education and internationalization at home. Cross-border education is defined as “the movement of people, knowledge programs, providers, curriculum, etc. across national or regional jurisdictional borders” (Knight, 2008, p xi). Student mobility specifically deals with the physical mobility of students, faculty and researchers. The expansion of student mobility has in turn stimulated the internationalization of campuses (at home), bringing in such features as intercultural and

international dimensions of teaching, learning, research, extracurricular activities, intercultural skills, and relationships with local cultural community groups (Knight, 2008).

In Japanese higher education, it is likely to be recognized that student mobility, more specifically, increasing the number of Japanese students who go abroad to study at foreign universities and receiving international students at Japanese universities by promoting study abroad programs, is almost equivalent to the internationalization of higher education. This is because student mobility has been particularly emphasized in the internationalization of Japanese higher education. For example, in *Japan Revitalization Strategy - Japan is Back*, which Prime Minister Shinzo Abe and his cabinet released as a fundamental policy on June 14th, 2014, it is mentioned that the Japanese government aims to offer all motivated Japanese university students opportunities to study abroad by creating national financial aid programs (The Prime Minister of Japan and His Cabinet, 2013). This policy was created with the intention that overseas study opportunities be expanded in higher education to foster globally competitive human resources. In concrete terms, the policy aims to double the number of Japanese students who study abroad, from about 60,000 in 2012 to 120,000 in 2020, as a way of promoting the internationalization of Japanese higher education (The Prime Minister of Japan and His Cabinet, 2013).

The purpose of this policy is to increase the number of Japanese outgoing international students who study at foreign higher education institutions. Considering the number of incoming international students who study at Japanese higher education institutions, Japanese higher education has been enjoying a drastic increase. For example, the number of incoming students increased from 73,812 in 2001 to 137,756 in 2012 (JASSO, 2015). By contrast, the number of Japanese students who studied at foreign higher education institutions decreased over the same period. In fact, the number of Japanese international students decreased from 78,151 in 2001 to 60,138 in 2012 (MEXT, 2015). This sharp plunge in the number of Japanese students studying

abroad has been a major concern in Japanese higher education, leading to a new agenda that focuses on increasing study abroad opportunities.

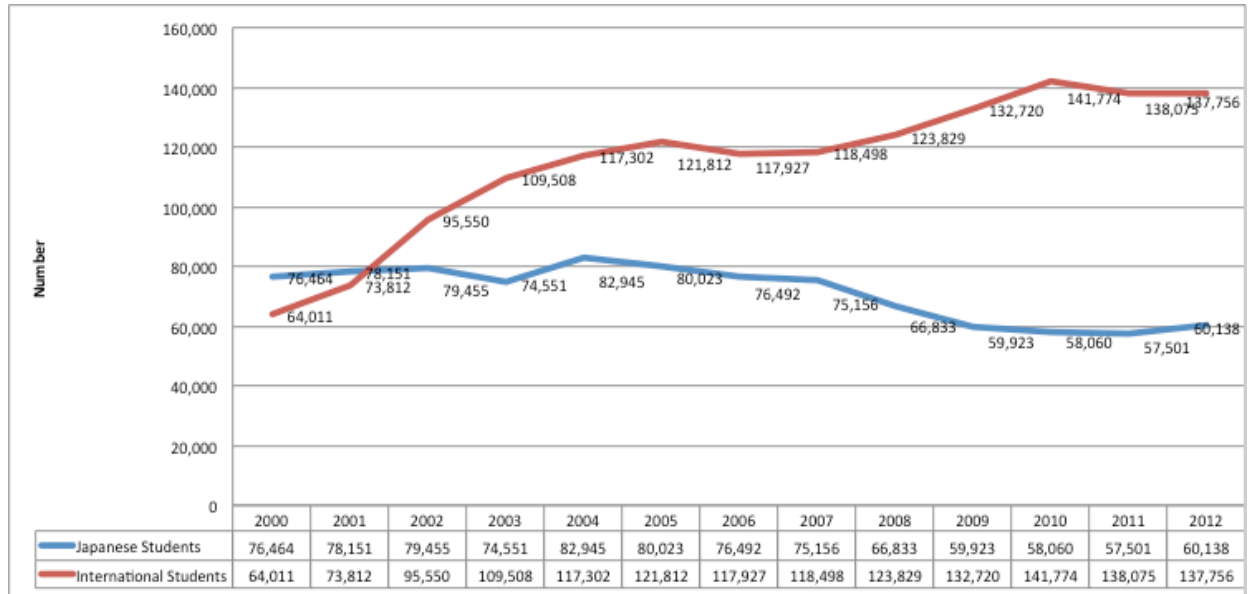


Figure 1.1.

Number of Japanese Students Studying Abroad & International Students Coming to Japan

Source: MEXT (2015) & JASSO (2015)

Some have argued that a primary reason for this decline is the rise in Japanese students' tendency to be introverted, which, in Japanese contexts, means that students are not interested in going overseas because it is more comfortable to stay in Japan, where they grew up. This argument has been presented in some Japanese policy papers (e.g., GHRDC, 2010; METI, 2009). However, it may be an over-hasty explanation for the decline. It should be noted that the declining numbers above include all Japanese students who registered at foreign higher education institutions, regardless of whether they were full-time students at foreign institutions or so-called "study abroad students," who are full-time students at Japanese universities that participate in an education program at foreign universities for a certain period of time. Looking only at the number

of study abroad students, it is not necessarily true that a tendency towards introversion among Japanese students is a significant factor in the decline. In fact, Table 1.1 indicates that this number increased by 48.7 percent between 2009 and 2011, from 36,302 students to 53,991. Among some types of short-term study abroad programs, in particular the number of students participating in study abroad programs of less than one month, the highest increase was recorded over the same period, i.e., a 71.4 percent increase. Programs for short-term study in North America were the most popular for Japanese students and in these, there was an 84.2 percent increase over the same period.

Table 1.1.

The Number of Japanese Students on Japanese Home University Provided Study Abroad

Programs

(Worldwide)

	Less than 1 month	1- 3 months	3- 6 months	6 months - 1 year	1 year or more	Total
2011	28,920	6,709	6,412	10,609	1,341	53,991
2010	20,787	5,420	5,805	8,058	2,162	42,320
2009	16,873	4,810	4,999	8,499	1,081	36,302
2011/2009	171.4%	139.5%	128.3%	124.8%	124.1%	148.7%

(North America)

	Less than 1 month	1- 3 months	3- 6 months	6 months - 1 year	1 year or more	Total
2011	7,587	2,231	3,125	4,187	468	17,598
2010	6,187	1,860	2,980	3,096	816	14,939
2009	4,118	1,505	2,648	3,418	345	12,034
2011/2009	184.2%	148.2%	118.0%	122.5%	135.7%	146.2%

Source: JASSO (2013, 2012 & 2011)

Short and Long-term Study Abroad Programs

As Table 1.1 indicates, short-term study abroad programs have been more popular recently than long-term study abroad programs in Japanese higher education. There are three major reasons why. First, sending more Japanese students abroad has been recognized as a key national educational agenda item. A primary factor is that Japanese corporations request forms of education that will nurture talent that can take a role in globalizing their businesses. A common definition of this kind of talent in the Japanese context is “global human resources” or “*global jinzai*,” which, in Japanese means the kind of talent that possesses intercultural competence, foreign language proficiency and social skills. In response to national policy to increase the number of Japanese study abroad students to 120,000 by 2020, universities are expected to provide more students with opportunities to join in study abroad programs. Second, short-term study abroad programs are more affordable for students than long-term study abroad programs. As mentioned in more detail in chapter Two, there are three major impediments for students who wish to participate in study abroad programs: finance, conflict with the job hunting season, and the lack of university support. Short-term study abroad programs are less affected by these impediments. Third, a primary purpose of participating in study abroad programs for many students is to gain intercultural experience and improve language proficiency. Both of these are required skills for *global jinzai*.

However, it is not true that long-term study abroad programs no longer attract attention in Japanese higher education. In fact, Table 1.1 shows that the number of students participating in study abroad programs of from more than 1 month up to a 1-year duration also increased in the same period (39.5 percent increase in 1- 3 months programs, 28.3 percent increase in 3- 6 month programs, 24.8 percent increase in 6 month -1year programs and 24.1 percent increase in 1 year or more between 2009 and 2011). There are many previous studies which conclude that long-term

programs might be better for students in developing intercultural competence, as they enable students to be immersed in another culture for a longer time period than short-term study abroad programs. Nonetheless, it is also true that the number of students who join long-term study abroad programs is a relatively small population compared to the number in short-term study abroad programs. Given the three major impediments to student participation in study abroad programs noted above, short-term study abroad programs are recognized as a feasible way to provide students with an international experience of study in foreign countries, enabling them to spend time with people from different cultural backgrounds. Therefore, they have received attention in recent years as short-term study abroad programs boom.

Classification of Study Abroad Programs in This Study

There are many types of study abroad programs provided by Japanese universities. These programs can be classified along two dimensions: program mode and duration. Program mode refers to the content of the study abroad programs, such as study tours, non-credit foreign language education and study abroad programs for academic credit. Duration refers to the length of study abroad programs such as three-week, six-month and one-year programs. In terms of program mode, this study covers programs in which “undergraduate students physically go abroad to participate in education at foreign institutions for a certain period”. It also covers academic credit programs provided by partnerships between students’ home and host universities, in which students participate in regular fulltime curricular programs at a host university. English language programs during summer or spring vacation are also included in this definition. By contrast, enrollment in a foreign university as a fulltime student is not included in this definition. Furthermore, study at international branch campuses in home countries, which are operated under the name of foreign universities, is not recognized as a study abroad program.

In terms of duration mode, this study covers programs of up to 6 months in length. The question arises as to how programs are defined as either short-term or long-term. In *The Guide to Successful Short-Term Programs Abroad* published by the Association of International Educators (NAFSA), an association of individuals worldwide advancing international education, Spensor & Tuma (2002) note that the definition of short-term study abroad programs abroad has changed significantly over the last 50 years. Dwyer (2004) noted that while there has been a drastic increase in the number of students studying abroad, the duration of time spent abroad has decreased consistently over the past 16 years. Short-term was generally recognized as a year long period in the early years, and then as a semester, and now as a 1 to 8 week program. Donnelly-Smith (2009) also pointed out that short-term study abroad programs range from week-long programs conducted during spring break as part of a single course curriculum, to 3 to 4-week programs in summer vacation, to up to 8-week programs. Looking at previous scholarly studies, in fact, different researchers defined the duration of study differently, as 2-week (Jessup-Anger & Aragonés, 2013; Mapp, 2012; Fairchild, Pillai, & Noble, 2006), 3-week (Nam, 2011), 4-week (Anderson, Lawton, Rexeisen & Hubbard, 2005), 5-week (Jackson, 2008; Chieffo & Griffiths, 2004) and 6-week (Allen & Herron, 2003). Others noted program ranges as 1 to 4-week (Gordon, Heischmidt, Sterrett, & McMillan, 2009), 1 to 6-week (Davidson, 2007), and up to 8-week (Donnelly-Smith, 2009). These studies show that there is no universally applicable duration for the definition of short-term study abroad programs.

Looking at Japanese contexts, on the other hand, the majority of short-term study abroad programs take place during semester-off vacation periods in summer (August and September) and spring (February and March), mainly in the form of 3 or 4-week intensive programs. In fact, many short-term programs in Canada and the United States provided at Japanese universities were 3 or 4-week intensive English language, intercultural programs during summer and spring vacations.

Therefore, the duration of short-term study abroad programs in this study is “less than 4-week programs.” By contrast, a long-term study abroad program is defined as a program of “more than 4 weeks and up to 6-months.” To distinguish 1-year programs from “more than 4 weeks and up to 6-month programs” in the description of long-term study abroad programs, this study calls more than 4 week and up to 6-month programs “medium-term study abroad programs.”

Under this classification, first, there are few previous studies that have conducted an assessment of the impact of short-term study abroad on the development of students’ intercultural competence (Zamastil-Vondrova, 2005). Second, there are few previous studies that focus on developing intercultural competence in Japanese students who study abroad on both short and medium-term study abroad programs, even though intercultural competence is one of three major competences for *global jinzai*. Therefore, there is a need to explore the comparison between short and medium-term study abroad programs for cultivating intercultural competence in the case of Japanese participants.

Research Questions

Based on this background situation, this study explores empirically the impact of study abroad programs for cultivating intercultural competence in Japanese students who join study abroad programs. Through an empirically based quantitative and qualitative examination of students in study abroad programs, this study will attempt to gain a greater understanding of the factors pertaining to the development of intercultural competence in Japanese students through both short and medium-term study abroad programs, the differences in the degree of development and the factors responsible for the development of intercultural competence. Developing intercultural competence in this study refers to cognitive, affective and behavioral development

relating to cultural differences. More specifically, it denotes deepening self-awareness of cultural differences, understanding cultural differences and adapting one's behavior to cultural differences.

The main research questions of this study are:

- I. To what degree do Japanese study abroad programs that send students to Canada and the United States have a measurable impact on their intercultural competence between their pre and post-study abroad periods?
- II. What factors in study abroad programs contribute, either positively or negatively, to the development of students' intercultural competence?
- III. What, if any, are the differences between short and medium-term study abroad programs, in the degree to which they develop intercultural competence among study abroad students?
- IV. Given the results of the above analyses, what implications are there for Japanese international higher education policies at national and institutional levels in the promotion of study abroad programs?

Purpose of This Study

This study aims to contribute to policy development for international higher education at institutional (university) and national levels in Japan through examining students' development of intercultural competence through study abroad programs. In concrete terms this study will:

- i. Measure the degree of development of intercultural competence of Japanese students before and after their periods of study abroad in the two countries.
- ii. Explore factors contributing to that development by looking at the reciprocal relationship between the development of intercultural competence and students' study abroad

experiences.

- iii. Develop implications for Japanese international education policies at institutional and national levels about study abroad programs.

Hypothesis of This Study

The hypothesis guiding this study is that the development of intercultural competence through study abroad depends on both student profiles and program profiles during students' study abroad. The combination of each of the variables has an influence on the degree of development of Japanese students' intercultural competence. This analysis seeks the optimum combination of variables. This study uses the following student profiles and program profiles.

Table 1.2.

Student Profiles and Program Profiles

Student Profiles	Classification	Program Profiles	Classification
Gender	<ul style="list-style-type: none"> • Male • Female 	Program Duration	<ul style="list-style-type: none"> • Short-term • Medium-term
Prior International Experience	<ul style="list-style-type: none"> • No experience • Up to 21 days • 22 days or more 	Program Type	<ul style="list-style-type: none"> • English language program • Cultural Program • Academic-credited program
Prior English Language Proficiency	<ul style="list-style-type: none"> • No score • TOEIC 499 or lower • TOEIC 500 – 700 • TOEIC 701 or higher 	Stay Type	<ul style="list-style-type: none"> • Homestay • Dormitory
		Pre-departure Orientation	<ul style="list-style-type: none"> • Yes • No
		Destination	<ul style="list-style-type: none"> • Canada • United States

Significance of This Study

There are two significant aspects to this study: the contribution to academic research in (1) the impact of study abroad programs in developing intercultural competence and (2) the internationalization of Japanese higher education.

The most significant contribution of this study is to go beyond some limitations of previous scholarly work on study abroad programs. Previous studies suggested that short-term programs have positive impacts on the development of intercultural attitudes and skills. However, there are some limitations in previous studies, regardless of whether they be English or Japanese language studies, that may affect the conclusions. First, they are limited to small samples. In fact, most previous studies included less than 50 students. Second, many of them are limited to students at a single institution. Third, most dealt only with American students. It is questionable whether an investigation of Japanese students would yield similar results. Fourth, the research method used in most studies was either a quantitative or qualitative examination after return from study abroad.

This study moves beyond previous research, in that it will investigate the impact of study abroad programs on the development of their participants' intercultural competence through a more complete approach. First, this study will look at the impact through a longitudinal pre-test and post-test research design using both quantitative and qualitative methods. Second, this study will examine about 344 Japanese students from 13 different institutions. Third, this study will account for the degree of differences based on the following variables: three aspects of the student profiles and five aspects of the program profiles. These variables are utilized to determine the extent of impact on the development of intercultural competence and the kinds of combinations which create that impact.

As for the contribution to the internationalization of Japanese higher education, the unique aspect of this study is its focus on the impact of study abroad programs in terms of cultivating intercultural competence in Japanese students, an area in which there exists very little empirical research so far. In fact, many previous Japanese studies on this topic focused on the case of receiving international students from overseas. Additionally, there are few studies detailing factors influencing the development of students' intercultural competence through study abroad using both qualitative and quantitative research. This study seeks to explain the reciprocal relationships between the dependent variable of intercultural competence developed in Japanese students through study abroad and the independent variables of student profiles and program profiles. It could be used as a reference for developing academically effective study abroad programs in terms of student profiles and program profiles. The study would thus be highly significant in terms of the empirical data it could provide that would support improvement in the short-term programs in which Japanese student participation rates are especially high.

Second, Canada and the United States were deliberately selected as the primary host countries for Japanese students in this study. This region is important in terms of national policy, so this study should be socially useful, given its overlap with broader policy discussions in Japan.

Third, the results of this study will be useful to study abroad coordinators in both Japan and host countries, so that educators and researchers can gain a better understanding of Japanese students. A study written in English is also valuable in light of the relatively limited amount of research on this topic.

Conceptual & Theoretical Frameworks

Based on the hypothesis of this study, the conceptual framework of this study can be briefly sketched in the following figure:

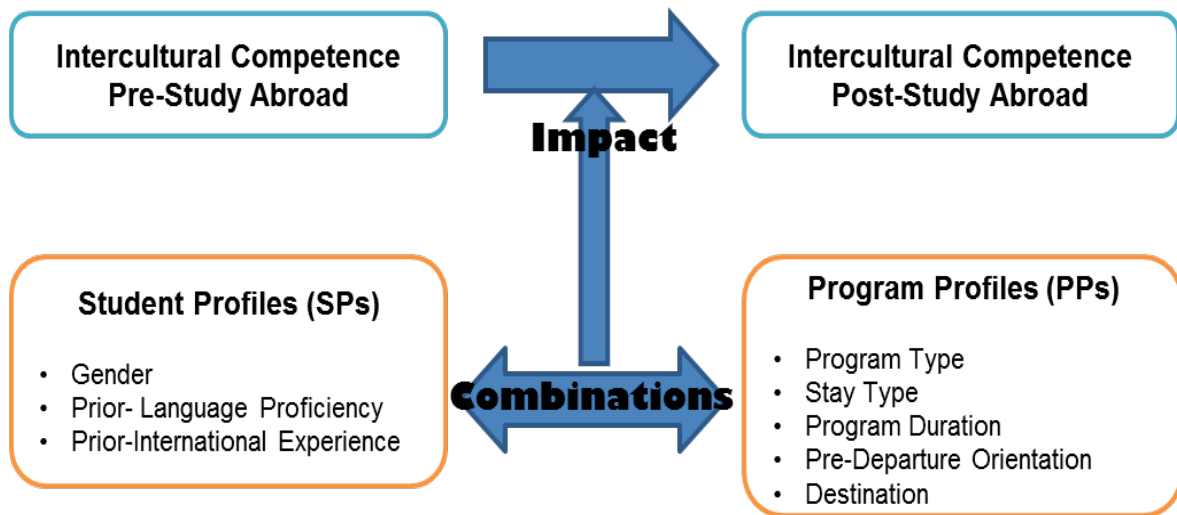


Figure 1.2.

Analytical Framework

The significant challenge of this study is to analyze the impact of study abroad on Japanese students' development of intercultural competence through a mixed method analysis. In order to achieve such a goal, it is essential to measure students' intercultural competence twice: before they study abroad and after they study abroad, using a standardized measurement instrument. By controlling the student and program profiles, a comparison of the changes in intercultural competence between pre and post study abroad will clarify the impact of study abroad on the students' development. For this reason, this study will use the Developmental Model of Intercultural Sensitivity (DMIS) developed by Bennett (2004 & 1993) and the revised Intercultural Developmental Continuum (IDC) developed by Hammer (2011, 2009 & 2003) as its

theoretical framework. A detailed discussion of DMIS and IDC is found in a section of Chapter Three entitled “Approach of This Study.”

Organization of the Thesis

This thesis is organized into six chapters. Chapter One gives an overview of the background context to this study, by identifying the need for *global jinzai* in Japanese society, the reason why study abroad programs are promoted at Japanese higher education institutions, and the reason why there is a need to conduct an empirical study about the impact of study abroad programs on the development of intercultural competence.

Chapter Two provides a more detailed review of literature about the background context introduced in Chapter One. Chapter Two covers three areas of literature: (1) Japanese *Global Jinzai* policies as they relate to promoting the internationalization of higher education based on the research concepts of the internationalization and globalization of higher education, (2) previous research on study abroad programs and intercultural competence in the English and Japanese languages and (3) previous studies relating to the eight variables examined in this study. The purpose of this chapter is three-fold. As *global jinzai* is a unique concept in Japanese society, this chapter reviews the Japanese context for *global jinzai*. Second, intercultural competence is sometimes confused with other cross-cultural skills learned through study abroad, such as intercultural communication. This chapter reviews the definition of intercultural competence etymologically and historically and discusses previous literature in English and Japanese, which specifically focuses on intercultural competence and study abroad programs. Finally, this chapter reviews previous literature relating to the eight independent variables covered in this study that may impact study abroad programs.

Chapter Three presents the research methodology in this study in three sections. The first section reviews major methodological approaches relating to research on intercultural competence.

After the review, the research approach used in this study is described. The second section introduces the research methods and design of this study. The last section explains research procedures relating to the recruitment of participants, data collection, the pilot study and data analysis.

Chapter Four addresses the data analysis pertaining to the first research question, “To what degree do Japanese study abroad programs that send students to Canada and the United States have a measurable impact on students’ intercultural competence between the pre and post- study abroad periods?” It then moves to the second research question, “What factors in study abroad programs contribute positively and negatively to the development of intercultural competence in students?” The results are presented through both quantitative and qualitative analysis.

Chapter Five aims to deepen understanding of the data results presented in Chapter Four. It interprets the findings from both quantitative and qualitative data results, which were shown separately in Chapter Four. Also it compares the findings of this study to those of previous studies reviewed in Chapter Two, the literature review chapter, to discover similarities and differences between previous studies and this one. Finally this chapter discusses research question III, whether there are differences between short and medium-term study abroad programs, in the degree to which they develop intercultural competence among study abroad students.

Chapter Six discusses major implications derived from the data analysis and discussion. It suggests various measures which would improve programs at institutional levels, as well as implications for national policy in relation to the goal of developing students’ intercultural competence through study abroad programs. After summarizing the major findings of this study, it suggests some main points to be considered in future studies.

Chapter Two: Literature Review

This chapter consists of two major sections. The first section reviews the Japanese policy literature in order to focus on the background of this study, especially the reason why sending Japanese students overseas in study abroad programs has been promoted in Japanese higher education. This section covers six subsections: (1) the basic concepts of the internationalization and globalization of higher education and the differences between them, (2) why *global jinzai* is needed from social and economic perspectives, (3) what competences are required in *global jinzai*, (4) the role of higher education in fostering *global jinzai*, (5) three major hurdles students face in relation to study abroad, (6) why short-term study abroad programs are viewed as a breakthrough to overcome the three hurdles, and (7) what new national funding programs have been developed in Japan to foster *global jinzai*.

The second section explores previous academic studies about study abroad programs and intercultural competence. This section has six subsections: (8) English studies about study abroad programs and intercultural competence, (9) some studies particularly relating to the independent variables in my study, (10) the definition of intercultural competence, (11) an etymological exploration of the words “intercultural” and “competence” through a review of the concepts of culture, intercultural and competence, (12) the historical development of intercultural competence as a research area, (13) major theoretical frameworks and models related to intercultural competence and (14) Japanese studies on study abroad programs and intercultural competence.

The Internationalization and Globalization of Higher Education

In Japanese higher education, the terms internationalization and globalization of higher education are often used interchangeably. A reason for this is that these terms are originally from

the English language literature and are simply translated into Japanese, such that the meanings behind the English terms are not likely to be conveyed. Some Japanese government policy papers about the internationalization of Japanese higher education make statements such as the following: “due to the advent of globalization of higher education, it is expected that universities will send more Japanese students overseas and receive more international students to Japanese universities.” In addition, international education (*kokusai-kyouiku* in Japanese), crossborder education (*kokkyou-wo-koeru-kyouiku*) and transnational education (*toransu-nashonaru-edukeishion*), the three popular terms used in internationalization of higher education are also used interchangeably. In order to define what this study is going to contribute to the research on internationalization of higher education, therefore, it is essential to state the scope of this study through clarifying the above terms.

Understanding the difference between internationalization and globalization of higher education is a basic step in looking at the concept of internationalization of higher education. Teichler (1999) developed an approach to clarify the commonalities and differences between the two terms. According to him, both terms focus on the international dimension of educational modalities and include perspectives beyond domestic higher education. While internationalization treats cross-border activities in higher education and relations between countries, globalization covers worldwide movements, which is closely linked to a priority for global technological and economic competitiveness. Furthermore, internationalization focuses on physical mobility of education, international academic cooperation and academic knowledge transfer, while globalization emphasizes the knowledge economy, the market economy and the commercialization of knowledge transfer.

Altbach et al. (2009) defined globalization and internationalization by comparing their influences on higher education. Globalization is defined as “the broad economic, technological,

and scientific trends that directly affect higher education and are largely inevitable in the contemporary world.” (Altbach et al., 2009, p 23). Its influence on higher education includes the knowledge economy, information technology, use of a common language, highly skilled human resource development and the private goods trend in the commercialization and trade liberalization of higher education. On the other hand, internationalization refers to “specific policies and programs undertaken by governments, academic systems and institutions, and even individual departments to deal with globalization” (Altbach et al., 2009, p 23).

Finally, Knight (2008, p 4) defined globalization as “a multi-faceted process that can impact countries in vastly different ways – economically, culturally, politically and technologically.” As five key elements of globalization, she pointed to the knowledge society, information and communication technologies, the market economy, trade liberalization and changes in governance structures (Knight, 2008). As for the definition of internationalization, in 2008, Knight updated the definition she developed in 1994, since she believed internationalization had evolved in its modality in the turbulence facing higher education. In 1994, Knight first defined the internationalization of higher education as the “process of integrating an international and intercultural dimension into the teaching, research and service functions of the institution” (Knight, 2008, p 20). The term “process” is deliberately used to emphasize the characteristics of the internationalization of higher education as an evolving modality. For example, the definition specifically focused on institutional levels but in this century Knight (2008) stressed internationalization at both national and institutional levels. In 2008, thus, she updated the definition as “the process of integrating an international, intercultural and global dimension into the purpose, function or delivery of higher education at the institutional and national levels” (Knight, 2008, p 21).

The three scholars suggest that the globalization of higher education is a worldwide force which involves not only higher education but also economics, culture and technology. On the other hand, the internationalization of higher education emphasizes relations in higher education between countries, such as in educational programs and cooperation.

Of the above three scholars, Knight (2008) developed the most detailed concept of the internationalization of higher education: that the internationalization of higher education has two streams in its process: “cross-border education” and “internationalization at home.” Cross-border education is defined as “the movement of people, knowledge, programs, providers, curriculum, etc. across national or regional jurisdictional borders” (Knight, 2008, p xi). The expansion of the movements stimulated campus (at home) internationalization such as intercultural and international dimensions of teaching, learning, research, extracurricular activities, intercultural skills, and relationships with local cultural and community groups (Knight, 2008).

The meaning of “cross-border education” can be clarified by comparing it with international and comparative education. International education covers a more comprehensive modality than cross-border education. Epstein (1994) and Wilson (1994) observed that international education and comparative education have been often used interchangeably and clarified the differences between the two terms. According to Epstein (1994), international education puts more emphasis on practical policies and educational programs in terms of the international dimension of higher education, while comparative education focuses more on historical, philosophical and social theories related to education. Wilson (1994) stated that international education is related to practical policies and programs, while comparative education consists of more scholarly work about the international dimension of education. As an example, much of the work of international education seems to be practically conducted in international educators’ organizations such as the Association of International Educators (NAFSA), the

Institute of International Education (IIE) in the United States and the European Association for International Educators (EAIE) in Europe, while comparative education is more related to scholarly organizations such as the Comparative and International Educational Society (CIES) and the World Council of Comparative Education Societies (WCCES).

Cross-border education specifically refers to the international physical mobility of people, programs and educational institutions (Knight, 2008). In greater detail, Knight (2008) conceptualized three generations of cross-border higher education. The first generation is the mobility of people, which includes students, faculty and researchers. The next generation is program mobility, which covers the mobility of educational programs such as twinning, joint and franchise programs and providers and institutions which foreign educational providers establish. Also, educational centers or research centers in foreign countries. As the newest trend in cross-border education, the third generation is the educational hub, which is “a concerted and planned effort by a country (or zone, or city) to build a critical mass of local and international actors to strengthen its efforts to build the higher education sector, expand the talent pool or contribute to the knowledge economy”(Knight, 2013, p375).

Within cross-border education, transnational higher education especially focuses on the offshore educational programs where learners and degree or certificate awarding institutions are located in different countries. UNESCO and the Council of Europe (2001, p 1) defined transnational higher education as “all types of higher education study programmes, or sets of courses of study, or educational services (including those of distance education) in which the learners are located in a country different from the one where the awarding institution is based”. In this definition, the different location between learners and institutions is emphasized to differentiate it from cross-border education, which includes physical mobility whether of students, programs or educational institutions. For example, Australia was one of the first countries to use

the term “transnational higher education” in the early 1990s. The intent was to differentiate international students who study at Australian home campuses and those who study at offshore campuses. On the other hand, Knight (2008) mentioned that the definition of transnational higher education becomes unclear when we look at international branch campuses as a new educational setting. The international branch campus is a modality of offshore education but it is not necessarily true that learners and the awarding institution are located in different countries. In the case of the United Arab of Emirates (UAE), for example, as only UAE nationals are eligible for enrollment in UAE public universities, international branch campuses are expected to provide an alternative opportunity for access to higher education for expatriates. In this case, both learners and institutions are located in the UAE, although the international branch campus is a form of transnational higher education (offshore education) in the context of the Australian home campus. Therefore, it is crucial to recognize that the various educational modalities in the internationalization of higher education are not fixed but evolving.

This study focuses on the development of intercultural competence in Japanese students through study abroad programs. Given the above definitions and clarifications, it focuses on student mobility, a type of mobility in the first generation of cross-border education in the internationalization of higher education.

The Social and Economic Background to Why Japan Needs Global Jinzai

This section looks at the reason why the Japanese government is eager to promote cross-border education, especially by increasing the number of Japanese students who study abroad. The key term to explain the logic of the Japanese government is *global jinzai*. Economic and social changes in Japan have been stimulating the rising need for *global jinzai* and sending Japanese students abroad is recognized as a promising and effective way to foster *global jinzai*.

From World War II until the burst of the bubble economy in 1991, Japan enjoyed a very fruitful period of economic development. For example, the average GDP development rate was 9.1 percent between 1956 and 1973. This economic success was praised worldwide. Ezra Vogel (1979) published a book entitled *Japan as Number One* and examined the factors in this dramatic development. However, after the economic bubble burst in 1991, Japan experienced hard economic times, the so-called “lost 20 years.” After these 20 lost years, Japanese leaders are trying to stimulate the economy and create a new economic development strategy. A primary example is the New Growth Strategy developed by Abe and his cabinet.

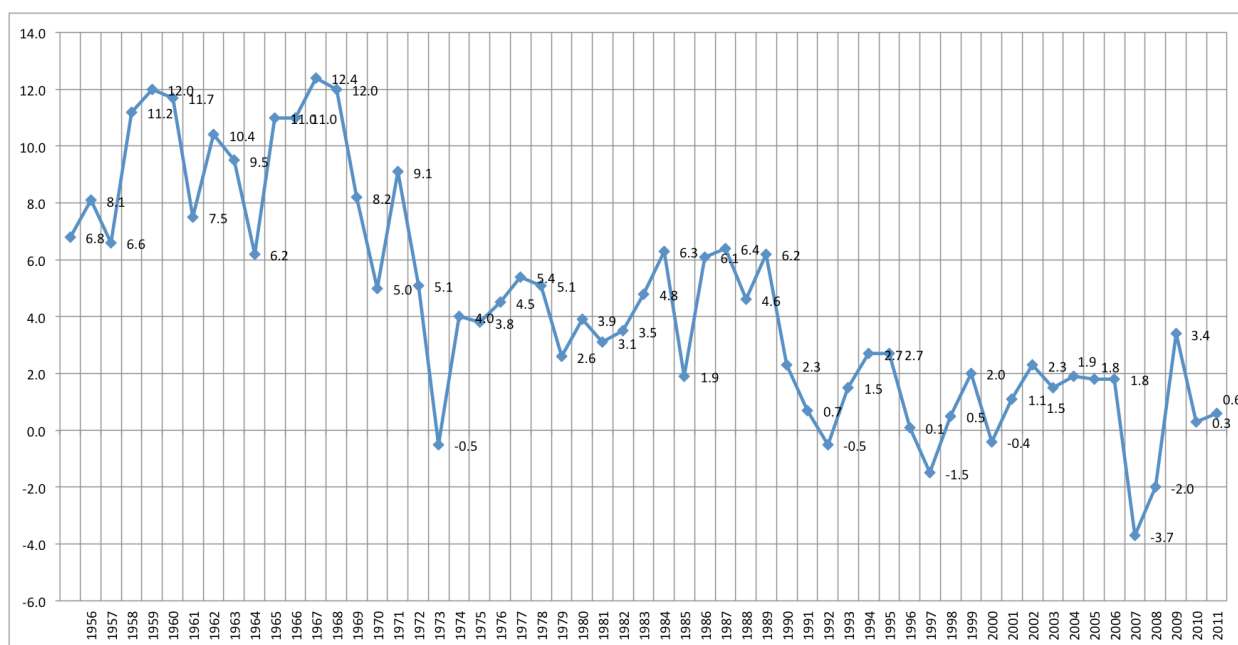


Figure 2.1. Transition of Japanese Substantial GDP

Source: Honkawa Data Tribune (2014)

There are two major new developments in this new era. First, Japanese society will experience continuous decrease in its population, while the world population is expected to increase continuously until 2100. According to Honkawa Data Tribune (2013), the population in

Japan will decrease by 33.7 percent between 2010 and 2100, while the world population will increase by 56.9 percent over the same period. Because of the overall decrease in the Japanese population, the workforce population will also decrease. This will lead not only to the maturation of the domestic consumption market and economic activities but also to the relative shrinking of the Japanese presence in the world economy. In fact, Japan is expected to keep the third largest GDP up to 2025, though the gap with the United States and China will be expanded. In 2050, furthermore, it is anticipated that Japan will be ranked in the seventh position on a GDP basis in the world economy. Meanwhile, consumption markets in emerging countries, mainly in Asia and Africa, are expected to grow at a fever pitch. In particular, the Asian developing countries are expected to expand middle-income markets, which are the potential buyers of automobiles, home appliances and high value-added services, expanding nine-fold between 2000 and 2020 to approximately two billion people (METI, 2010).

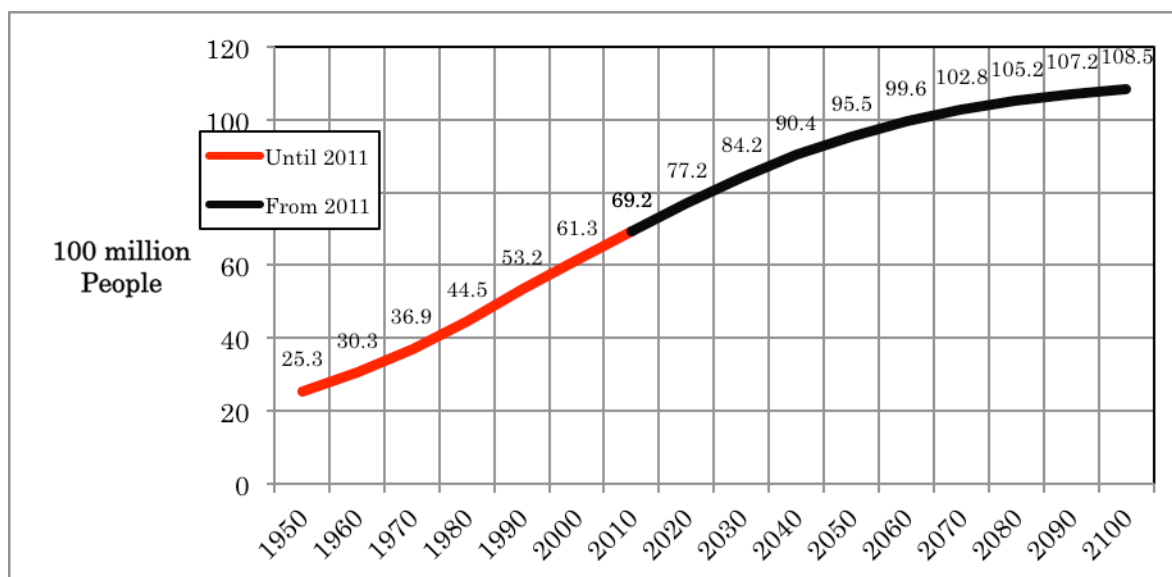


Figure 2.2. World Population Prediction

Source: Honkawa Data Tribune (2013)

Population Growth Rate (%) between 2010 and 2100

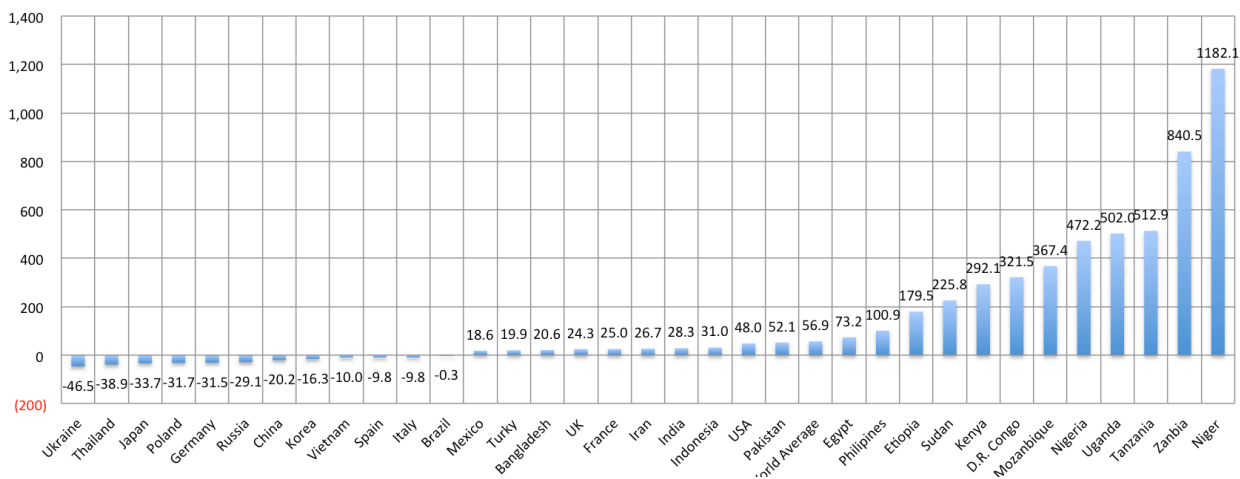


Figure 2.3. World Population Prediction by Countries

Source: Honkawa Data Tribune (2013)

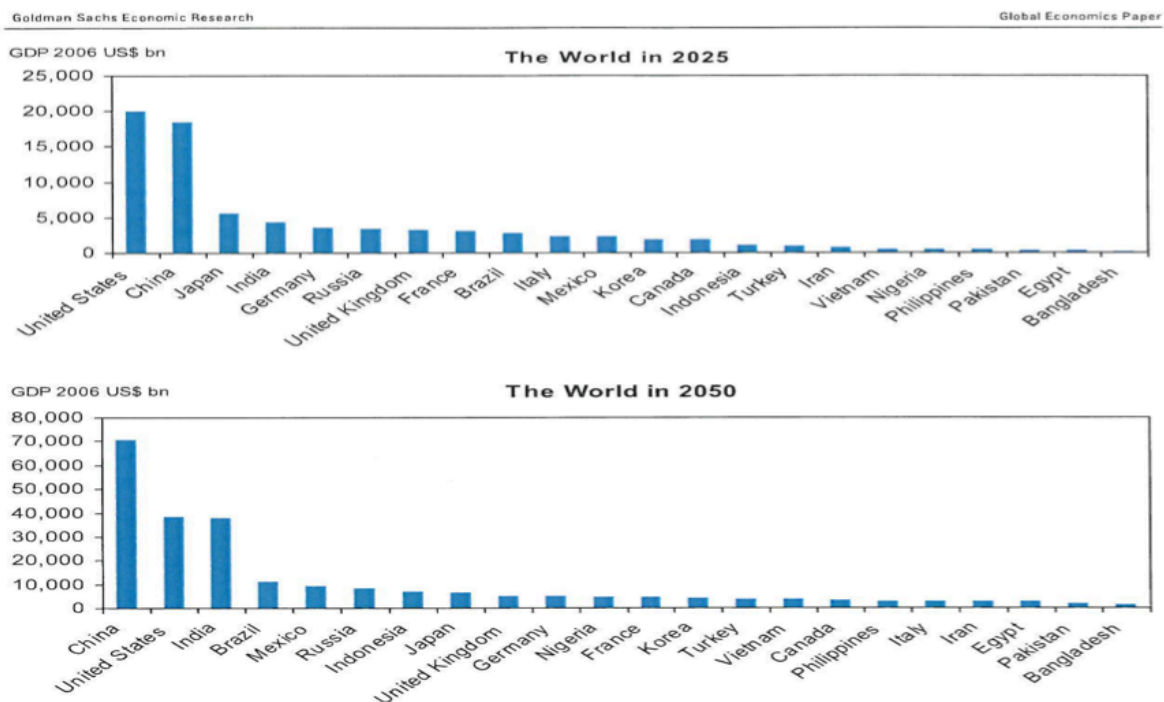


Figure 2.4. GDP Prediction in 2025 and 2050

Source: Goldman Saches (2007)

Given these factors, Japanese companies are focusing on their business activities in overseas markets. These developing countries will become even more important markets than they are now. Amid the expansion of emerging markets, many Japanese companies will need to actively advance into these countries in order to survive. However, the current presence of Japanese companies in the emerging markets is relatively small, due to the robust performance of Korean companies and the rise of Chinese companies in China's burgeoning domestic market. In the four years from 2005 to 2009, the number of Japanese companies listed in the top 20 places of the Fortune Global 500 has fallen from 15 to 10 (METI, 2009). One reason that is pointed out for this is that many Korean and Chinese companies established local subsidiaries employing business models suited to local needs, while Japanese companies continued to make decisions from their headquarters in Japan, leading them to fall behind their counterparts in creating business models suited to local market needs and business customs.

Against this background, Japanese companies are growing increasingly aware of the need to globalize by establishing and effectively operating local subsidiaries, in order to create business models suited to local needs and business customs. In fact, the Japan Federation of Economic Organizations surveyed 263 Japanese companies about the issue of recruiting *global jinzai* who can set up and run their subsidiaries, and they found that 74.1 percent of them answered that the lack of *global jinzai* was a management issue (GHRDC, 2010).

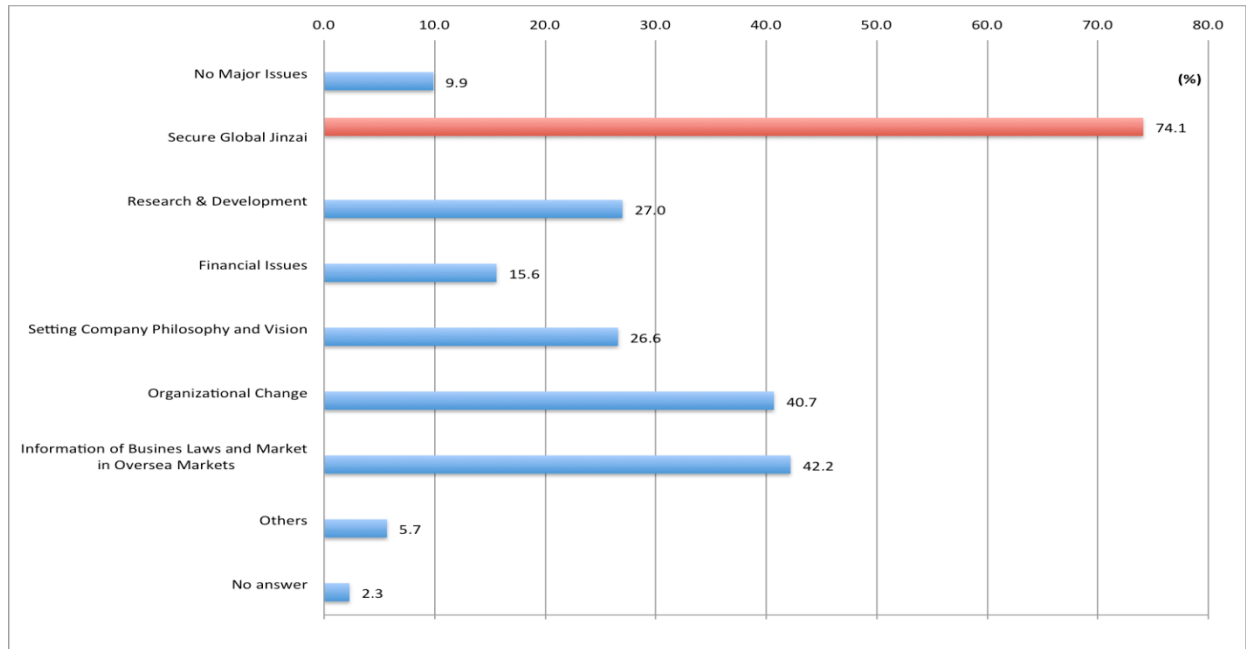


Figure 2.5. Major Agendas for Japanese Companies for Operating Global Business

Source: GHRDC (2010)

Competence of Global Jinzai

The three main skills that companies demand from *global jinzai* are "social competence", "intercultural competence", and "foreign language proficiency"(GHRDC, 2010).

I. Social Competences

These refer to the most basic social skills of adult persons, and thus are not a unique competence of *global jinzai*. METI (2009) indicated 12 concrete examples. Some examples include the ability to constantly maintain a can-do spirit, the ability to make objective judgments and the ability to adapt to changing situations.

II. Intercultural competence

Global jinzai are expected to know about cultural differences stemming from different cultural and historical backgrounds. They must not only possess knowledge of these differences, but must experience and recognize their presence. Therefore, learning through experience is thought to be an effective way of providing students with knowledge of cultural differences. To understand cultural differences and adapt to them, it is important for people to interact with people of varying cultural backgrounds by immersing themselves in environments that let them experience foreign cultures at first hand. Furthermore, students must objectively understand their own culture before they can understand a foreign culture. Objectively reviewing how people overseas view Japan and its culture, history and people, is thought to be effective in the development of *global jinzai*, so study abroad programs are seen as effective for achieving this purpose.

III. Foreign language proficiency

There is particular emphasis on English as it is a lingua franca used in business throughout Asia.

The Role of Higher Education in Fostering Global Jinzai

While Japanese companies hire local employees at their local offices, many of them recognize the need to cultivate *global jinzai* at home. In a METI (2009) survey, approximately 70 percent of companies answered that they needed to train more Japanese employees to have intercultural and foreign language proficiency in step with the globalization of their foreign business operations. This shows that companies are well aware of the need to improve training and education so they can cultivate Japanese employees who can work overseas.

Meanwhile, discussions on the roles that university education should play in the development of *global jinzai* are heating up. Universities are expected to promote study abroad programs, because these are seen as a means to provide students international experiences and end an observed shift away from outward-orientation in young people, something antithetical to the formation of *global jinzai* in the future. In the youth lifestyle survey conducted by Nomura Research Institute in 2008, youth in their 20s and 30s who were expected by Japanese companies to become *global jinzai*, showed a remarkably low acceptance of the idea of working in foreign countries (GHRDC, 2010; METI, 2009). While they were receptive to having foreign friends and communicating with them, they were incredibly hesitant about working overseas regardless of whether the destination was a Western or an emerging developing country (GHRDC, 2010; METI, 2009). In addition, the number of Japanese students who study abroad has dropped dramatically and the percentage of youth in their 20s, who leave Japan for overseas travel or other reasons, has also declined (GHRDC, 2010; METI, 2009). To this end, sending university students on study abroad programs around the age of 20 is thought to be an effective way of increasing their receptiveness to foreign cultures.

Major Hurdles for Students to Study Abroad

While universities are expected to provide students more opportunities for participating in study abroad programs, there are three major hurdles to such participation. It cited a survey released by Recruit Marketing Partners in 2011, to 7,502 senior-year high school students who had received university enrollment acceptance. In this survey result, 40.4 percent of the students were not interested in participating in study abroad programs in the next four years in undergraduate programs, while 32.8 percent were interested in joining the programs (Recruit Marketing Partners, 2011). However, even for the 32.8 percent of the students who had an interest

in the programs, the survey indicated three major hurdles likely to prevent students from joining study abroad programs: finance, conflict with the job hunting season and the lack of university support. Furthermore, the Benesse survey, involving university students and faculty at 345 universities, including national, public and private universities, also showed the same three factors as major disincentives for study abroad (Benesse Educational Research and Development Institute, 2012).

The first and biggest disincentive is financial. In the Benesse survey, 59.7 percent of faculty at the 345 universities answered that they had students who gave up their ambitions to join study abroad programs because of financial barriers (Benesse Educational Research and Development Institute, 2012). Nonetheless, 41.7 percent of faculty noted that students had few chances to get scholarships to support study abroad, regardless of whether they were university or externally funded programs. In fact, 68.0 percent of the students who did not study abroad noted that they wanted to but gave up because of financial problems.

The second major factor is the conflict between study abroad and job hunting. 39.1 percent of faculty answered that students are often afraid to sacrifice time from job hunting by participating in study abroad programs (Benesse Educational Research and Development Institute, 2012). While it is not uncommon for university students in North America to start job hunting either before or after graduating from school, Japanese university students have to start when they are in the second half of their third year. This is due to the unique Japanese social structure. Japanese companies have two clear job recruitment categories: new university graduates and career experience categories. The new university graduate category is exclusive to university students and candidates are not expected to have any prior job experience. Most of the students apply for this category. As this category is usually only open from fall in the third year until summer in the fourth year, most candidates start job hunting during this precise period. If they fail

to find a job in this period and graduate from university the next spring, they lose graduate qualification and then have to apply for the career category, in which candidates are expected to have some prior job experience. Therefore, timing of job hunting is very important for most university students. If students join in 6-month study abroad programs when they are in their third year, there is a risk they will miss time in job hunting. On the other hand, they are not likely to be foreign language proficient when they are in their second year. Because of this conflict in the timing of study abroad and job hunting, many students are reluctant to study abroad.

The third factor is the lack of a university support system at the home campus before study abroad. This is mainly due to the lack of support for foreign language teaching and intercultural education for study abroad candidates at the home campus. In fact, 39.8 percent of students who gave up joining study abroad programs also mentioned their lack of confidence in their language proficiency as a major barrier to study abroad. Moreover, 38.0 percent of faculty answered that the lack of university support, especially in foreign language education programs, is a major issue for prospective study abroad students.

Short-term Study Abroad as a Breakthrough

Long-term study abroad is not always feasible for the majority of students because of the above barriers. On the other hand, short-term programs are seen as a feasible choice for Japanese students and faculty.

Recruit Marketing Partners' survey indicated that short-term study abroad programs could serve to overcome the hurdles. In fact, students answered that the most realistic study abroad duration would be 1 to 2 weeks (20.9 percent), more than 2 weeks up to 3 months (26.3 percent), more than 3 months up to a year (46.2 percent) and more than a year (23.7 percent). On the other hand, students' learning objectives through study abroad are ranked as "broadening their

own perspectives (75.0 percent)”, “speaking a foreign language (74.1 percent)”, “understanding foreign cultures and values (62.2 percent)”, “experiencing life in foreign countries (57.0 percent)”, and “exchange with foreign people (52.3 percent)” (Recruit Marketing Partners, 2011). It can be seen that these objectives are more practical and experience-focused than academic-focused. Many of the short-term study abroad programs provided in Canada and the United States aim at cultivating these practical experiences. Given the students’ needs in relation to the duration and purpose of study abroad, short-term study abroad is viewed as the target of highest value for expanding the number of study abroad programs. In the Benesse survey as well, 77.2 percent of 219 faculty members will focus on programs which aim at cultivating students’ foreign language education and international experiences (Benesse Educational Research and Development Institute, 2012).

In conclusion, there are some advantages to short-term study abroad programs. First, they are short in duration and focus on practical and experience-oriented programs which are requested by students. Second, a short-term program is a practical way to avoid conflict with job hunting. Third, a short-term program such as an English language program does not require prior foreign language proficiency so the question of students’ proficiency does not become an issue.

New National Funding Programs

Given the social need to foster *global jinzai* and the three major hurdles for university students to study abroad, MEXT has developed a series of new funding programs to support universities and individual Japanese students to promote internationalization, including study abroad. The budget for internationalization has increased drastically in the last five decades. In 2008, MEXT budgeted 42.1 billion yen (approximately 421 million US dollars) for the internationalization of higher education (MEXT, 2008). Among all items, only 0.6 billion yen was

allocated to support Japanese students to study abroad, while 39.1 billion yen was for support to international students. It shows that MEXT gave highest priority to the intake of international students just five years ago. The emphasis on international student support had been continuous since MEXT began the 100,000 International Student Intake Plan in 1983. In 2008, this intake plan was updated to 300,000. This shows why internationalization of higher education for Japan was almost equivalent to the intake of international students.

Table 2.1.

Budget for Internationalization of Higher Education (Year 2008)

Category	Amount
Support for International Students <ul style="list-style-type: none"> • Scholarship • Dormitory Support • Job Hunting Support 	39.1 Billion Yen
Public Relations to Advertise Study Abroad to Japan <ul style="list-style-type: none"> • Support for Building University Networking between Japanese and foreign universities • Increase the Number of Test Centers of Japanese Language Proficiency Test in Oversea • Advertise Japanese Higher Education to Promote International Students Intake 	2.4 Billion Yen
Support to Japanese Students for Study Abroad <ul style="list-style-type: none"> • Scholarship 	0.6 Billion Yen
Total	42.1 Billion Yen

Source: MEXT (2008).

On the other hand, the budget for internationalization of higher education was allocated at 70.3 Billion yen most recently (MEXT, 2014a). Compared to the budget for 2008, two big changes can be seen in the budget for 2014. First, the 2014 budget covers both “Internationalization at Home” and “Internationalization Abroad”, while the 2008 budget covered only “Internationalization Abroad.” Second, the 2014 budget particularly emphasizes supporting Japanese students to study abroad, while the 2008 budget almost exclusively supported international students. In the 2014 budget, “Internationalization of University Research and Education to World-Class Levels” are specifically targeting “Internationalization at Home.” To be more specific, the “Top Global University Project” is a new program starting in 2014, to promote structural reform at selected Japanese universities to elevate their research and education to a world-class level. The structural reform includes every element necessary for development in research, education and university management. World-class in MEXT’s context means the top 100 in the Times Higher Education Ranking. This project selected 13 universities to be world-class research universities and grant up to 1,000 million yen annually for the next 10 years. In addition, another 24 universities were selected as education universities and granted up to 260 million yen annually for the next 10 years. The “Go Global Japan initiative” more specifically focuses on developing education and university support to develop future *global jinzai*. This program started in 2012 to support selected universities for up to five years on a merit base. As of the end of 2013, 42 universities have been selected (MEXT, 2014b).

“Developing International Education Programs” is categorized in “Internationalization Abroad.” Specifically, the “Re-Inventing Japan Project” aims at supporting universities to build partnerships with foreign universities in international education programs, such as study abroad programs, to foster future *global jinzai* (MEXT, 2011). The important point is that it is an essential requirement to build mutual study abroad programs between Japanese and foreign

universities; i.e., universities on both sides need to send and receive students. This program began selecting universities in 2011 and actually started working in 2012. A unique point of this program is that it targets different regions for foreign universities by MEXT every year; i.e., North America and Northeast Asia in 2012, Southeast Asia in 2013, and Russia and India among other countries in 2014.

“Support to Japanese Students for Study Abroad” is also a remarkable change in “Internationalization Abroad.” 14.4 Billion yen is allocated to support Japanese students to study abroad on scholarships, while there was only 0.6 billion yen for scholarships in the 2008 budget. The objective of this drastic increase in the budget is to provide study abroad experience to all Japanese students who wish to study abroad. More specifically, they intend to support 500 students for more than a year of study abroad and 32,000 students for programs of less than a year provided by Japanese universities, and finally achieve the goal of providing 10 percent of students in their early twenties with study abroad experience.

Table 2.2.

Budget for Internationalization of Higher Education (Year 2014)

Category	Amount
Internationalization of University Research and Education to World-Class	23.0 Billion Yen
<ul style="list-style-type: none"> • Top-Global University Project • Project for Promotion of Global Human Resource Development • Re-Inventing Japan Project (e.g., CAMPUS Asia) 	(15.6 Billion Yen) (4.2 Billion Yen) (3.1 Billion Yen)
Support to Japanese Students for Study Abroad	14.5 Billion Yen
<ul style="list-style-type: none"> • Scholarship • Public Relations to Advertise Japanese Students 	(14.4 Billion Yen) (0.1 Billion Yen)
Support to International Students for Study Abroad to Japan	32.8 Billion Yen
<ul style="list-style-type: none"> • Scholarship 	
Total	70.3 Billion Yen

Source: MEXT (2014a)

These new funding programs are expected to ease the three major hurdles for students. Expanding scholarships for Japanese students to study abroad is expected to serve as a solution to the financial hurdle while the “Top University Project”, the “Go Global Japan initiative”, and the “Re-Inventing Japan Project” are expected to serve as a solution to the lack of university education support.

As for the conflict between the job hunting season and the study abroad season, in addition MEXT has started a discussion about the “Gap Term”. The Gap Term is meant to move the start of the university academic calendar from the current spring semester to the fall semester (MEXT, 2014c). Traditionally, the Japanese university academic calendar starts in April and ends

the next March. As mentioned earlier, this calendar makes it difficult for students to join study abroad programs because it conflicts with the job hunting season. Introducing a Gap Term is expected to serve as a solution to this conflict and provide more students opportunities to join study abroad programs. For example, if third-year students start a new academic year from the fall semester, they can study abroad from the fall semester and return to home universities the next spring. It enables students to secure more time to prepare for job hunting, which would begin in the fall of their fourth year.

English Studies as a part of Study Abroad and Intercultural Competence

In general, one might think that long-term study abroad programs bring greater benefits in fostering intercultural competence than short-term study abroad programs. This supposition is based on the premise that the length of time students can be immersed in a foreign culture largely influences the development of students' intercultural competence. If we look at previous studies, however, the supposition is not universally demonstrated. This section will review the four major types of literature on the development of students' intercultural competence through study abroad programs: (1) comparative studies which examined both short and long-term study abroad programs, (2) studies which focus on the benefits of short-term study abroad programs, and (3) studies which utilized the IDI as an instrument of assessment.

First, different studies demonstrated different benefits from study abroad programs. For example, they pointed out the development of several dimensions of intercultural competence such as cross-cultural/intercultural sensitivity (Nam, 2011; Gilin & Young 2009; Anderson et al., 2005; Medina-López-Portillo, 2004), an appreciation for other cultures (Fry, Paige, Jon, Dillow, & Nam, 2009; Pence & Macgillivray, 2008; Lindsey, 2005; Thomlison, 1991), intercultural or multicultural awareness (Fairchild et al., 2006; Chieffo & Griffiths, 2004), cross-cultural

adaptability (Mapp, 2012), intercultural or multicultural knowledge (Cordero & Rodriguez, 2009; Fairchild et al., 2006; Poole & Davis, 2006), and global engagement (Fry et al., 2009). Second, there are previous studies that examined the impact of duration on students' development by comparing short and longer term study abroad programs. In a study to discover the impact of duration on the development of intercultural learning, Engle & Engle (2004) investigated differing influences on the development of French language learning and intercultural understanding among American students, who joined in a study abroad program in France for between a semester and a year. In this study, students who participated in a year-long program showed more development in intercultural understanding than those in a semester-long program. Kehl & Morris (2008) compared global-mindedness between three groups of students. One group joined in a study abroad program for a semester. Another group participated in a short-term program up to 8 weeks, and the third group was made up of students accepted to study abroad who had not yet departed. This study found that the students who studied abroad for a full semester showed significantly higher levels of global-mindedness than those students on short-term study abroad programs, and those who remained in the home country. Moreover, the students who studied abroad on short-term programs showed no statistically significant differences from those who did not study abroad. This study concludes by noting the importance of study abroad duration for the development of the intercultural mindset. Vande Berg, Connor-Litton, & Paige (2009) made specific note of the importance of program duration for the development of intercultural competence. In their study, American students who participated in 8-12 weeks, or about a one semester study abroad, showed the greatest increase in their intercultural development. This study also examined students participating in 4-7 week and 8-12 week programs. It showed a negative impact for students in the 4-7 week program and very small development for those students in the 8-12 week program. In order to reinforce the intercultural development, Vande Berg et al. (2009)

proposed the need for intervention in student intercultural learning abroad, especially for students who participate in shorter duration programs.

On the other hand, Fry et al. (2009) found a number of positive effects of short-term programs. In this study, they examined 6,391 participants and pointed out a variety of benefits of short-term programs. As a conclusion to the study, they indicated that the duration of study abroad for the development of consciousness regarding global engagement does not matter. Dwyer (2004) also found students who participated in a 6-week program experienced as much growth in intercultural development as students who joined in a semester-length study abroad program. Thus, she indicated that the impact is impressively shown regardless of the length of term. She also pointed out that the impact coming from less than a 6-week program is a topic for future research.

Third, there are previous studies that focused on the effect of short-term study abroad programs on the development of students' intercultural competence. As noted in Chapter One, short-term study abroad programs range from weeklong programs to up to 8-week programs and different researchers defined the duration of study differently as 2-week (Jessup-Anger & Aragonés, 2013; Mapp, 2012; Fairchild, Pillai, & Noble, 2006), 3-week (Nam, 2011), 4-week (Anderson, Lawton, Rexeisen & Hubbard, 2005), 5-week (Jackson, 2008; Chieffo & Griffiths, 2004) and 6-week (Allen & Herron, 2003). Others noted program ranges as 1 to 4-week (Gordon, Heischmidt, Sterrett, & McMillan, 2009), 1 to 6-week (Davidson, 2007), and up to 8-week (Donnelly-Smith, 2009). For example, Mapp (2012) examined the development of cross-cultural skills in undergraduate students who attended a 2-week program in Ireland, Thailand and Vietnam. Using both quantitative and qualitative analysis, they concluded that there is a significant change in students' development of cross-cultural adaptability between the pre and post-program periods. Chieffo & Griffiths (2004) investigated the impact of 5-week programs. They compared students'

attitudes about global awareness between those who finished a 5-week winter course on the home campus with those who completed short-term study abroad programs. They concluded that study abroad students had greater global awareness. Gilin & Young (2009) examined 16 students who joined in a 10-days program in Italy. They found four major areas of students' development: increased awareness of connection between social policies and practices, new ideas for practice, deepened empathy and respect for other cultural groups, and an expansion and consolidation of their professional identity. Poole & Davis (2006) examined 24 students who attended a 2-week program in Mexico. They found five positive outcomes: social welfare and social services, Mexican culture and history, Mexico - U.S. relationships, and Mexican recreation and leisure, with the highest development of personal knowledge and growth.

Fourth, there are some previous studies, which used IDI as a standardized instrument judging the development of intercultural competence. Anderson et al. (2005) discovered the impact on intercultural sensitivity of 23 students who joined a 4-week study abroad program in England and Ireland. Students took the IDI before their program abroad and four weeks later on their return to the United States. The result showed a 4-week programs could have a positive impact on the development of cross-cultural sensitivity. Jackson (2008) investigated 14 Chinese English major students who joined in a 5-week program in England. The IDI was used to judge the change in intercultural sensitivity of Chinese students between pre and post-study programs. He found that the development of intercultural competence does not always parallel linguistic competence. In this study, intercultural sensitivity may lag far behind language proficiency. He suggested that the learning of intercultural competence is a challenging process that "students need to work on before, during, and after a study abroad experience, no matter the length of the sojourn. Residence in the host culture does not automatically produce interculturality" (p.357).

There are at least four major limitations in previous studies, as mentioned earlier in the “Significance of The Study” Section. First, they are limited to small samples. In fact, most previous studies used less than 50 participants. Second, many of them are limited to participants at a single institution. Third, most samples included only American students. It is questionable whether an investigation of Japanese students would yield similar results given the different context. Fourth, the research method of most studies was either a quantitative or qualitative examination at the time of return from study abroad.

Japanese Studies on Study Abroad and Intercultural Competence

While the above previous studies in English focused on the impact of study abroad for the development of intercultural competence in terms of sending students overseas, many previous Japanese studies on this topic mainly focused on receiving international students from overseas. That is because MEXT’s policies for the internationalization of higher education specifically focused on receiving international students from overseas. This section briefly reviews Japanese higher education policies for internationalization and previous Japanese studies on the topic from 1983, when the Ministry of Education (MOE, the former education ministry of MEXT) first implemented policies for internationalization, to 2008, when Japanese higher education started to focus on both “Internationalization at Home” and “Internationalization Abroad.”

The first national policy related to the internationalization of higher education in Japan was the 100,000 International Students Plan (100,000 Plan) started in 1983 (Ebuchi, 1997). In the early 1980s, the number of international students at Japanese higher education institutions was extremely low compared to the numbers in other industrialized countries. In fact, the number in Japan was 8,116 in 1982, while the United States had 311,882 in 1980, France 119,336 in 1982,

West Germany 57,421 in 1979, and England 52,889 in 1980 (MOE, 2002). In order to increase the number, the Japanese government formulated the 100,000 Plan with some proposals to enhance the attractiveness of Japanese higher education for international students. The objectives of the 100,000 Plan can be summarized as follows:

- I. Help developing countries in terms of human resource development by providing educational opportunities to international students at Japanese higher education institutions, as part of Japan's contribution to international cooperation.
- II. Promote friendship between Japan and other countries at the national level by inviting international students to Japan.
- III. Promote cultural diplomacy at the individual level by increasing the number of people who are friendly toward Japan.

These objectives stressed creating friendships with Asian countries, increasing the number of foreign Japanophiles overseas, and promoting Japan's intellectual contribution to the world. These were political agendas to give Japan appeal as a country open to the world. Inviting international students was recognized as a way to achieve these objectives.

Under these contexts, the Japanese government implemented the 100,000 Plan. Although the name of this plan had a specific numerical goal, it also sought to reform the college and university education system in order to attract international students. According to Kitamura (1984), Umakoshi (1997), Ebuchi (1997) and Terakura (2009), Japanese higher education in the 1980s faced three major issues. First, improvement in the quality of college and university education was needed to meet global standards to attract more international students. In many cases, international students at Japanese colleges and universities had to take specially arranged programs, which were often exclusively for them. Being segregated, international students could

not expect to experience a deep level of interaction with Japanese students. Japanese institutions paid little attention to the educational meaning of the interactions between international and domestic students on campus. Second, doctoral program reform was needed to attract international graduate students. In determining the offer of a degree, Japanese doctoral programs often stressed the number of students' academic publications and the contribution to supervisors under their research apprenticeship. On the other hand, there was little coursework or course teaching. Third, the improvement of immigration policy was an institutional issue. The application process for international student visas was very complicated and it discouraged prospective international students from choosing Japan as a destination. Moreover, the regulation about students' qualification for part-time jobs was very strict and it made it difficult for students to study and live in Japan.

Although the MOE and Japanese colleges and universities acknowledged the necessity for reform in relation to all of the above three points, the numerical goal of 100,000 was strongly emphasized. The MOE strongly focused on reforming not only educational but also practical aspects; i.e., reforming immigration policy, as it was a convenient way to increase the number of students. In fact, Terakura (2009) and Shiraishi (2006) pointed out that immigration policy was substantially the key factor, which influenced the rise and fall of numbers of international students. In the end, improving education remained a minor issue. The 100,000 Plan was achieved in 2003 and the 300,000 Plan started as the next phase, beginning in 2008.

Given that background, Japanese scholars have mainly conducted research about international students in terms of the cultural adaptation of international students to Japanese universities and society, the educational effects of study abroad in Japan for the promotion of friendship etc. One of the pioneering studies was a series of surveys based on social psychological analysis of international students from European, North American and Asian countries about their

academic and life experiences in Japan (Iwao & Hagiwara, 1988 & 1987). On the other hand, single country case studies were about Chinese (Endo & Wang, 2002 & 1996), Korean (Tei, Zhang, Yoshida, & Endo, 2000), Taiwanese (Yoshida & Huang, 2001) and Thai students (Kampeeraparb, 2002). A recent study looked at Thai and Indonesian students (Sato, 2010). This study revealed that international students viewed the quality of education at Japanese universities as lower than that in universities in the US and European countries. Of particular note, specially arranged education programs do not meet the needs of international students. In graduate schools, there are a considerable number of students who face difficulty adjusting to the Japanese research atmosphere and forming relationship with faculty and colleagues. This meant that the circumstances described as a major issue in 1980s have still not been remedied in the 2010s.

In another study, which focused more on conceptual research, Kitamura (1984) reviewed Japanese higher education after World War II and indicated the characteristics of Japanese higher education in terms of research and education as viewed by foreign students. This research was highly beneficial, as Kitamura first translated the concept of the international dimension of higher education into the Japanese language. After that, Ebuchi (1997) reviewed the literature on the international dimension in Japanese higher education after World War II and he first introduced the concept of the internationalization of higher education into the Japanese language. Furthermore, Ebuchi (1997) classified international student intake policies into six models by comparing those of the United States, England, France, Germany and Canada: (1) Personal Career Model, (2) Foreign Aid Model, (3) International Education Model, (4) Scholastic Network Model, (5) Partnership Model, (6) Customer Model and (7) Global Community Model. According to this classification, he concluded that Japanese international student intake policy had strongly reflected the Foreign Aid and International Education Models. On the other hand,

Japanese higher education was relatively weak in pursuing financial benefits through promoting internationalization (Ebuchi, 1997).

Studies Relating to the Independent Variables Used in This Study

This study uses eight independent variables: Gender, Prior International Experience, Prior English Language Proficiency from students profiles, and Program Duration, Program Type, Stay Type, Pre-Departure Orientation and Destination from program profiles. In addition to the aforementioned study abroad duration, this section reviews previous empirical studies, which examined the impact of study abroad on fostering intercultural competence from different perspectives.

Gender is often paid attention to among scholars and international educators, as a popular variable to explain the difference in the development of intercultural competence through study abroad. Nichols (2011) revealed that gender differences have an impact on the development of intercultural competence in study abroad. She concluded that women were more likely to choose to take intercultural and targeted language courses. Furthermore, women were more active in meeting frequently with a faculty member and intercultural professionals to discuss cultural adjustment. Thomlison (1991) also found that females experienced more changes relating to personal and cultural awareness through study abroad.

Prior international experience should be examined because control factors relating to students' intercultural competence before study abroad are essential in examining the impact of study abroad between pre and post- study periods in precise ways. Understanding students' intercultural competence before study abroad is a focal point for examining the study abroad impact between pre and post- study abroad. Vande Berg et al. (2009) examined how previous experience living in different cultures affected intercultural competence. They concluded that

there was no significant relationship between students who have lived in different cultures and those who have not. It also showed that students who had never lived in a different culture started out with the lowest level of intercultural competence but showed the greatest development.

Williams (2005) analyzed the impact of prior immersion in different cultures before study abroad on the development of intercultural competence. Exposure to different cultures included having close friends from another culture, previous experiences of traveling or living abroad, attending religious services outside of one's own religion, taking intercultural courses, learning a foreign language, or attending intercultural exhibitions.

Prior language proficiency is also an important factor to control in looking at the change in students' intercultural competence between pre and post- study periods. This refers to one's foreign language proficiency in the official languages of the destination country before study abroad. Smith, S., Paige, R. M., & Stegtlitz, I. (2003) examined the relationship between intercultural communication competence, language proficiency and cultural adjustment. In their study, greater language proficiency led to greater cultural understanding and greater ability to make good relationships with host-country nationals. In addition, a good relationship facilitated further language capabilities and cultural adjustment (Smith et al., 2003). Allen & Herron (2003) followed 25 undergraduate students who joined a 6-week study abroad program to France. By a quasi-experimental study with a control group of non-study-abroad students, they found that the participants significantly improved both French speaking and listening capabilities, along with a decrease in anxiety. The Vande Berg et al. (2009) study found that students who had previously studied language in high school and college had greater development of intercultural competence that was statistically significant in comparison to those who had not. Lafford (1995) showed highly positive results for the impact of study abroad on speaking, at least with regard to conversational ability by comparing 28 study abroad students and 13 at home students. This

finding revealed that the students who studied abroad were clearly better conversationalists than the at-home students.

In program profiles, “Study Abroad Type” and “Program Duration” are basic variables to look at students’ experience of study abroad. Study abroad type refers to the types of study abroad program, including English language programs, academic credit programs and international field study programs. In addition, how smoothly students can adjust to foreign cultures may depend on whether they took pre-departure orientations at home universities or not. The pre-departure orientation usually consists of lectures and a workshop about culture, lifestyle and public safety in destination countries.

Barron (2003) looked at 33 Irish learners of German, studying abroad for a year in Germany. This study demonstrated that the students lacked meaningful interactions with German locals, to help their development of intercultural understanding. Even though their language proficiency showed improvement over time, while they were staying in Germany, there was a lack of acquisition of behavioral elements of intercultural competence. As a result, this study suggests the need to provide students guidance on learning about culture and becoming aware of needed behaviors before departure. Pedersen (2010) argued for the impact of mentoring by professors and intercultural professionals for students’ intercultural competence development. She studied two groups of students who were studying abroad in a year-long program in England. One group received an intercultural intervention, while the other did not. The students who received the intercultural intervention developed significantly more intercultural than those who did not. Those who did not receive the intervention showed no statistically significant difference from the control group who had enrolled in study abroad but had not departed yet (Pedersen, 2010). This result implies that students who receive mentoring from intercultural professionals before leaving

home universities might have a more smooth entry into local communities, and then have a more productive life in terms of the development of intercultural competence.

Finally, interaction with people is a very important aspect for Japanese students. It is a popular comment from returning students that they often spent time with Japanese friends in destination countries. International educators often indicate this as a negative point of study abroad among Japanese students. On this point, it should be investigated if there are any differences in the development of intercultural competence between students who particularly enjoyed time with locals, internationals (foreign people who are not locals) or Japanese people. The impact of interaction with local and international people in study abroad has been viewed mainly through two perspectives: housing and class composition. Living with a host family has long been assumed to be a way to improve both second language and intercultural interaction. Marion (1980) found that American students who lived with a host family or with host country nationals were likely to be more nationalistic, while students living with other Americans or international students became more familiar with cultural differences. Vande Berg et al. (2009) also showed a similar finding. They found that students living with other American students or host-country students showed statistically significant gains in intercultural competence, while those living with a host family or with international students did not. They also addressed the impact of class composition in relation to the development of intercultural competence. This study found that students who were placed mainly with host-country nationals did not gain as much intercultural competence as students who studied alongside other American students or those who studied with a mix of Americans, host country, and other international students.

Definition of Intercultural Competence

This literature implies that different researchers see different components of intercultural competence through study abroad programs. In a broad sense, intercultural competence has often been recognized as a capability, which supports effective and appropriate interaction among people in different cultural contexts. However, the specific components comprising intercultural competence have been explored based on the perspectives of disciplines such as business management, communication and higher education. (Bennett, 2009). This is the major reason why conceptualizations of intercultural competence are still seen in various ways by individual scholars (Spitzberg & Changnon, 2009; Deardorff, 2006). For example, Spitzberg & Changnon (2009) indicated that there are a number of components of intercultural competence advocated for in scholarly works. Some of these components are generally perceived as intercultural competence in one context but not in another. Therefore, they pointed out that no particular component could ever be universally applicable.

This is natural if we think of people's individuality and the reality that how smoothly people adapt to a different environment depends on individual capabilities. Not all people have a natural gift of adaptation to new environments (Kim, 2001). What is most commonly agreed among researchers is that individuals can acquire intercultural competence most effectively through their own immersion in different cultures. Therefore, conceptualization of intercultural competence is highly diverse in terms of different disciplines, terminologies and scholarly and practical objectives.

Despite the fact that no authoritative definition of intercultural competence prevails in the relevant literature, intercultural competence includes at least three elements: cognitive, affective and behavioral. The cognitive element deals with cultural markers and references related to identity formation and cultural knowledge, cultural self-knowledge and cultural integration.

(Bennett, 2009). The affective element relates to how one sees different cultural qualities such as open-mindedness, inquisitiveness, and willingness to adjust to varying circumstances. The behavioral element relates to one's behavior and the skills adopted in intercultural environments. In fact, there is an emerging consensus among scholars that these three elements are the key components of intercultural competence (Spitzberg & Changnon, 2009; Lustig & Koester, 2003; Bennett, 2004; Deardorff, 2006). Based on this, Spitzberg & Changnon (2009) proposed their definition of intercultural competence as "the appropriate and effective management of interaction between people, who to some degree or another, represent different or divergent affective, cognitive and behavioral orientations to the world." (p7). Lustig & Koester (2003) mentioned three key elements of intercultural competence as interpersonal and situational context; the degree of appropriateness and effectiveness of the interaction; sufficient knowledge, and motivations and actions. Bennett (2004 & 1993) conceptualized intercultural competence by identifying six orientations that individuals display in their acquisition of intercultural competence. In his DMIS, he stated that as one's experience of cultural difference becomes more complex and sophisticated, one's potential in intercultural competence in terms of behavior, knowing others and empathetic attitudes to others evolves as relations increase. Hammer (2012a) suggests that building intercultural competence involves increasing self-awareness, deepening understanding of the experiences, values, perceptions, and behaviors of people from diverse cultural communities and expanding the capability to shift cultural perspective and adapt behavior to bridge cultural differences. King & Baxter Magolda (2005) examined intercultural competence in terms of a developmental process in individual self-maturity. They proposed three developmental levels of individual intercultural maturity: initial, intermediate and mature levels. From the point of self-maturity, King & Baxter Magolda (2005) defined intercultural maturity as "multi-dimensional and consisting of a range of attributes, including understanding (cognitive dimension), sensitivity to

others (interpersonal dimension), and a sense of oneself that enables one to listen to and learn from others (intrapersonal dimension)” (p574). Finally, Deardorff, (2006) through an empirical study to scholars and administrators, demonstrated that major components of intercultural competence are shared by intercultural scholars and higher education administrators. She asked intercultural scholars from a variety of disciplines, including communications, political science, education, international relations, anthropology, political science, psychology, and business, and higher education administrators from across the United States, from community colleges to research universities, to answer questionnaires for measuring desired components of intercultural competence. The result showed that knowledge of others and self; skills to interpret and relate / to discover and/or to interact; and valuing others’ values, beliefs and behaviors and relativizing one’s self were the most commonly shared competencies among the group.

“Intercultural” and “Competence”

Intercultural

“Intercultural” refers to individuals or people in a culture interacting with individuals or people who have different cultural backgrounds. The word culture has roots in the terms “cultivate” and “agriculture,” and has been used since the 17th century (Shaules, 2007). Although many sociologists and anthropologists have defined culture from their own perspectives, Tyler’s definition was recognized as an influential one in the first part of the 20th century. Tyler (1920) defined culture as a complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by people as members of a society. He emphasized that culture is not static but evolves with the development of society. Benedict (1943) defined culture as an inherited property, which is not innate but can be passed from generation to generation by learning from previous generations. Kroeber & Kluckhohn (1952) defined culture

as original property in a society that members can acquire as the result of belonging to that society. Culture includes both shared internal modalities such as values, ways of thinking and emotional tendencies and material modalities such as language, body expression, food, clothing and housing. Recently, Storti (1999) defined culture as the shared assumptions, values and beliefs of a group of people, which result in characteristic behaviors. He also advocated identifying two layers of culture: invisible and visible. Regarding this distinction, Bennett (1998) distinguished “Culture” and “culture.” “Culture” refers to institutionalized visible properties exemplified by traditional arts and crafts. On the other hand, “culture” refers to invisible properties, which can be observed by people who stay in a place over time.

Reviewing these definitions makes clear that culture has at least four characteristics. First, culture is the synthesis of knowledge, values, beliefs, and habits shared by members of a society. Second, culture can be divided into visible and invisible properties. Third, culture is not innate but is inherited by later generations learning from previous generations. Finally, culture is not shared only by some privileged members of society, but is shared by most members of a society.

Competence

In scholarship, the word “competence” is often employed inexactly (Deardorff, 2006) with insufficient attention paid to the complexity of its meaning, while criteria to describe the concept have been debated in the literature (Spitzberg & Cupach, 2002). In early work, Spitzberg & Cupach (1984) compared the definitions of competence proposed in ten studies, which were published from the 1950s to the 1970s. Their conclusion was that the most fundamental component of competence is “an individual’s ability to adapt effectively to the surrounding environment over time to achieve goals” and that “no other aspect of competence and effective social functioning seems so universally accepted as the ability to adapt to changing environmental

and social conditions” (p. 35). They indicated that adaptability is “at the core of nearly all competence constructs,” which are seen as a “requisite for adaptability” (p. 36) and defined competence as “specific abilities underlying or manifested in the performance of competent behavior” (p. 41).

Although competence is likely to be understood as similar in meaning to performance, Boys (1995) proposed a distinction between the two terms, defining competence as comprised of a mixture between unconscious and conscious components. Observing only performance as a visible component is not necessarily an appropriate way to evaluate competence. As an example of unconscious components, he noted that individual competence is affected by one’s experiences, opportunities and motivation. On this point, Korossy (1999) proposed to distinguish between unconscious and conscious components, by making a distinction between competence and performance. The first term describes non-empirical cognitive attributes that aid in problem solving. The second term describes actions. Performance can be seen and measured, but the competence that enables that behavior may not be observable.

Bowden & Marton (1998) theorized four developmental stages of competence; behaviorist (performance), additive (performance and knowledge, not yet integrated), integrative (performance and knowledge harmonized) and holistic (with perception and views integrated with performance and knowledge) (p105-106). This development process emphasizes that competence includes performance as a visible component, with knowledge and perception/view as invisible components. They pointed out that these components are essential in evaluating one’s competence.

History of Intercultural Competence as a Research Area

The study of intercultural communication has been a research field in the United States since the 1950s. Intercultural competence came to the fore of intercultural communication studies

in the 1980s, when scholars began to investigate the components of intercultural competence. Therefore, intercultural competence is often considered to be a subfield of intercultural communication research. Given this point, it is helpful to view intercultural competence in the broader context of intercultural communication research (Deardorff, 2004).

The major reason that intercultural communication came to be recognized as a research field in the 1950s was that it became a crucial agenda for the U.S. government in providing practical communication training to U.S. officials in occupied areas such as Japan and Germany, in order to facilitate their occupation policy. The training programs applied the research achievements of major anthropologists and linguists, such as Edward Hall, who first used the term “intercultural communication” (Leeds-Hurwiz, 1990).

The 1960s was a troubled period both at home and abroad for the United States. At home, the U.S. government faced the civil rights movement, the anti-Vietnam War movement, and student and feminist movements. Abroad, it needed to cope with the re-entry of Vietnam War veterans into American society. Based on this background, intercultural communication became an interdisciplinary research field, which came to be conducted not only in anthropology and linguistics, but also in cultural anthropology, sociology and psychology (Ishii, S., Kume, A., Tooyama, J., Hirai, K., Matsumoto, S., & Midouoka, K., 1997).

The 1970s was a period when intercultural communication affected the public in general. With mass transport via aircraft increasing in this period, the number of business travelers, international students and immigrants rapidly increased, and the opportunity for people to interact with people of different cultures became common. As a result, intercultural communication conflict came to be a social problem, especially in areas which accepted many immigrants. This led to an interest in intercultural adaptation in American society, in terms of pursuing harmonization with people or groups who have different values.

The 1980s was a burgeoning period for the development of intercultural competence research. In addition to research into the mechanisms and phenomena of intercultural conflict, the research focus moved to intercultural competence, defined as a specific skill set to cope with intercultural situations. The distinction between intercultural communication competence and intercultural competence is that intercultural communication competence stresses the importance of language or linguistic competence (Byram, 1997), while intercultural competence often emphasizes other factors in the adaptation to different cultures.

Summary

This chapter reviewed three areas of literature: (1) Japanese *global jinzai* policies as a rationale to promote internationalization of higher education based on the research concepts of internationalization and globalization of higher education, (2) previous studies on study abroad programs and intercultural competence in English and Japanese, and (3) previous studies relating to the eight variables examined in this study.

As *global jinzai* is a unique concept in Japanese society, this chapter aimed to review the background to *global jinzai* in the current Japanese context and governmental support for forms of university education that are intended to cultivate *global jinzai*. Second, intercultural competence is sometimes confused with other cultural skills learned through study abroad, such as intercultural communication. This chapter reviewed the definition of intercultural competence etymologically and historically drawing on earlier literature in English and Japanese which specifically focuses on intercultural competence and study abroad programs. Finally, this chapter reviewed previous research literature relating to study abroad programs and the eight independent variables covered in this study.

Chapter Three: Methodology

This chapter consists of three parts. The first part reviews major research approaches relating to research into intercultural competence. After the review, the research approach to this study is described. The second part introduces the research methods and design of this study, including the measurement instrument used for quantitative analysis. Finally, the last part explains research procedures relating to the recruitment of participants, data collection, the pilot study and data analysis.

The study employed 344 Japanese students who joined studied abroad programs in Canada and the United States. Among them, 246 students were those who participated in study abroad programs provided by their home universities. Another 98 students were those who individually applied for study abroad programs at educational institutions in destination countries. In addition, 25 students who did not join study abroad program were recruited as a control group. In total, the investigator finally got 369 participants.

The first and second phases in this study used quantitative analysis. The first phase aimed to judge students' intercultural competence score in their pre-study abroad period using IDI. The second phase aimed to judge students' intercultural competence score in the post-study abroad period. Comparing the scores between pre- and post-study abroad periods, this study clarified the extent of the change (both positive and negative changes) in students' intercultural competence through study abroad programs. The 369 students took the IDI in both pre-and post-study abroad periods.

In the third phase, qualitative analysis, the 344 students who joined study abroad programs were asked to submit reflection papers about their experiences in study abroad programs. A total of 249 students submitted the papers. The purpose of requesting reflection papers was to

explore the reasons why some student and program profiles have a significant impact on the change in Developmental Scores between pre-and post-study abroad periods through text mining analysis.

Major Research Approaches

Scholars have advocated various research approaches to intercultural communication and intercultural competence since the 1950s, following changes emerging in the four major approaches that have been adopted.

The Psychological Approach

The burgeoning period of intercultural communication research in the 1950s mainly focused on the psychological stress of intercultural situations. A major example of psychological stress is culture shock. The term “culture shock” was first used by Kalervo Oberg, an anthropologist, to describe his psychological stress when he stayed in foreign countries. He stated that people are usually excited about the novelty of the situation when they visit a foreign culture. However, the degree of excitement depends on the individual, who might also feel stress in coping with cultural differences. The degree of culture shock is subjective and is determined by the balance between excitement and stress, since people feel culture shock when they feel stress more than excitement.

Major early theoretical frameworks to depict the psychological stress experienced by people entering into different cultures are the U-Curve Theory (Lysgaard, 1995) and the W-Curve Theory (Gullaborn & Gullaborn, 1963). These two frameworks showed how psychological stress varies over the course of time. Lysgaard (1955) interviewed 200 Fulbright scholars from Norway about stress and living in the United States. As a result of his study, he concluded that intercultural

adaptation could be divided into three periods: honeymoon, crisis and adjustment. In the honeymoon period, people are excited at the novelty of a different culture. In the crisis period, however, they come to feel uncomfortable and face the need to survive this period in order to adjust. In the adjustment period, they learn how to cope with cultural differences effectively, finally mastering their new culture. Lysgaard (1955) named this process the U-Curve Theory, as the degree of adjustment and psychological stress moved in a pattern like the letter U. On the other hand, the W-Curve Theory added two additional periods to the U-Curve Theory: re-entry culture shock, where people feel psychological stress adjusting to their own culture immediately after they go back, and the re-adjustment period, where people come to adjust to their home culture. The two theories aimed at generalizing the phases of psychological change, when people are immersed in different cultures. Martin & Nakayama (2009) defined the U-curve theory as: "A theory of cultural adaptation positing that migrants go through fairly predictable phases --- excitement/anticipation, shock/disorientation, adjustment in adapting to a new cultural situation" (p. 327). W-Curve Theory was also defined as: "A theory of cultural adaptation that suggests that sojourners experience another U curve upon returning home" (p. 331).

Another major framework is the Stress-Adaptation-Growth Model developed by Kim (2001). She proposed a spiral adaptation process, in which every new experience in the host culture adds to personal growth. Until they adapt to the different culture, people would experience a back and forth process between stress and adaptation, with gradual development of adaptation, and the developmental process depicted as an arc.

Furthermore, the research focus shifted from the process of psychological stress to the factors that create the stress. This is because international educators focused on cultivating students' intercultural communication competence. Paige (1993) identified the ten factors that can cause physiological stress: cultural differences, ethnocentrism, cultural immersion, cultural

isolation, language, prior intercultural experience, expectations, visibility and invisibility, status and power and control.

The Communication Approach

The communication approach came to be a focus of research in the 1970s, when the number of immigrants and travelers increased due to mass air transport. A major framework was high-low cultural context theory developed by Hall (1976). He focused on the relationship between intercultural communication and cultural context. In his theory, culture can be divided into high-context culture and low-context culture. In high-context culture, communication between speaker and listener is likely to be smooth, unless the speaker provides oral information in detail. People in a high-context culture place emphasis on the intent of the speaker, and depend less on the details of oral information. This communication style occurs in cases where both speaker and listener share a lot of cultural context, such as shared customs. In a low-context culture, on the other hand, speaker and listener depend more on oral information, as the shared cultural context between them is limited. For example, Japan is an example of a high-context culture, and Japanese people prefer heart-to-heart communication (*ishin denshin*) and breathing communication (*aun no kokyuu*) to get the message. On the other hand, the United States is an example of a low-context culture, and American people generally emphasize their individual ideas, beliefs and opinions. In this communication style, it is essential to state oral information clearly. Hall's theory advocated the need to keep cultural context and differences in mind, and make arrangements for communication between people who have different cultural contexts.

Later, Gudykunst (1995) proposed Anxiety/Uncertainty Management Theory (AUMT) by referring to Hall's cultural context theory. AUMT hypothesizes that the speaker's anxiety and uncertainty increase when the speaker does not have much information about the listener. In that

case the speaker is motivated to collect information about the listener in conversation, in order to decrease his/her anxiety. However, if the two people come from different cultural contexts, it is often difficult for the speaker to collect that information, since the two people have different communication styles and cultural contexts. Therefore, it is necessary for the speaker to know the listener's cultural context early in the conversation. Gudykunst (1995) proposed that an effective way to decrease people's anxiety is to reduce uncertainty, and uncertainty can be reduced by knowing the partner's cultural context.

The Epistemological Approach

The 1980s was a period when theoretical frameworks of intercultural competence became a focal point of investigation. The major frameworks were epistemological developmental frameworks.

The epistemological developmental framework focuses on the cognitive developmental process in situations. A dominant theoretical framework is the Developmental Model of Intercultural Sensitivity (DMIS) developed by Bennett (1993), the theoretical framework chosen for this study. Another framework is the Developmental Model of Intercultural Maturity developed by King & Baxter Magolda (2005). This model posited three developmental levels of individual intercultural maturity: initial, intermediate and mature. King & Baxter Magolda (2005) defined intercultural maturity as multi-dimensional, consisting of a range of attributes, including understanding (cognitive dimension), sensitivity to others (interpersonal dimension), and a sense of oneself that enables one to listen to and learn from others (intrapersonal dimension) (p574).

These two frameworks have in common the fact that they do not pursue a definition of intercultural competence, but clarify the developmental process of intercultural competence. On the other hand, while DMIS emphasizes the objective evaluation by others of one's development

of intercultural competence, the Developmental Model of Intercultural Maturity model stresses how individuals make self-meaning of experience and interpret experiences in intercultural situations (Bennett, 1993; King & Baxter Magolda, 2005).

The Compositional Approach

The compositional approach posits categories of intercultural competence. This method of analysis categorizes the abilities and characteristics that contribute to intercultural competence. One of the major early works of the compositional framework is Ruben's (1976) seven dimensions of intercultural competence. He identified a gap between knowing and doing in intercultural situations. That is the difference between individuals knowing how to behave with intercultural competence, and how to behave, actually, in an interaction with people of different cultures. Through his research, he listed seven required dimensions of "doing" in intercultural situations. Ruben's work particularly emphasized competence based on observed actions in intercultural situations. On the other hand, Byram (1997) focused on visible and invisible dimensions of intercultural competence, and stressed individual attitudes and knowledge as invisible competences. He proposed a five dimensional model of intercultural competence; attitudes, knowledge, skills of interpreting and relating, skills of discovery and intentions and critical cultural awareness. Deardorff (2006) proposed a pyramid model of intercultural competence, which showed the desired learning outcomes of intercultural education. According to the model, there are grounded invisible layers under visible behaving and communicating capabilities. The most fundamental layer is attitudes, which includes respect, openness and curiosity about different cultures. The second layer is knowledge, comprehension and skills, which include cultural self-awareness and deep understanding and knowledge of cultures as well as skills such as listening, observing, analyzing and interpreting cultural difference. The next

upper layer is an internal learning outcome such as self-reflection, which includes adaptability, flexibility, an ethnorelative viewpoint and empathy toward cultural differences. The major contribution of this model is that it is the only one which focuses on learning outcomes. Each component was determined based on empirical study, with 23 intercultural scholars from a variety of disciplines and 24 higher education administrators from across the United States surveyed about the desired components of intercultural competence they shared.

Approach of This study

The four approaches have in common the fact that they look at needed elements for people to adapt to different cultures but each of them specifically focuses on different elements. The psychological approach looks at individual's psychological tendencies, such as stress and shock, in adapting to different cultures. The communication approach emphasizes communication style in interaction among people from different cultures. The compositional approach specifically focuses on the categories of individuals' ability that are needed to adapt to different cultures. By contrast, the epistemological approach used in this study focuses on individuals' cognitive developmental process adapting to different cultures. In fact, the DMIS and IDC used as theoretical models focus on the process of developing intercultural competence by identifying orientations based on the level of individuals' cognition toward different cultures.

The DMIS and IDC theorized that as one's experience of cultural difference becomes more complex and sophisticated, one's potential for intercultural competence, in ways of behaving, knowing and empathetic attitudes toward cultural differences, also evolves.

The DMIS is comprised of three ethnocentric stages (Denial, Defense, and Minimization) followed by three ethnorelative stages (Acceptance, Adaptation and Integration). Bennett (1993) defined ethnocentrism as "assuming that the worldview of one's culture is central

to all reality” (p30) and ethnorelativism as the idea that “cultures can only be understood relative to one another and that particular behavior can only be understood within a cultural context.” (p46).

In the Denial stage, individuals deny that cultural difference exists. This belief may reflect either physical or social isolation from people of different cultural backgrounds.

Individuals in this stage see the world completely from their own cultural background and are likely to categorize different cultures into stereotypes, for example, Japan as the samurai culture.

In the Defense stage, individuals acknowledge the existence of certain cultural differences. However, people see the differences negatively and construct defenses against those differences, because they threaten their own reality and sense of self (Bennett, 1993). Specifically, the person defends him or herself by three cultural orientations: denigration of different cultures, belief in the superiority of their own culture, or denigration of their own culture and belief in the superiority of a different culture.

In the Minimization stage, individuals acknowledge cultural differences but trivialize them, believing that human similarities far outweigh any differences. This is the last stage of ethnocentrism. The danger of this stage is that similarity is assumed rather than known (Bennett, 1993).

In the Acceptance stage, individuals recognize cultural differences without evaluating those differences positively or negatively. This stage moves an individual from ethnocentrism to ethnorelativism. People come to respect cultural differences in behavior, and then have a deeper respect for cultural differences in values (Bennett, 1993).

In the Adaptation stage, individuals develop and improve skills for interacting and communicating with people of other cultures, whereas in the Acceptance stage they just recognize the differences between cultures (Bennett, 1993). The key skill at this stage is perspective-

shifting: the ability to look at the world through different eyes. People in this stage not only emphasize cultural differences but also have skills to recognize things from the viewpoints of people from other cultures.

Finally, in the Integration stage, individuals not only value a variety of cultures, but also are constantly defining their own identity and evaluating behaviors and values in contrast to and in concert with a multitude of cultures (Bennett, 1993). Rising above the limitations of living in one cultural context, people integrate aspects of their original cultural perspectives with those of other cultures. Therefore, individuals can establish their own behaviors, values and beliefs by integrating different cultures without risking a collapse of their own identity.

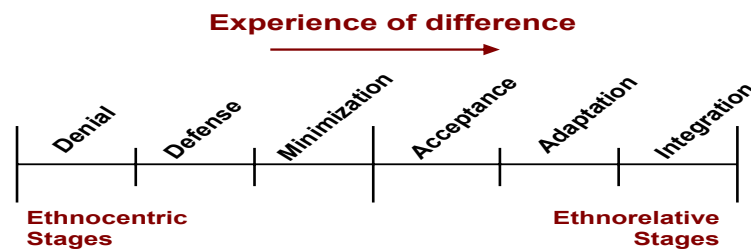


Figure 3.1.

The Developmental Model of Intercultural Sensitivity

Source: Bennett (1993).

Based on the DMIS, Hammer developed the Intercultural Developmental Inventory (IDI) as the instrument to assess a person's intercultural competence by indicating their orientation in the DMIS. IDI is an online 50-item theory-based instrument which uses a 5-point Likert-type scale: 1=disagree, 2=disagree somewhat more than agree, 3= disagree some and agree some, 4=agree somewhat more than disagree, and 5= agree. Hammer, Bennett & Wiseman (2003) stated that IDI is "useful for assessing training needs, guiding interventions for the development of

intercultural competence, contributing to personnel selection, and evaluating programs” (p 441). For example, IDI was used in previous studies to assess the intercultural competence of university students who studied abroad (e.g. Vande Berg et al., 2009, Pedersen, 2010; Jackson, 2008 and Anderson et al., 2005).

IDI is theoretically grounded in the DMIS but it is very important to note that IDI used a revised theoretical framework which is called the Intercultural Developmental Continuum (IDC) (Hammer, 2009). IDI measures the level of one’s intercultural competence across this continuum. This continuum represents a transition of a person’s set of perceptions and behavior from a less complex view of cultural commonalities and differences to a more complex one (Hammer 2009). There are four major differences between DMIS and IDC.

First, the IDC is a model of intercultural competence, while the DMIS is a model of intercultural sensitivity. The DMIS focuses on a person’s process of developing intercultural competence by identifying six orientations that individuals develop in their acquisition of intercultural sensitivity (Bennett, 2004 & 1993; Hammer, 2003). This framework theorized the development of “perspectives” toward cultural differences. By contrast, The IDC covers the competence of shifting “both perspectives and behaviors” in relation to cultural differences.

Second, the DMIS has six orientation stages of intercultural development, while IDC has five orientation stages and the final stage, labeled as Integration in the DMIS, is not covered. The reason is that Integration is concerned with the construction of intercultural identity rather than the development of intercultural competence (Hammer, 2011 & 2009). As IDI is an instrument specialized in measuring intercultural competence, IDC is proposed as the model of the developmental continuum from Denial through Adaptation.

Third, IDC forms Polarization instead of the Defense. Polarization can take the form of Defense or Reversal. Defense is the mindset that has an uncritical view toward one’s own cultural

values and practices and an overly critical view toward other cultural values and practices. By contrast, Reversal is the mindset that has an overly critical orientation toward one's own cultural values and practices and an uncritical view toward other cultural values and practices (Hammer, 2012b).

Fourth, DMIS views Minimization as an ethnocentric orientation, while IDC identifies it as the transitional orientation between ethnocentric and ethnorelative orientations. The IDI version 3 validity tests administered to 4,763 people supported the point that Minimization is a more effective orientation than two ethnocentric orientations (i.e., Denial, and Polarization) in dealing with cultural commonalities. Unlike two ethnoorelative orientations (i.e., Acceptance and Adaptation), however, Minimization showed the difficulty in recognizing cultural differences, which is an essential capability to be recognized as part of the ethnorelative orientation. In fact, the validity test presented inter-correlations among the five orientations from Denial to Adaptation. According to Hammer (2011), there were very weak correlations of Minimization with both ethnocentric (Denial [$r = -.33$] and Defense [$r = .062$]) and ethnorelative orientations (Acceptance [$r = .014$] and Adaptation [$r = .007$]). By contrast, there was a strong correlation between Defense and Denial [$r = .83$] and a positive correlation with Denial and with Defense in Polarization [$r = .37$]. Furthermore, there was also a strong correlation with Acceptance and Adaptation ($r = .638$). Finally, no ethnocentric orientations had strong correlations with any ethnorelative orientations. Based on the results of a validity test, it was suggested Minimization is not ethnocentric yet and also not yet ethnorelative, thus it was conceptualized as a transitional orientation between them.

Research Methods

Based on the epistemological approach, this study uses a mixed research method. The mixed research method provides a framework for incorporating both quantitative and qualitative data into a single study (Johnson & Christensen, 2008; Creswell & Plano Clark, 2010). Creswell & Plano Clark (2010) indicated that a mixed method brings deeper research exploration to findings as one method complements the other. The use of mixed methods enhances research credibility compared to a single quantitative or qualitative method, as it overcomes the weaknesses of single quantitative or qualitative methods. For example, the quantitative method provides objective data, but this method sometimes does not show what factors shaped the data. On the other hand, the qualitative method facilitates a deeper understanding about the factors responsible for the data, by observing study populations in on-site fieldwork or by carrying out interviews. However, this method is sometimes influenced by the researcher's bias in observation. Given the characteristics of the two methods, Deardorff (2006) judged that using both quantitative and qualitative methods is the best approach for studies which assess intercultural competence. In this study, for example, although the quantitative method revealed how much students were influenced by English language programs in a short-term study abroad program, it is unable to get to deeper understandings of how students thought the program influenced their intercultural development and how they recognized that they were affected by the program.

Johnson & Christensen (2008) classified mixed method as a function of two dimensions; time orientation and paradigm emphasis. Time orientation refers to whether quantitative and qualitative data are used concurrently at the same point in time, or whether they are organized sequentially. Paradigm emphasis indicates whether quantitative and qualitative data are used in approximately equivalent emphasis in a study, or whether either of them is given more weight

than the other. Based on the two dimensions, Johnson & Christensen (2008) proposed nine types of mixed research methods as follows (p446):

		Time Order Decision	
		Concurrent	Sequential
Paradigm Emphasis	Equal	QUAL + QUAN	QUAL → QUAN QUAN → QUAL
	Dominant	QUAL + quan Quan + qual	QUAL → quan qual → QUAN QUAN → qual quan → QUAL

- Capital letters denote priority weight.
- A plus sign (+) represents a concurrent collection of data.
- A arrow (→) represents a sequential collection of data.

Figure 3.2.

Mixed Method Classification

Source: Johnson & Christensen (2008, p46).

For instance, “QUAL + QUAN” means a research design in which quantitative and qualitative paradigms are given equal weight and are conducted concurrently. As this study explores the correlation between student profiles and program profiles by quantitative method and examines the factors of the correlation by subsequent students’ reflection papers, the research design of this study is “QUAN→qual.”

Research Design

The mixed method in this study includes two phases: (1) pre-study abroad IDI and questionnaire survey, and (2) post-study abroad IDI and reflection paper.

Pre-Study Abroad IDI and Questionnaire

The first phase in this study is to judge students' intercultural competence score in their pre-study abroad period. This study used IDI as the measurement instrument. When students took the IDI online, this study attached additional online survey questions to collect student profiles and program profiles. Student profiles include Gender, Prior International Experience and Prior Language Proficiency. Program profiles include the Program Duration, Program Type, Stay Type, Pre-Departure Orientation and Destination.

Post-Study Abroad IDI and Reflection Paper

The second phase in this study is to judge students' intercultural competence score in the post-study abroad period using IDI. Comparing the scores between pre and post-study abroad periods, this study clarified the extent of the change (both positive and negative changes) in students' intercultural competence through study abroad programs. In addition, students were asked about their experiences of study abroad programs through two open and free questions; Question I - "What did you learn the most through study abroad programs to develop your intercultural competence?" and Question II - "What is your challenge for the further development of your intercultural competence?"

Instrument

IDI is used in this study to assess students' intercultural competence through quantitative analysis. According to Fantini (2009), there are 44 instruments applicable to assessing intercultural competence. Among them, the investigator judged that IDI is the best instrumental tool for this study because of four major advantages IDI has.

The first advantage is that IDI is a theory-based instrument used worldwide. According to IDI, LLC. (2014a), IDI is “the only theory-based assessment of intercultural competence.” It provides in-depth insights into how individuals make sense of cultural differences in terms of mindset and also how they respond to cultural differences in terms of skillset along a development continuum. For example, IDI presents not only figurative scores of one’s intercultural competence but also a sheet advising how an individual may engage cultural difference in their daily interactions with others and what mindset and skillset the individual is expected to develop.

The second advantage is that IDI is proven to have strong validity as a measuring instrument to assess intercultural competence for diverse cultural groups including Japanese people. To develop its validity, IDI has been continuously conducting pilot studies and has developed three revised versions since it was first developed in 1998 (Hammer 2011 & 2009). The validity test of the first version began with an initial 60 item set of questions. This test was to assess whether the questions were able to assess intercultural competence based in DMIS in systematic ways. The validity was verified by the test which was administered to a culturally diverse group of 226 respondents and then the correlation between their IDI scores and how they construed their experience in intercultural environment was examined through qualitative interviewing (Hammer, 2011). The second version was developed in 2003. The original 60 items verified in the first version were reviewed for the second validity test. Another 591 culturally diverse respondents were administered the test and 50 items were finally chosen for the second version. The third version was developed in 2010. The 50 items used in the second version were reviewed by administering them to 4,763 respondents from 11 distinct cross-cultural groups, including 277 Japanese respondents (Hammer, 2011). These respondents were deliberately chosen from high schools and universities and both for-profit and non-profit sectors to have a diversity of respondents. There is reliable evidence that the validity of IDI was enhanced, in that the number

of participants for the validity test was increased from 226 in the first version to 4,763 in the third version. In order to avoid problems arising from the influence of language proficiency in assessing intercultural competence, IDI developed a rigorously back-translated Japanese version. It enabled Japanese participants to complete the IDI in their native Japanese language. This was very important for this study, as a certain number of participants in this study were first-time students experiencing study abroad who did not have enough English proficiency to answer IDI questions in English. These contexts show that IDI is a cross-culturally valid instrument to measure intercultural competence.

The third advantage is that IDI is a very sophisticated psychometric measuring instrument. In analyzing IDI results, to what extent participants answered questions straightforwardly is a crucial factor in the credibility of this study. For example, it might be a risk for this study if some of them intentionally chose answers because they wanted to get high scores. On this point, IDI's 50 psychometric questions are deliberately created to judge both respondents' Perceived Orientation Score (Perceived Score or PO score) – “PO score represents where the individual or group perceives themselves on this developmental continuum” - and the Developmental Orientation Score (Developmental Score or DO score) – “DO score represents where the IDI places the individual or group along the continuum (i.e., the individual or group's actual level of intercultural competence)”. (Hammer, 2012b, p 64). The Developmental Score and Perceived Score indicate one's orientation of intercultural competence in the IDC as displayed in the Table 3.1.

Table 3.1.

Developmental Score and Perceived Score Range

Orientations	Score Range
Denial	55-69
Polarization	70-84
Minimization	85-114
Acceptance	115-129
Adaptation	130-145

Source: Hammer (2012b)

Perceived Score and Developmental Score were confirmed in terms of their reliability at .82 and .83 respectively (Hammer, 2011). Given the two scores, IDI can assure insusceptibility to respondents' social desirability effects (e.g., a respondent cannot "just look at the IDI items and determine what it measures or whether it is a valid assessment") (IDI, 2014b).

The fourth advantage is that IDI is not freely available but is a license protected instrument. People who wish to use IDI are required to get a license from an IDI administration organization by attending a three day qualifying seminar. In the seminar, participants must learn IDI in term of both its theoretical frameworks (i.e., DMIS and IDC) and technical requirements. In other words, people are not allowed to use IDI until they complete the seminar session and get a license. It has sometimes happened that someone uses a freely available instrument even when they do not deeply understand the adequacy of the instrument theoretically (e.g., what kind of research exploration an instrument is useful for) and technically (e.g., how an instrument should be used and how the result should be understood). If a study falls into this category, there might be a risk to its credibility. The investigator of this study participated in a seminar held in Vancouver in October 2012 and got the license.

Participants

The participants for this study are Japanese students who joined study abroad programs in Canada and the United States. The participants were recruited from three groups. Group A covers students who participated in study abroad programs provided by their home Japanese universities. These students were chosen from 13 Japanese universities where international education professionals agreed to invite their students to participate in the study. In order to enhance the demographic coverage of Japanese students, the location and types of universities were taken into account. The location was chosen from three universities in each of the Kansai and Shikoku areas, two universities in each of the Tokyo, Kyushu and Chuugoku areas, and one university in the Tokai area. These 13 universities were chosen to emphasize diversity of university characteristics and included both national and private universities, and both international education-focused universities and others. The criterion of the international education-focused universities was that they had been selected by MEXT for either the Go Global Japan initiative, the Re-Inventing Japan Project or the Top Global University Project.

Group B covers Japanese university students who applied for study abroad programs at educational institutions in destination countries. These students were contacted by the investigator through invitation letters distributed at Japanese study abroad agencies or educational institutions in destination countries.

Group C is a control group. Students in this group did not study abroad and remained at their home university campuses over the same period as those who studied abroad for six months, the longest study abroad period among the participants in this study.

In total, the investigator finally got 369 participants. Only the students who completed both pre and post-IDIs and questionnaires were counted as participants of this study. Of the 369

students, the demographic characteristics of participants based on independent variables in this study are shown in Table 3.2.

Table 3.2.

Participants' Group

Type	Participant number
Type A	246 students
Type B	98 students
Type C	25 students

Data Collection

As for Group A students, first, the investigator sent invitation letters (Appendix A) and consent forms (Appendix B) to international education professionals at 36 Japanese universities asking them to participate in the study. In the letter, the investigator explained the purpose of the study and requested they ask their Japanese students who would be attending study abroad programs to take IDIs and answer questionnaires in both pre and post-study abroad periods. As a result, 13 of 36 universities responded (36.1 percent response rate) to the investigator and agreed to send out the invitation and consent forms (Appendix C) to students. As for Group B, the investigator sent the invitation letters (Appendix A) and consent forms (Appendix B) to study abroad coordinators at seven study abroad agencies and two Canadian universities. 3 of 7 agents and 2 universities responded (71.4 percent response rate) and agreed to send out the invitation and consent forms (Appendix C) to students. As a benefit of joining this study, both types of students were told in the invitation letter (Appendix C) that they could get individual scores and advice sheets for the further development of intercultural competence after study abroad. They were also

given the URL to access online IDIs and questionnaires in the invitation letter. As a result, 519 students agreed to join in this study online and took the first IDI and questionnaires. The pre-study abroad IDI and questionnaires were implemented between one month before and three days after study abroad programs began in destination countries.

The post-study abroad IDI and questionnaires were carried out after the students finished their study abroad programs. The investigator sent a confirmation to all students who took the pre-IDI and questionnaires. As a result, 344 of 519 students (a 66.3 percent response rate) actually took the post-IDI.

In taking post-IDI, students were given two open questions for writing reflection papers about their experiences in study abroad programs. The reflection paper was to gain a deeper understanding of factors contributing to the change in their IDI scores between pre and post-study abroad periods. 249 of 344 (72.4 percent rate) students submitted the reflection papers.

Finally, Group C students were collected from only one university. Those students were recruited from students at a university where the investigator teaches. As a limitation to this study, it was impossible to ask students who did not join study abroad programs at other universities, as there was no benefit for them to take the IDI.

All recruitment and data collection processes, including conducting two IDIs in the pre and post-study abroad periods, writing reflection papers and sending all letters and consent forms were implemented in Japanese. In addition, many international education professionals requested the investigator to revise or simplify the invitation letter to students, as it contained too much information for them. In response to the request, the letters were edited but not to a degree that differed significantly from the original content of the letters. The reason why the investigator used a Japanese translation is that it was not realistic to ask participants to read and understand the

letter contents in English, because many of them were first time students going to study abroad who were not capable of understanding the letter easily.

The Pilot Study

This study conducted a pilot study by implementing IDI with five Japanese students before starting data collection. The investigator intended to confirm two things in the pilot study. First, the investigator confirmed that Japanese students do not have technical difficulties in completing the IDI online. It was assumed that not all participants were familiar with using personal computers, especially early grade participants. Reviewing students' feedback for taking the IDI online, the investigator provided simple technical guidelines for how to access and take the IDI. Second, the investigator checked how to use the IDI administration system. Avoiding operational mistakes relating to system setup and data collection procedures was important for the investigator.

Data Analysis

This study examines the development of students' intercultural competence through study abroad programs to Canada and the United States. This study uses a "QUAN→qual" type of mixed research method for the examination. This section describes what quantitative and qualitative analyses were conducted in this study.

Quantitative Analysis

In quantitative analysis, first, the IDI is used to clarify how much students' Developmental Score changed and the gap between the Perceived Score and the Developmental Score between pre- and post- study abroad periods. The gap between Perceived Score and

Developmental Score means the gap between self-assessed and actual intercultural competence. The reason why IDI is used in pre-study abroad periods is to understand both participants' Perceived Score and Developmental Score in the immediate pre-study abroad period. It is an essential point in order to analyze the impact of study abroad programs in a precise way.

Based on collected data, this study then explores the basic result regarding the degree of impact on students' intercultural competence between the pre and post- study abroad periods. To answer this question, this study conducted two independent sample t-tests. The first t-test looks at the change in the Developmental Score between pre and post-study abroad periods. This is to look at the change of students' intercultural competence between the two periods. The second t-test seeks the change in the gap between the Perceived Score and the Developmental Score between pre and post-study abroad periods. This is for the purpose of assessing the change in the gap between self-assessed and actual intercultural competence.

Third, this study explores concrete factors that cause changes in the Developmental Score and the gap between the Perceived Score and the Developmental Score. Two multiple regression analyses are conducted to find out if there are significant factors in student profiles and program profiles that contributed to the change between pre and post-study abroad periods. The first multiple regression analysis explores which variables are predicted to have significant impact on the change of intercultural competence between pre and post-study abroad periods. The second multiple regression analysis looks at significant predictive factors to the improvement of the gap between self-assessed and actual intercultural competence. Both t-test and multiple regression analysis are conducted by R version 3.2.2.

The two multiple regression analysis are expected to statistically identify the optimum combination of student profiles and program profiles for maximum progress in intercultural competence. For example, what program profiles are the most influential for a student who has

the student profile of male (Gender), a 2-week homestay experience in an English-speaking country (Prior International Experience) and TOEFL 500 (Prior Language Proficiency) in ways that will help international educators improve study abroad program arrangements?

Qualitative Analysis

Qualitative analysis aims to gain deeper understandings of the statistical results revealed by quantitative analysis. To be specific, a text mining analysis of students' reflection papers is conducted to explore the reason why a particular variable appears to have a significant impact on the change in students' intercultural competence. Text mining is a method of research which clarifies the patterns of data, such as commonalities and differences in the characteristics of different reflection papers (Weiss, Indurkha, Zhang, & Damerau, 2004). The purpose of conducting text mining analysis in this study is to catch the commonalities and differences among 249 different reflection papers. This is very important because quantitative analysis in this study may provide solid findings statistically, but it does not provide the reason behind the statistical findings. In other words, the investigator is unable to get a deeper understanding of what intercultural experiences students have through study abroad programs they join and why they think these experiences have had an impact on their intercultural development. For the examination, the reflection paper asks students two open free questions; Question 1 - "What did you learn the most through study abroad programs to develop your intercultural competence?" and Question 2 - "What is your challenge for the further development of your intercultural competence?"

Furthermore, this study interviewed international education professionals at participating universities. The interview questions ask about the purpose, program contents, learning outcome and agenda of study abroad programs they offer students.

Ethical Considerations

This study has been approved by the Office of Research Ethics of the University of Toronto. Before starting data collection of this study, including the pilot study, the investigator needed to get institutional approval to implement the data collection. After receiving approval, the investigator contacted the three types of students to invite them for this study. All students were told that participation in the study was voluntary. Furthermore, they were also told that they were able to decline to participate and withdraw from the study without consequence at any time. If a participating student withdrew, any information about him/her collected in the data collection process was eliminated from the project.

Limitations

There are four major limitations to this study. First, this study uses IDI to examine the changes of students' intercultural competence between pre and post- study abroad. Considering the aforementioned three advantages of IDI, IDI is one of the most reliable instruments for this study among 44 instrumental tools in the intercultural area. However, it is true that IDI was originally developed on the basis of Western perspectives. It is also true that no specific measurement instrument has been developed to examine intercultural competence in Japanese students. In order to confirm the adaptability of the IDI to Japanese students, this investigator conducted a pilot study before using IDI on participating students.

Second, this study chose three student profiles (Gender, Prior International Experience and Prior Language Proficiency), as they are major variables, which might have some influence on changes in intercultural competence. However, there might be other factors, such as age, students' major subject areas, grade point averages at home universities and family backgrounds. As it is

not feasible to define what all the possible variables are and control them, the investigator chose the three variables which are strongly related to the study abroad program.

Third, this study uses 25 control group students from one university where the investigator teaches. In this respect, it was impossible to ask students who did not join study abroad programs at other universities to join this study as control group students, because there was no benefit for them in taking IDI.

Finally, this study tries to achieve generalizability as an empirical study in the case of Japanese students as far as possible. For example, collecting data from 344 participants from 13 universities including both international and non-international universities and individual voluntary students is not a small case study. Nonetheless, there are 86 national, 95 public and 597 private universities in Japan (MEXT, 2010). Thus, it is appropriate to say that this study has limited generalizability.

Summary

This chapter began with a section describing four major research approaches relating to the research of intercultural competence: the psychological, communication, epistemological and compositional approaches. Based on the review of the four research approaches, the epistemological approach, the research approach in this study, was discussed with reference to the DMIS and IDC, the theoretical models used in this study.

The next part introduced the research methods and design of this study. Identifying quantitative and qualitative approaches conducted in this study clarified the mixed research method used for this study. Among the nine types of mixed research method introduced in this chapter, this study chose “QUAN→qual,” as this study explores the correlation between student

profiles and study abroad program experiences by the quantitative method and examines the factors of the correlation by subsequent reflection papers and interviews.

The last section explains research procedures relating to the recruitment of participants, data collection, the pilot study and data analysis of this study. In conducting this study in the research settings that are described, there were limitations and these are explained. Finally, it was demonstrated that this study completely fulfilled ethical requirements set by the Social Science and Humanities Research Board (REB) of the University of Toronto.

Chapter Four: Results from the Quantitative and Qualitative Analyses

This chapter presents results from the data analysis pertaining to research question I: “To what degree do Japanese study abroad programs that send students to Canada and the United States have a measurable impact on their intercultural competence between their pre and post-study abroad periods?” and research question II: “What factors in study abroad programs contribute, either positively or negatively, to the development of students’ intercultural competence?” The results are presented through both quantitative and qualitative analysis. In the quantitative analysis, t-tests and multiple regression analyses were conducted for research questions I and II respectively, to explore the impact of study abroad programs. In the qualitative analysis, text mining analysis of participants’ reflections about study abroad programs was conducted to arrive at qualitative interpretations of the results of the quantitative analysis.

This chapter is presented in three parts. The first part reviews characteristics of the participants, based on eight variables. The second part presents data results relating to research question I. The third part presents data results relating to research question II. Discussion of research questions III and IV will be carried out in Chapters Five and Six, based on the findings for research questions I and II.

Characteristics of the Participants

Basic Characteristics

To better understand factors affecting the development of intercultural competence in study abroad program participants, this study examined 344 Japanese students. Basic characteristics of the participants are shown in Table 4.1. In study abroad programs to Canada, 43 of 160 students (26.9 percent) participated in medium-term programs while 117 students (73.1

percent) participated in short-term programs. In study abroad programs to the United States, on the other hand, 43 of 184 students (23.4 percent) participated in medium-term programs with the remaining 141 students (76.6 percent) in short-term programs.

Table 4.1.

Basic Participant Population

	Medium	Short	Total
Canada	43 (26.9%)	117 (73.1%)	160 (100%)
USA	43 (23.4%)	141 (76.6%)	184 (100%)
Total	86 (25.0%)	258 (75.0%)	344 (100%)

Detailed Characteristics

Table 4.2 displays detailed characteristics of the participants based on eight independent variables. For example, M denotes male and F denotes female students. Of 344 participants, 129 were male (37.5 percent) and 215 female (62.5 percent). Of the eight variables, two are given as interval scales: Prior International Experience and Prior Language Proficiency. For example, Prior International Experience 0 denotes students without prior international experience before studying abroad and Prior International Experience 1 denotes students with up to 21 days prior international experience, Prior International Experience 2 with 22 or more days. Likewise, Prior Language Proficiency 0 denotes students who did not have an English language test score before studying abroad. Prior Language Proficiency 1 denotes students with an English language test score above zero and up to TOEFL 449, while 2 and 3 are correspondingly higher.

Table 4.2.

Detailed Participants' Characteristics

Variables	Category	Number	Percentage
Gender			
Gender M	Male	129	37.5%
Gender F	Female	215	62.5%
Destination			
Destination C	Canada	160	46.5%
Destination A	USA	184	53.5%
Program Duration			
Program Duration M	Medium	86	25.0%
Program Duration S	Short	258	75.0%
Program Type			
Program Type A	Academic	27	7.8%
Program Type C	Cultural	100	29.1%
Program Type L	Language	217	63.1%
Stay Type			
Stay Type D	Dormitory	142	41.3%
Stay Type H	Homestay	202	58.7%
Prior International Experience			
Prior International Experience 0	None	238	69.2%
Prior International Experience 1	21 or less days	65	18.9%
Prior International Experience 2	22 or more days	41	11.9%
Pre-Departure Orientation			
Pre-Departure Orientation 0	No	163	47.4%

Pre-Departure Orientation 1	Yes	181	52.6%
<hr/>			
Prior Language Proficiency			
<hr/>			
Prior Language Proficiency 0	None	109	31.7%
Prior Language Proficiency 1	TOEFL 449 or lower	79	23.0%
Prior Language Proficiency 2	TOEFL 450 - 499	124	36.0%
Prior Language Proficiency 3	TOEFL 500 or higher	32	9.3%
<hr/>			

Additional Notes about Prior Language Proficiency

Additional explanation and clarification regarding the Prior Language Proficiency category is called for. In order to rank each student in Prior Language Proficiency, this study needed to establish a single, common standard. Students in this study took one of three English language tests: TOEIC, TOEFL or Eiken. TOEIC (Test of English for International Communication) was conceived in Japan and created by the Educational Testing Service (ETS), an American nonprofit that develops tests to measure communication skills. The second test, TOEFL (Test of English as a Foreign Language) was created by ETS to measure the proficiency of non-native speakers, for the purpose of assessing their qualifications for entry into colleges and universities in English-speaking countries. The last test, Eiken, is a Japanese language assessment backed by the MEXT. The majority of participants in this study took TOEIC. Therefore, TOEFL scores and Eiken grades were converted to TOEIC scores by using the conversion table displayed as Table 4.3.

Table 4.3.

Prior Language Conversion Standard

TOEIC score	TOEFL score	Eiken Grade	Proficiency Level by TOEIC
499 or lower	449 or lower	Pre2 or less	Minimum daily conversation
500 - 700	450- 499	2	Limited communication in business
701 or higher	500 or higher	Pre1 and 1	Fluent Communication in circumstances

Data Presentation for Research Question I

This section presents the findings related to Research Question I: “To what degree do Japanese study abroad programs that send students to Canada and the United States have a measurable impact on students’ intercultural competence between the pre and post- study abroad periods?” To answer this question, this study conducted two independent sample t-tests. The first t-test looks at the change in the students’ *Developmental Score* between their pre-study abroad period (*Pre-Developmental Score*) and post-study abroad period (*Post-Developmental Score*). The second t-test seeks to measure changes in the Perceived Score and the Developmental Score between the pre and post study abroad periods.

This study conducted independent sample t-tests to examine the meaning of changes that occurred in the Developmental Score between pre and post-study abroad periods. For example, Jackson (2008) indicated that a 0.05 score increase of Post-Developmental Score minus Pre-Developmental Score is a valid change. However, IDI does not provide an official scale standard for significant score change in the Development Score from a point to a point. For this reason, the t-test helps to judge if score changes of students who participated in study abroad are statistically meaningful or not. Twenty-five students who did not study abroad also took the IDI in the same period as participants who studied abroad for six months, to serve as a control group.

The average Developmental Score for the control group, in the pre and post-study abroad period, are also displayed in Table 4.4 and Table 4.5. The control group took the second IDI six months after taking the first because six months was the maximum period of study abroad for 344 participants in this study.

The Change in Developmental Score between Pre and Post-study Abroad Periods

The result of the first t-test is presented in Table 4.4. It provides basic information on the impact of study abroad programs for development of intercultural competence. It examined changes in the Pre-Developmental Score and Post-Developmental Score of 344 participants. T-test results show that the 344 participants recorded an average score change of 2.241, while the control group recorded a -0.794 score change. Although the participants' Pre-Developmental Score (83.277) was lower than the control group's (83.944), participants' Post-Developmental Score (85.518) was higher than the control group's Post-Developmental Score (83.150). The t-test indicates that the difference in score change between study abroad participants and control group students was significant. The result suggests that study abroad programs do significantly affect the development of intercultural competence.

Table 4.4.

Post-Developmental Score minus Pre-Developmental Score

	N	PreDS	PostDS	PostDS - PreDS	SD	T	Sig.
Participants	344	83.277	85.518	2.241	11.509		
Control Group	25	83.944	83.150	-0.794	5.442	2.417	.020

* PreDS is Pre-Developmental Score

* PostDS is Post- Developmental Score

The Change in the Gap between Perceived Score and Developmental Score from Pre to Post-Study Abroad Periods

The result of the second t-test is presented in Table 4.5. It demonstrates the change in ***Perceived Score minus Developmental Score*** from pre-study abroad program participation (***Pre-Perceived minus Developmental Score***) to post-study abroad program participation (***Post-Perceived minus Developmental Score***). The Perceived Score minus the Developmental Score is the gap score between a student's self-assessment score and his or her actual intercultural competence score; i.e. the smaller the gap the more accurate the student's self-assessment. Thus, (Pre-Perceived minus Developmental Score) minus (Post-Perceived minus Developmental Score) provides data about how students improved their self-assessments of intercultural competence as a result of participating in study abroad programs. An independent sample t-test was conducted to compare score change between the participants and the control group. Results show a significant difference in the score change between them. This suggests that study abroad programs do have an effect on reducing the gap between students' self-assessments and their actual intercultural competence. It also means that students are able to improve their self-assessments of intercultural competence.

Table 4.5.

(Pre-Perceived minus Developmental Score) minus (Post-Perceived minus Developmental Score)

	N	PreP-DS	PostP-DS	PreP-DS - PostP-DS	SD	T	Sig.
Participants	344	34.817	33.507	1.310	7.365		
Control Group	25	33.739	34.691	-0.952	3.365	2.895	.006

* PreP-DS is Pre-Perceived minus Developmental Score

* PostP-DS is Post-Perceived minus Developmental Score

Score Changes by IDI Orientations in Pre-Study Abroad Period

The two t-tests indicate that students who studied abroad developed intercultural competence to a significantly greater degree than control group students. Looking at more detailed results focusing on individual students, some further important findings are revealed. Table 4.6 demonstrates the number of students who changed their Developmental Score based on each of five IDI orientations (Denial, Defense, Minimization, Acceptance and Adaptation) of the IDC model in the pre-study abroad period. As noted in the section in Chapter Three entitled “Approach of This Study”, people are classified into five orientations according to their intercultural competence. For example, people in Denial do not accept the existence of cultural differences, and those in Defense acknowledge the differences but see the different cultures either negatively or positively, while those in Acceptance recognize the differences without evaluating cultural differences positively or negatively. In this study, 187 of 344 students (54.4 percent) improved their Developmental Scores between pre and post- study abroad periods. Looking at Denial in the pre-study abroad period, 31 of 40 students (77.5 percent) increased their Developmental Score in the post-study abroad periods. Likewise, for the more advanced orientations in the pre-study abroad period, 87 of 146 students (59.6 percent) in Polarization and 67 of 149 (45.0 percent) in Minimization increased their Developmental Score. Even though there was only a small number of students who were in Acceptance in the pre-study abroad period, 2 of 9 students (22.2 percent) increased their Developmental Score in the post-study abroad period. In the pre-study abroad program period, no students were in Adaptation.

A significant finding from Table 4.6 is that more students in lower orientations in the pre-study abroad period improved their Developmental Score than did students in advanced orientations. This suggests that study abroad programs have a particularly strong impact on

developing intercultural competence for students in lower IDI orientation categories in the pre-study abroad period.

Table 4.6.

Developmental Score Change

	No Change	Score Up	Score Down	Total
Denial		31 (77.5%)	9 (22.5%)	40 (100%)
Polarization		87 (59.6%)	59 (40.4%)	146 (100%)
Minimization	1 (0.6%)	67 (45.0%)	81 (54.4%)	149 (100%)
Acceptance		2 (22.2%)	7 (77.7%)	9 (100%)
Total	1 (0.2%)	187 (54.4%)	156 (45.4%)	344 (100%)

Data Presentation for Research Question 2 (Quantitative Analysis)

This section presents data results for Research Question II: “What factors in study abroad programs contribute, either positively or negatively, to the development of students’ intercultural competence?” Whereas the two t-tests made clear the significant impact study abroad programs have on the development of intercultural competence and on improvement in students’ self-assessment of intercultural competence, further quantitative analysis explores the factors which are responsible for this impact. Then through qualitative analysis this study seeks the reason for those significant impacts, by examining students’ reflections about their experiences in study abroad programs.

In the quantitative analysis, two multiple regression analyses were conducted and the results are presented in Tables 4.7 and 4.13. Table 4.7 explains the predictive relationship for changes in Developmental Scores, between pre and post-study abroad, using Gender, Prior

International Experience, Prior Language Proficiency, Destination, Program Type, Program Duration, Stay Type and Pre-Departure Orientation as independent variables. By contrast, Table 4.13 explains, with those same eight independent variables, the predictive relationship for the diminishment in the gap between self-assessment of intercultural competence and actual intercultural competence.

Changes in Developmental Score Between Pre-and Post-Study Abroad Periods

Table 4.7 displays the independent variables having predictive significance for changes in Developmental Scores between pre and post-study abroad periods. IDI does not provide its official scale standard, point to point, for score changes in the Development Score so this multiple regression analysis examines the difference between predicted Developmental Score (i.e. the Post-Developmental Score minus the Pre-Developmental Score should be zero, if students did not study abroad) and the actual measured Developmental Score, and recognizes the difference as the effect of study abroad programs. A stepwise selection is applied, which chooses the variable that improves the regression model one at a time and repeats this process until no further improvement is possible. By this process, Gender, Destination, Program Type and Stay Type were dropped from the selection. By contrast, Pre-Departure Orientation, Program Duration, Prior International Experience and Prior Language Proficiency are predicted to have a certain impact on changes in Developmental Scores between pre and post study abroad periods.

Pre-Departure Orientation 1 is predicted to have the strongest relationship to a positive change in Post-Development Scores and Pre- Development Scores among all variables. This demonstrates that participants who took the pre-departure orientation increased their Developmental Scores between pre- and post-study abroad programs more than participants who did not take pre-departure orientation.

In comparison to Prior Language Proficiency 0, Prior Language Proficiency 3 is shown to contribute to a positive change in Post Development Scores and Pre-Development Scores. Despite having no statistical significance, Prior Language Proficiency 1 is also predicted to have a certain impact on negative score changes.

Despite no statistical significance, in comparison to Prior International Experience 0, Prior International Experience 1 is expected to have a certain relationship to changes in Post-Development Scores and Pre-Development Scores. However, it negatively influences the score change. Likewise, Prior International Experience 2 shows a tendency for a positive impact on the score change.

An interesting finding of these results is that students who have intermediate English proficiency are predicted to increase their Developmental Scores less than students who have lower English language scores. Likewise, students who have short prior international experience are predicted to increase Development Scores less than students who have no prior international experience.

Finally, despite having no statistical significance, Program Duration S indicates that short-term study abroad programs are predicted to have less impact on the positive change of Developmental Scores than Program Duration M. This implies that medium-term study abroad programs are more beneficial than short-term study abroad programs for increasing Developmental Scores.

Table 4.7.

Multiple Regression Analysis Post-Developmental Score minus Pre-Developmental Score

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	31.195	3.793	8.224	4.39e-15***
DO1	0.628	0.042	14.908	< 2e-16***
Prior Language Proficiency 1	-2.389	1.519	-1.573	0.117
Prior Language Proficiency 2	0.511	1.337	0.374	0.709
Prior Language Proficiency 3	4.009	2.080	1.927	0.0548.
Pre-Departure Orientation 1	6.917	1.199	5.772	1.78e-08***
Program Duration S	-1.956	1.381	-1.416	0.158
International Experience 1	-2.330	1.458	-1.598	0.011
International Experience 2	2.213	1.812	1.221	0.223

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 10.13 on 335 degrees of freedom

Multiple R-squared: 0.4695, Adjusted R-squared: 0.4569

F-statistic: 37.07 on 8 and 335 DF, p-value: < 2.2e-16

Further Results of Pre-Departure Orientation

Among all eight variables, this study shows that Pre-Departure Orientation 1 is predicted to have the most significant impact on the improvement of Developmental Scores. To deepen understanding of this finding, it is important to ask what types of students can be predicted to maximize the effectiveness of pre-departure orientation to increase Developmental Scores. Of the 344 participants, Pre-Departure Orientation 1 had an especially strong impact on three types of students.

The first is students who were in the ethnocentric (i.e. earlier) orientation (Denial and Polarization) in the pre-study abroad period. Although Table 4.8 indicates that pre-departure orientation is very helpful to enhance the development of intercultural competence in the post-study abroad period (i.e. post-study abroad ICC) regardless of IDI orientation registered for the pre-study abroad period, a more detailed analysis reveals very important results. Among 40 students in Denial, in fact, 19 of 23 students (82.6 percent) who took the orientation increased their Developmental Score, while 12 of 17 students (70.6 percent) who did not take the orientation increased their score. Likewise in Polarization, 50 of 70 students (71.4 percent) who took pre-departure orientation increased their Developmental Score, while only 37 of 76 students (48.7 percent) who did not take the orientation increased their score. The difference in the percentage of students who did not take pre-departure orientation between Denial and Polarization implies that study abroad programs are more influential for students who were in earlier Denial orientations, regardless of whether they took pre-departure orientation. However, it can also be confirmed that students who take pre-departure orientation will have a greater possibility of improving their Developmental Score in the post-study abroad period as compared to students who do not take the orientation.

Table 4.8.

Comparison By IDI Orientation

	No Change	Score Up	Score Down	Total
Denial		31 (77.5%)	9 (22.5%)	40 (100%)
Pre-Departure Orientation 0		12 (70.6%)	5 (29.4%)	17 (100%)
Pre-Departure Orientation 1		19 (82.6%)	4 (17.4%)	23 (100%)
Polarization		87 (59.6%)	59 (40.4%)	146 (100%)
Pre-Departure Orientation 0		37 (48.7%)	39 (51.3%)	76 (100%)
Pre-Departure Orientation 1		50 (71.4%)	20 (28.6%)	70 (100%)
Minimization	1 (0.6%)	67 (45.0%)	81 (55.0%)	149 (100%)
Pre-Departure Orientation 0	1 (1.49%)	23 (34.3%)	43 (64.1%)	67 (100%)
Pre-Departure Orientation 1		44 (53.7%)	38 (46.3%)	82 (100%)
Acceptance		2 (22.2%)	7 (77.7%)	9 (100%)
Pre-Departure Orientation 0			3 (100%)	3 (100%)
Pre-Departure Orientation 1		2 (33.3%)	4 (66.6%)	6 (100%)
Total	1 (0.2%)	187 (54.4%)	156 (45.4%)	344 (100%)

The second type is students who joined short-term study abroad programs. Among 158 students who joined short-term study abroad programs and took pre-departure orientation, 99 (62.7 percent) increased their Developmental Score between pre and post-study abroad periods, while 40 of 100 students (40.0 percent) who joined short-term study abroad programs and did not take the orientation increased their scores. Likewise, medium-term study abroad programs demonstrate a higher possibility for score improvement than short-term study abroad programs. Given that the number of Japanese students joining short-term study abroad programs has increased in recent years and that the number of students who did not take pre-departure

orientation and increased their Developmental Score is quite low, the impact of pre-departure orientation on the short-term study abroad students is a noteworthy finding.

Table 4.9.

Comparison By Program Duration

	No Change	Score Up	Score Down	Total
Pre-Departure Orien. 0	1 (0.6%)	72 (44.1%)	90 (55.2%)	163 (100%)
Medium		32 (50.8%)	31 (49.2%)	63 (100%)
Short	1 (1.0%)	40 (40.0%)	59 (59.0%)	100 (100%)
Pre-Departure Orien. 1		115 (63.5%)	66 (36.5%)	181 (100%)
Medium		16 (69.6%)	7 (30.4%)	23 (100%)
Short		99 (62.7%)	59 (37.3%)	158 (100%)
Total	1 (0.2%)	187 (54.4%)	156 (45.4%)	344 (100%)

The third type is students who have no prior international experience. Among 115 students who have no prior international experience and took the pre-departure orientation, 76 students (66.1 percent) increased their Developmental Scores between pre and post-study abroad periods. By contrast, 54 of 123 students (43.9 percent) who did not take the orientation increased their score.

Table 4.10.

Comparison By Prior International Experience

	No Change	Score Up	Score Down	Total
Pre-Departure Orien. 0	1 (0.6%)	72 (44.2%)	90 (55.2%)	163 (100%)
Prior International Experience 0	1 (0.8%)	54 (43.9%)	68 (55.3%)	123 (100%)
Prior International Experience 1		7 (43.8%)	9 (56.2%)	16 (100%)
Prior International Experience 2		11 (45.8%)	13 (54.2%)	24 (100%)
Pre-Departure Orien. 1		115 (63.5%)	66 (36.5%)	181 (100%)
Prior International Experience 0		76 (66.1%)	39 (33.9%)	115 (100%)
Prior International Experience 1		28 (57.1%)	21 (40.8%)	49 (100%)
Prior International Experience 2		11 (64.7%)	6 (35.3%)	17 (100%)
Total	1 (0.2%)	187 (54.4%)	156 (45.4%)	344 (100%)

Of course, it cannot be concluded that the results indicate the exact impact of pre-departure orientation, because students are also influenced by other variables. However, a significant finding is that students who were given pre-departure orientation are likely to have more effective study abroad programs than students who did not take the orientation.

Further Results of Prior Foreign Language Proficiency

Along with Pre-Departure Orientation 1, Prior Language Proficiency 3 is also predicted to have a significant impact on the development of intercultural competence. As can be seen in Table 4.11, Prior Language Proficiency 3 has the smallest number of students among the four categories of Prior Language Proficiency. Nonetheless, it can be noted that the average score increase of Prior Language Proficiency 3 students is notably higher than other language

proficiency groups. In fact, the students in Prior Language Proficiency 3 increased their score by 6.30 between pre and post-study abroad periods, on average, while group scores for Prior Language Proficiency 0, 1 and 2 were 1.28, 0.75 and 2.99 respectively.

Table 4.11.

Prior Language Proficiency

	No change	Score Up	Score Down	Total
Prior Language Proficiency 0	1 (0.9%)	56 (51.4%)	52 (47.7%)	109 (100%)
Prior Language Proficiency 1		40 (50.6%)	39 (49.4%)	79 (100%)
Prior Language Proficiency 2		73 (58.9%)	51 (41.1%)	124 (100%)
Prior Language Proficiency 3		18 (56.3%)	14 (43.7%)	32 (100%)
Total	1 (0.2%)	187 (54.4%)	156 (45.4%)	344 (100%)

Further Results of Prior International Experience

By contrast, Prior International Experience 1 is predicted to have a negative impact on change in intercultural competence compared to Prior International Experience 0. A more detailed observation of Table 4.12 indicates that the negative impact is noticeable in students with low scores for pre-study abroad ICC.

In this regard, there are three types of students in Prior International Experience 1 who have a relatively high likelihood of avoiding a negative influence on the development of their intercultural competence. The first type is students who take pre-departure orientation. Table 4.12 shows that 28 of 49 students (57.1 percent) who took pre-departure orientation increased their Developmental Score, while 7 of 16 students (43.8 percent) who did not take the orientation increased their score. The second type is students who joined a cultural program. Among 49

students with this orientation, those taking a cultural program were more likely to avoid a decrease in the score than students taking other programs. In fact, 17 of 27 (63.0 percent) students who participated in cultural programs increased their Developmental Score, while 11 of 22 students (50.0 percent) who participated in English language programs increased their score. This indicates that Prior International Experience 1 students who participate in cultural programs are less likely to see a decrease in their Developmental Scores than students who participate in English language and academic programs. The final type might be students who participate in homestay. Among 27 students who took pre-departure orientation and participated in cultural programs, 25 students participated in homestay. 16 of the 25 students (64.0 percent) increased their Developmental Score. However, the data cannot prove the superiority of homestay over dormitory stay, as the number of students who had a dormitory experience among the students who took pre-departure orientation and a cultural program is quite small (i.e. two students). Nonetheless, Table 4.12 clearly shows that, among all students who were in Prior International Experience 1, the students who took pre-departure orientation, joined cultural programs, and participated in homestay had the highest possibility of increasing their intercultural competence.

Table 4.12.

Prior International Experience 1 Results

Prior International Experience 1	No Change	Score Up	Score Down	Total
	1 (1.6%)	35 (53.8%)	29 (44.6%)	65 (100%)
Pre Depart. Orient. 0		7 (43.8%)	9 (56.2%)	16 (100%)
Lang.		7 (43.8%)	9 (56.2%)	16 (100%)
Dorm		6 (42.9%)	8 (57.1%)	14 (100%)
Medium		3 (60.0%)	2 (40.0%)	5 (100%)
Short		3 (33.3%)	6 (66.7%)	9 (100%)
Homestay		1 (50.0%)	1 (50.0%)	2 (100%)
Medium		1 (50.0%)	1 (50.0%)	2 (100%)
Pre Depart. Orient. 1		28 (57.1%)	21 (42.9%)	49 (100%)
Culture		17 (63.0%)	10 (37.0%)	27 (100%)
Dorm		1 (50.0%)	1 (50.0%)	2 (100%)
Medium		1 (50.0%)	1 (50.0%)	2 (100%)
Homestay		16 (64.0%)	9 (36.0%)	25 (100%)
Short		16 (64.0%)	9 (36.0%)	25 (100%)
Lang.		11 (50.0%)	11 (50.0%)	22 (100%)
Homestay		11 (50.0%)	11 (50.0%)	22 (100%)
Short		11 (50.0%)	11 (50.0%)	22 (100%)

Gap between Self-Assessment and Actual Intercultural Competence

Table 4.14 indicates the estimated relationship between the change of Perceived Score minus Developmental Score for pre-study abroad programs (***Pre-Perceived minus Developmental Score***) and post-study abroad programs (***Post-Perceived minus Developmental Score***). As aforementioned, (***Pre-Perceived minus Developmental Score***) minus (***Pre-Perceived minus Developmental Score***) shows to what extent students improved their self-assessment of intercultural competence through study abroad programs. This regression analysis explores

predicted score (*Pre-Perceived minus Developmental Score*) minus (*Pre-Perceived minus Developmental Score*) and actual measured score and regards their differences as the effect of study abroad programs. As a result, Gender, Destination, Program Type and Stay Type were dropped by stepwise selection. On the other hand, Pre-Departure Orientation, Prior International Experience, Prior Language Proficiency and Program Duration are expected to have a positive influence on the improvement of self-assessment of intercultural competence.

First, Pre-Departure Orientation 1 shows the strongest relationship to improved self-assessment of intercultural competence. The minus estimate means that Post-Perceived Score minus Post-Developmental Score becomes smaller than Pre-Perceived Score minus Post-Developmental Score; i.e. students in the post-study abroad period estimate their intercultural competence score more accurately than in the pre-study abroad period. Second, Prior International Experience 1 is predicted to have a negative relationship to improved self-assessment of intercultural competence compared to Prior international Experience 0. By contrast, Prior International Experience 2 had some influence on the improvement of self-assessment, without reaching statistical significance. In comparison to Prior Foreign Language Proficiency 0 (i.e. no language test score), all Language categories except Prior Foreign Language Proficiency 1 lack statistical significance. Only Prior Language Proficiency 1 showed a significant negative impact, while Prior Language Proficiency 2 and 3 showed a positive impact on the improvement of self-assessment. Also, Program Duration M had stronger impact on change compared to Program Duration S, although neither reached statistical significance.

Table 4.13.

Multiple Regression Analysis

(Pre-Perceived minus Developmental Score) minus (Post-Perceived minus Developmental Score)

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	13.198	1.745	7.561	3.87e-13***
PO1DO1	0.619	0.042	14.747	< 2e-16***
Prior Language Proficiency 1	1.895	0.967	1.960	0.051.
Prior Language Proficiency 2	-0.295	0.871	-0.339	0.735
Prior Language Proficiency 3	-1.413	1.325	-1.066	0.287
Pre-Departure Orientation 1	-4.076	0.764	-5.338	1.74e-07***
Program Duration S	-0.797	0.880	0.906	0.366
Prior International Experience 1	1.577	0.930	1.696	0.091.
Prior International Experience 2	-1.570	1.155	-1.360	0.175

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 6.454 on 335 degrees of freedom

Multiple R-squared: 0.4613, Adjusted R-squared: 0.4484

F-statistic: 35.86 on 8 and 335 DF, p-value: < 2.2e-16

Data Presentation of Research Question 2 (Qualitative Analysis)

In qualitative analysis, text mining analysis of students' reflection papers explores factors that some independent variables indicate have significant impact on the change in Developmental Scores revealed by quantitative analysis. The reflection papers asked students two open questions: Question 1 - "What did you learn in study abroad programs that most helped you to develop your intercultural competence?" and Question 2 - "What challenges do you face in the further development of your intercultural competence?" Among 344 students, 249 students submitted reflection papers. Content analysis carried out through text mining analysis of answers to the two questions found the reasons why Pre-Departure Orientation 1, Prior Language Proficiency 3 and Prior International Experience 1 categories showed a statistically significant increase in Developmental Scores between pre and post-study abroad periods.

Pre-Departure Orientation

In the reflection papers, text mining analysis found differences between students who took pre-departure orientation and those who did not. Text mining is a method of research which clarifies the commonalities and differences in the characteristics of different reflection papers by examining word usages in each paper. The purpose of conducting text mining analysis in this study is to catch the commonalities and differences among 249 different reflection papers. It determines whether there are any commonalities and differences in the contents of reflection papers between students who have significant predictive variables revealed by quantitative analysis and those who do not. Through this analysis, the study explores whether students who had significant predictive variables had different experiences in and reflections about study abroad than students who did not have the variables. Table 4.10 and Table 4.11 clarify the similarities and differences of the frequency of word usage between the two types of students in the answers

for the two questions. The figures to the right of the word list are a Jaccard index, which shows how much each student group classified according to the variables has used particular words, i.e. how often each student group used a word in writing answers to the two questions in reflection papers.

Qualitative Question 1:

First, Question 1 asked students “what did you learn the most through study abroad programs to develop your intercultural competence?” Table 4.14 denotes the frequency with which students who took pre-departure orientation used the words “difference” or “different” followed by “I”, “feel”, “communicate”, “think”, and “understand”. By contrast, students who did not take pre-departure orientation used “have fun” the most, followed by “culture”, “Japan”, “difficult”, “know”, and “lifestyle”. The difference between the two types of students implies the tendency of students who took the orientation to take seriously the understanding of cultural differences, especially in communication, such as the use of English and people’s communication style. However, students who did not take the orientation emphasized the elements of cultural differences only in terms of the fun in the differences, such as lifestyle and the differing value placed upon punctuality, by the Japanese and typical residents of the destination countries. According to DMIS and IDC, the theoretical models applied to IDI, a person who is aware of components of cultural differences is in a more advanced stage of intercultural competence than a person who only recognizes the elements of cultural difference. Furthermore, a person who emphasizes the fun of feeling cultural difference is likely to be in the honeymoon stage in intercultural exposure according to the W-Curve Theory referred to in the literature review section in this study.

Table 4.14.

Students' Word Frequency (Pre-Departure Orientation, Q1 answers)

Pre-Departure Orientation 0		Pre-Departure Orientation 1	
have fun	.244	I	.211
culture	.221	feel	.187
Japan	.179	communicate	.164
difficult	.160	think	.159
know	.113	English	.157
lifestyle	.096	understand	.148
many	.073	different	.141
time	.066	people	.125
Canada	.066	difference	.105
country	.064	vocabulary	.083

Many students who took pre-departure orientation discussed the relative importance of English language proficiency when communicating with people from different cultures.

Following is an example:

“English is not the most important factor in communicating with people from other cultures. It is true that it is difficult to talk with American people if I don't have a certain level of English speaking proficiency. But what is most important is that I do my best to communicate what I want to say. By showing such an attitude, my American friends kindly tried to understand what I was talking about. I think building such mutual relationships is the key to intercultural communication. (Participant #228)

On the other hand, other students mentioned the importance of language proficiency to truly understand people from different cultures. For instance:

“English speaking skill is very important. I was able to make many foreign friends, even though my English was not good enough to communicate with them fluently. But I realized after a while that I needed to have a certain level of English speaking skill, if I wanted to truly understand my friends and be close. (Participant #297)

Next, some other students referred to the difference of communication in terms of style:

“In Japan, making a strong personal statement is not a social virtue because we see strong statements as an expression of lack of concern for other people. But in the United States, my communication style was often regarded as passive. I was surprised to hear my English teacher tell me “you are shy.” In Japan I had never thought I was shy. But I realized that my classmates from Latin America and China were much more active in expressing what they were thinking about.” (Participant# 289)

“I was told by my instructor that American society emphasizes self-responsibility. For example, if I don’t understand something that the instructor is teaching and I fail to ask questions then that is my fault. I did my best to ask questions but I struggled to do that because I was not so active in Japan.” (Participant #297)

A participant explained that he felt the difference between understanding and accepting different cultures was as follows:

“I felt that accepting different cultures is completely different from understanding different cultures. For example, even if my friend tried to understand what I wanted to tell him, I had difficulty making him understand why I wanted to tell him, because my comments were from a Japanese viewpoint. I believe that cultural differences influence the way people think. So it is not always a question of personality” (Participant #328)

Some other students pointed out that they were likely to see every difference between people from other cultures and themselves as a cultural difference. But after they came back to Japan, some students realized that was not necessarily correct:

“My friend from a foreign country was always late to meetings. From my Japanese viewpoint, that was not good manners. But he told me that coming late is common in his country. But later I thought that I was too likely to interpret and accept every difference as a cultural difference. I now think that he came late as a result of his personality, because not all people from his country people come late.” (Participant #336)

“Throughout this study abroad, I wondered how I should understand human morals, regardless of cultural differences. It is true that common sense is different in different cultures but morality should be the foundation of all cultures. (Participant #341).

Next, students who did not take pre-departure orientation and who discussed the fun they enjoyed in their study abroad, mentioned the excitement of being exposed to different cultures and new perspectives:

“Before I studied abroad in Toronto, I thought Canada was like America. But I realized that Toronto has more ethnic diversity than America. Sometimes I felt I was not in Canada. I had a lot of fun in this intercultural environment because I had never been in such an ethnically diverse environment in Japan” (Participant#143)

“By living in a different culture area, I was able to compare Japanese culture to other cultures and discover their differences. Also it was a good opportunity for me to see Japan from an outside perspective. Living in a different culture gave me the enjoyment of learning about both good and bad aspects of Japan and Japanese culture.”
(Participant #263)

“I had a lot of fun living in a different culture because I was able to learn different perspectives and ways of thinking. I did not have these in Japan. I got some new impressions about Japan in both good ways and bad. At the same time, cultural differences are natural in the world and I do not think that I need to accept everything”
(Participant #278).

Qualitative Question 2:

Second, Question 2 asked students “what is your challenge for the further development of your intercultural competence?” Table 4.15 shows the tendency of answers by students who took pre-departure orientation. The tendency shows the interaction with people from different cultures as challenging, by using words “I”, “activeness”, “people”, “lifestyle”, “training”, “interact”, “and “action”. By contrast, students who did not take the orientation wrote more about what they should do next by using words “English”, “study abroad”, “overseas”, “study” and

“experience”. If we compare them, students who took pre-departure orientation are likely to reflect about study abroad in introspective ways, especially in terms of how they should interact with other people from different cultures or what attitudes they should have to understand cultural differences in the future. On the other hand, students who did not take the orientation focused more on looking at what they do in the next step of their further development, especially in improving English proficiency and getting more intercultural experiences. Looking at the future is not bad thing. However, the different tendency shows the different level of reflection between the two types of students and how much they reflected deeply on their study abroad experience.

Table 4.15.

Students' Word frequency (Pre-Departure Orientation, Q2 answers)

Pre-Departure Orientation 0		Pre-Departure Orientation 1	
English	.258	I	.187
Think	.231	activeness	.146
study abroad	.183	people	.136
Japan	.141	lifestyle	.130
Study	.127	have	.091
foreign country	.120	create	.087
experience	.095	training	.084
consider	.091	interact	.083
world	.067	action	.082
utilize	.065	learn	.080

Many students who took pre-departure orientation spoke of interaction with people from other cultures. Following are some examples:

“I am going to create exchange opportunities with international students at my home university in Japan this coming semester. Through these opportunities, I intend to improve my abilities to interact with people from other cultures. I want to make foreign friends throughout my life.” (Participant #291)

“In the future, what I need to develop, in conversation with people from other cultures, is my body language. Before study abroad, I did not care about the importance of body language in conversation. But I realized that Western people often noticed my gestures and eye contact when they listened to me. I am not good at expressing my feelings in front of people but I need to improve this to be more intercultural. (Participant #192).

“I had difficulty conversing in English. I want to be able to have good conversations in English with people from other cultures. It was especially inspiring to see that my South Korean classmates were very fluent English speakers, although South Korea is located near Japan and a non-English speaking country. ” (Participant #138)

By contrast, following are examples of comments by students who did not take the orientation:

“I will find a job where I use English. For that purpose, I learned many things from this study abroad experience but I want to participate in longer study abroad programs or a working-holiday program next time.” (Participant #143)

“I want to be a Japanese teacher in a foreign country. For this goal, I am going to keep studying English very hard so I can lecture about Japan in English. Also, I will learn more about Japan. Through my study abroad programs, I realized that I don’t know about my own country very much.” (Participant #263).

“I realized that studying English is very interesting. I will not forget my motivation and will create chances to listen to English radio programs and to read English newspapers.” (Participant #256).

“Learning in a foreign country gave me the motivation to study what I have never known. Especially, spending time with people from different cultures is attractive to me. So I am planning to study abroad again.” (Participant #302).

“Next, I want to study abroad for a long-term period. One purpose is to study English. But more importantly, I want to gain confidence that I can stay in foreign countries.” (Participant #250).

Prior Language Proficiency

Quantitative analysis revealed that Prior Language Proficiency 3 demonstrates a more significant predicted impact on the change of Developmental Score, compared to Prior Language Proficiency 0. By contrast, neither Prior Language Proficiency 1 nor 2 showed significance in terms of the score change. Looking at the result of text mining about Prior Language Proficiency 3 shows the tendency for students to comment about accepting cultural differences by using the

words “custom”, “culture”, “difference”, “accept.” As a comparison, Prior Language Proficiency 0 wrote more about what they learned by using the words “English”, “people”, “country”, and “lifestyle”. In DMIS and IDC, a person who has an awareness of accepting the cultural differences and is not merely trying to understand them is on at least a transitional orientation, which is more advanced than Denial and Polarization. It was evident that Prior Language Proficiency 3 resulted in deeper reflections than Prior Language Proficiency 0.

Furthermore, it can be seen in Table 4.16 that the higher English language score students have, the deeper the reflection papers they wrote. In fact, Prior Language Proficiency 1 students mentioned introspective reflections about cultural difference by using the words such as “different” and “communication”, while Prior Language Proficiency 0 students were more inclined to write about the elements of cultural difference. Compared to Prior Language Proficiency 1, on the other hand, Prior Language Proficiency 2 students demonstrated deep introspective reflections rather than experiencing difficulty in understanding cultural difference. Finally, as noted earlier, Prior Language Proficiency 3 students mentioned accepting cultural differences, which is a step beyond the understanding of cultural differences.

By contrast, Table 4.17 did not provide specific different tendencies among the four language groups in the answer Question 2.

Table 4.16.

Students' Word Frequency (Prior Language Proficiency, Q1 answers)

Prior Language Proficiency 0		Prior Language Proficiency 1		Prior Language Proficiency 2		Prior Language Proficiency 3	
English	.122	Japan	.149	culture	.320	custom	.118
people	.111	I	.129	have fun	.267	food	.105
country	.085	Feel	.121	difficult	.210	difference	.098
lifestyle	.071	different	.111	understanding	.173	know	.095
many	.063	communicate	.105	I	.171	activeness	.095
foreign	.057	experience	.096	think	.155	feel	.092
see	.055	think	.096	know	.147	common	.091
time	.053	difference	.086	different	.113	culture	.089
various	.053	someone	.071	people	.113	accept	.087
someone	.053	different	.071	English	.113	exposure	.087

Table 4.17.

Students' Word Frequency (Prior Language Proficiency, Q2 answers)

Prior Language Proficiency 0		Prior Language Proficiency 1		Prior Language Proficiency 2		Prior Language Proficiency 3	
think	.119	English	.206	English	.238	active	.118
Japan	.095	study	.177	people	.167	surrounding	.118
interest	.056	think	.164	study abroad	.158	environment	.105
words	.056	I	.143	I	.152	learning	.103
language	.055	study	.138	active	.139	lifestyle	.100
activity	.054	Japan	.119	lifestyle	.118	good	.100
do my best	.054	utilize	.109	this time	.094	stimulus	.095
trainings	.053	action	.105	communication	.090	overseas	.093
work	.053	overseas	.099	experience	.085	perspective	.091
precious	.053	this time	.097	exploit	.084	opportunity	.087

Some examples of reflection papers written by Prior Language Proficiency 3 students are as follows:

“Through discussions, I enjoyed learning about my classmates’ cultures and religions. I was happy that I was able to build mutual understanding with classmates who have different cultures, values and religions. But moreover, I was especially excited when I found commonalities between us.” (Participant #291)

“Language is very important but it is a tool of communication. Another important thing is my will to communicate with people from other cultures. In addition, I think respecting cultural differences is important.” (Participant #14).

“Learning about different cultures is exciting because I was able to learn different customs and ways of thinking. But sometimes I had difficulty accepting what I had learned. I want to be an intercultural person who can handle the difficulty.”

(Participant #256).

Prior International Experience

In quantitative analysis, Prior International Experience 1 is predicted to make a more negative impact on the change in Developmental Score than Prior International Experience 0. Likewise, Prior International Experience 1 is estimated to have a more negative impact on the improvement of students’ self-assessment of intercultural competence than Prior International Experience 0. Looking at the Table 4,18, there are two remarkable tendencies. First, there are some similar word choices between the two types of students, such as “differ” and “different”, “communicate and communication” and “talk and tell”. Second, the distinctive characteristic of Prior International Experience 1 is that the students mentioned both the “difficulty” and “fun” of understanding cultural difference. In DMIS and IDC, experiencing both sides of understanding cultural differences shows that students’ exposure to an intercultural environment gives them a deeper layer of cultural understanding than students who do not have that experience.

Table 4.18.

Students' Word Frequency (Prior International Experience, Q1 answers)

Prior International Experience 0		Prior International Experience 1		Prior International Experience 2	
Japan	.201	have fun	.198	precious	.125
know	.117	I	.177	Canada	.125
communicate	.060	Feel	.152	disparity	.125
differ	.055	difficulty	.136	unwearying	.125
many	.054	different	.135	can know	.100
Canada	.049	understanding	.133	know	.098
various	.049	communicate	.130	talk	.095
time	.049	English	.120	experience	.087
finding	.044	conversation	.105	have fun	.083
talk	.044	tell	.098	various	.080

As for frequency, on the other hand, Table 4.19 illustrates that Prior International Experience 0 students wrote about what they what they should do next for further intercultural development, by using “English”, “study abroad”, “overseas”, “study” and “experience”. By contrast, Prior International Experience 1 students were more likely to mention “action” or to work on something more “active” or “actively”. Nonetheless, Prior International Experience 1 shows a negative impact on both the development of intercultural competence and the improvement of the gap between self-assessed and actual intercultural competence. It implies that there must be other factors contributing to the statistical significance of negative influence in the change of Developmental Scores and the improvement of self-assessment of intercultural competence.

Table 4.19.

Students' Word Frequency (Prior International Experience, Q2 answers)

Prior International Experience 0		Prior International Experience 1		Prior International Experience 2	
English	0.317	think	0.179	world	0.143
study abroad	0.167	I	0.163	exploit	0.125
study	0.145	training	0.143	realize	0.118
oversea	0.116	Action	0.136	host family	0.118
Japan	0.112	Active	0.113	next	0.111
lifestyle	0.106	activity	0.109	take	0.111
experience	0.081	consider	0.1	include	0.111
feel	0.065	people	0.099	stimulus	0.1
capability	0.06	overseas	0.093	Canada	0.1
culture	0.06	perspective	0.093	various	0.095

Some examples from reflection papers of Prior International Experience 1 students are as follows:

“I had a difficulty in adjusting to the lifestyle of my host family for the first week. I realized that living in a different culture was endlessly surprising. But after the first week, I got accustomed to the lifestyle and sometimes I discussed with my host family the cultural difference between us.” (Participant #255)

“It was difficult to present my opinions in English. I think this is common for Japanese students. But if I did not try to speak in English, making local friends was very difficult. So I did my best. Now I strongly think that I should study English harder, not only for

developing my speaking skills but also for making friends with locals.” (Participant #77)

“One thing I learned from this study abroad is that there are many cultural differences, even between the Japanese and other Asians. Nonetheless, I felt similarity in physical appearance with other Asian students in study abroad.” (Participant #4)

“There are many way of thinking in this world. I want to be a person with great capacity who can accept differences. For that, I think I should engage in many activities and expand my curiosity about different cultures. An ability to speak a foreign language is not everything required to be an international person.”
(Participant # 142)

“Through this study abroad, I realized the importance of getting real experience rather than just learning from books. To accumulate experience, I need to engage in challenging actions.” (Participant #303)

Summary

This chapter presented results from quantitative and qualitative data analysis pertaining to research question 1 and research question 2. In the quantitative analysis, t-tests and multiple regression analyses were conducted to explore the answer to the questions. The t-tests captured the most basic findings of the impact of study abroad programs on the changes in students’ intercultural competence. As a result, it was indicated that study abroad programs that sent

Japanese students to Canada and the United States have statistically significant impacts on students' intercultural competence between the pre- and post- study abroad periods.

By contrast, the two multiple regression analyses explored concrete factors which influenced the change of students' intercultural competence between pre and post-study abroad. The analyses clarified the differences of the impact of study abroad programs between three student profiles (Gender, Prior International Experience and Prior Foreign Language Proficiency) and five programs profiles (Program Duration, Program Type, Stay Type, Pre-Departure Orientation and Destination). The first multiple regression analysis explored the predicted significant independent variables for the change of intercultural competence between pre and post-study abroad periods. As the result, Pre-Departure Orientation 1 is predicted to have the strongest relationship to the development of intercultural competence. Likewise, Prior Language Proficiency 3 is estimated to have a significant relationship to the development of intercultural competence. Despite lacking statistical significance, by contrast, Prior International Experience 1 is expected to have some negative impact to the development of intercultural competence. Neither reached statistical significance, yet Program Duration M had a stronger impact on change compared to Program Duration M and Prior International Experience 2 had a stronger impact on change compared to Prior International Experience 0.

The second regression analysis indicated the estimated significant independent variables for the change in the gap between students' self-assessment of intercultural competence and their actual intercultural competence. As a result, Pre-Departure Orientation 1 showed the strongest relationship to improved self-assessment of intercultural competence. By contrast, Prior International Experience 1 is predicted to have a negative relationship with improved self-assessment of intercultural competence. Without reaching statistical significance, in addition, Prior International Experience 2 had some positive influence on the improvement of self-

assessment. Among all of the three Language categories, finally, only Prior Language Proficiency 1 showed a significant but negative impact in comparison to Prior Language Proficiency 0, while Prior Language Proficiency 3 showed some positive impact on the improvement of self-assessment.

In terms of qualitative analysis, this study conducted text-mining analysis of students' reflection papers. It examined the commonalities and differences in the contents of reflection papers between students who have significant predictive variables revealed by quantitative analysis and those who do not. Applying DMIS and IDC, the theoretical models of this study, the text mining analysis indicated that students who are characterized by significant predicted variables were likely to reflect upon different cultures more deeply than students who are not.

Students who took pre-departure orientation took seriously the understanding of cultural differences and reflected on their study abroad experience in introspective ways, especially in terms of how they should interact with other people from different cultures or what attitudes they should have to understand cultural differences in the future. By contrast, students who did not take the orientation emphasized the elements of cultural differences and looked at what they should do in the next step of their further development rather than reflecting on the study abroad they experienced. These indicated the different level of reflections between the two types of students and how far they reflected deeply on their study abroad experience at this time. Furthermore, it was evident that Prior Language Proficiency 3 resulted in deeper reflections than Prior Language Proficiency 0. Finally, Prior International Experience 1 indicates that the students experienced deeper cultural understanding than students who do not have such experience. Nonetheless, Prior International Experience 1 shows a negative impact on both the development of intercultural competence and the improvement in the gap between self-assessed and actual intercultural competence. It implies that there must be other factors contributing to the statistical significance

of negative influence in the development of intercultural competence and the improvement in self-assessment of intercultural competence.

Chapter Five: Discussion

This chapter aims to deepen understanding of the data results presented in Chapter Four by exploring three analytical approaches. The first approach is to interpret the findings from both quantitative and qualitative data results, which were shown separately in Chapter Four. The second approach is to compare the findings of this study to those of previous studies reviewed in Chapter Two, the literature review chapter, to discover similarities and differences between previous studies and this one. The third approach is to discuss research question III: “What, if any, are the differences between short and medium-term study abroad programs, in the degree to which they develop intercultural competence among study abroad students.” Through these three approaches, this chapter aims to deepen understanding of what variables in study abroad programs impact the development of participating students' intercultural competence.

Basic Findings about the Impact of Study Abroad Programs

This study examines the impact of study abroad programs on Japanese students' intercultural competence. Two t-tests were conducted to assess what effect study abroad programs had on changes in students' intercultural competence. The first t-test explored to what degree students who studied abroad changed their Developmental Scores. As discussed in greater detail in Chapter Three, the Developmental Score measures the score of respondents' primary intercultural orientation: the intercultural perspective he or she is most likely to employ in situations where cultural differences and commonalities arise (Hammer, 2011). The Developmental Score indicates one's degree of intercultural competence, according to the IDC, as displayed in Table 3.1. The test results demonstrated that students who studied abroad made significantly greater progress in developing their intercultural competence, as compared to control

group students. This result is in line with previous studies of American students by Vande Berg et al. (2009) and Anderson et al. (2005), which used IDI as a measurement. In fact, this study reveals that 344 Japanese students recorded an average 2.24 points increase in their Developmental Scores following their study abroad programs, while Vande Berg et al. (2009) recorded an average increase of 2.37 points. This Japanese study is thus clearly in line with the Vande Berg et al. (2009) case study of American students.

The second t-test examined to what extent students who studied abroad closed the gap between their self-assessed intercultural competence and their actual intercultural competence. This investigation of the gap between student's self-assessed and actual intercultural competence, and how they change as a result of study abroad programs, offers a unique perspective, as compared to previous studies that used IDI as a measurement. The test results demonstrated that students who studied abroad significantly closed the gap between their self-assessed scores and actual Developmental Scores, as compared to control group students.

In short, the two t-tests indicate that study abroad programs that sent Japanese students to the United States and Canada have a measurable impact on students' intercultural competence. However, it is important to note that study abroad programs do not uniformly affect all types of students. This study indicates that study abroad programs are more effective in increasing the Developmental Score for students who were in lower IDI orientations in their pre-study abroad period. This study clarifies different impacts study abroad programs make in terms of three students profiles (Gender, Prior International Experience and Prior Foreign Language Proficiency) and five programs profiles (Program Duration, Program Type, Stay Type, Pre-Departure Orientation and Destination).

The Factors Influencing the Impact of Study Abroad

The two multiple regression analyses in this study explore concrete factors which influenced changes in students' intercultural competence as a result of studying abroad. The purpose of this exploration is to deepen understanding of the basic findings on the impact of study abroad programs which were reached by the use of t-tests. This study provides findings about what program profiles are more or less effective according to different student profiles.

Unlike many previous studies, the research method of this study is unique, in that it examines the factors impacting changes in students' intercultural competence, not only through descriptive statistics but also by using inferential statistics. The first multiple regression analysis predicted a change in Developmental Scores for the following variables: Gender, Prior International Experience, Prior Language Proficiency, Destination, Program Type, Length of Program, Stay Type and Pre-Departure Orientation. Using the same independent variables, the second multiple regression analysis predicted to what extent students improved their self-assessment of intercultural competence. Furthermore, qualitative analysis explored reasons behind the findings of the quantitative analyses by examining students' reflections about their experience in study abroad programs. Through both quantitative and qualitative analyses, this study finds that certain factors in student profiles contributed to changes in their intercultural competence. These factors will be discussed in this chapter.

Factor 1 - Pre-Departure Orientation

Pre-Departure Orientation 1 (i.e. taking pre-departure orientation) has been shown to be the most significant factor in both increasing the development of students' intercultural competence and improving the gap between self-assessed and actual intercultural competence. In fact, this study demonstrates that students who took the pre-departure orientation improved their

Development Score an average of 6.917 points more than students who did not take the orientation. Likewise, students who took pre-departure orientation closed the gap between their Perceived Score and Developmental Score by an average of 3.173 points more than students who did not take the orientation. Furthermore, this study found that the higher a student's intercultural competence in the pre-study abroad period (i.e. pre-study abroad ICC) was, the higher the growth rate that was achieved between pre and post-study abroad ICC through pre-departure orientations. Similarly, the smaller a student's gap between his or her self-assessed and actual intercultural competence was, the higher the growth rate in the gap improvement provided by pre-departure orientations. Pre-departure orientation, in this study, is defined as a series of preparation studies covering the culture and language of the destination country. These results confirm the findings of Barron (2003) and Pedersen (2010) as detailed in the literature review of Chapter Two. Barron (2003) demonstrated that students who study abroad usually lack language and cultural preparation, and so need the opportunity to learn language and culture in their destination country. Pedersen (2010) also concluded that cultural intervention by mentors at students' home universities would contribute to a more productive study abroad experience. This study also demonstrated a significant difference between students who took pre-departure orientation and those who did not. Text mining analysis of students' reflection papers revealed that many students who took the pre-departure orientation demonstrated a tendency to more deeply reflect on the difficulty in understanding and accepting the cultural differences between their home and destination countries. By contrast, students who did not take the orientation emphasized the fun of having intercultural experiences and elements of cultural differences, such as lifestyle and the value placed upon punctuality between Japan and destination countries. According to the DMIS and IDC, as discussed in Chapter Three, a person who is aware of components of cultural difference has reached a more advanced stage of intercultural competence than a person who

recognizes only the elements of cultural difference. Furthermore, according to the W-Curve Theory which was introduced in Chapter Two, a person who emphasizes the fun of experiencing cultural difference is likely to be in the honeymoon stage of intercultural exposure in which people are usually excited about the novelty of the situation. The difference between these two types of students suggests that pre-departure orientation is an important learning opportunity for students, enabling them to understand how to look at culture in an intercultural environment. This study indicates that learning how to look at culture in the pre-study abroad period is crucial to improving the effectiveness of study abroad programs in developing students' intercultural competence and also improving self-awareness of intercultural competence.

Another significant finding about the Pre-Departure Orientation is that it is especially effective for the intercultural development of four types of students. The first type is students who, in their pre-study abroad period, are in the earlier, more ethnocentric orientation phase (identified as the Denial and Polarization orientation phases in the IDC and DMIS). People in Denial and Polarization orientations are not likely to have the capacity to assess cultural differences. Also, people in the Polarization phase are likely either to be defensive and assume the superiority of their own culture or to adopt the opposite position and assume the superiority of other cultures over their own. The common characteristic of people in both orientations is that neither can come to terms, in a balanced way, with the existence of cultural differences. For this reason, pre-departure orientation provides an opportunity for students to gain a basic understanding of cultural differences and helps them to look at those cultural differences in a relatively balanced way. Pre-departure orientation thus clearly provides the potential for improving intercultural learning in destination countries.

The second type of students are those who, in their pre-study abroad period, are in the advanced orientation phase in the IDC. The difference between the first and second types of

students is that the second type of students has a higher growth rate in intercultural competence, while the first type of students has a higher possibility of developing intercultural competence.

The third type of students who seem to benefit from Pre-Departure Orientation are those who join short-term study abroad programs. Because the time period for intercultural immersion in short-term study abroad programs is limited, the extent to which students enjoy a quality immersion experience is crucial to helping them improve their intercultural understanding. According to the W-Curve Theory discussed in the literature review chapter, when people first experience intercultural exposure, they enter into a honeymoon period, in which they find everything novel and exciting. As the results of text mining reveal, the tendency was for students who lacked a pre-departure orientation to experience mainly the fun of their intercultural experience, and to mainly focus on elements of cultural difference. This suggests that pre-departure orientation provides an intercultural intervention which is especially helpful for students in short-term study abroad programs, enabling them to move beyond the honeymoon period, and more quickly gain perspective about the difficulty of understanding or accepting cultural differences.

The Fourth type of students who seem to benefit from taking pre-departure orientation are those who lack prior international experience. These students have not been previously exposed to an intercultural environment, even if they have gained some knowledge of cultural differences by reading books, or watching television and movies. It can be assumed that these students are especially likely to enter into a honeymoon period, once exposed to intercultural environments. Without taking a pre-departure orientation to deepen their understanding of cultural differences, it can be assumed that they will have difficulty moving quickly beyond the honeymoon period.

The last major finding about Pre-Departure Orientation pertains to those students who took no pre-departure orientation. Among students without this orientation, those who were in earlier IDI orientations in the pre-study abroad period were more likely to develop intercultural competence than those who were in a transitional orientation. This suggests that if universities have no choice but to send students overseas without providing pre-departure orientation, study abroad programs are more effective for students who are in earlier and more ethnocentric orientation phases (identified as Denial and Polarization phases in the IDC and DMIS).

Factor 2 - Gender, Program Type, Stay Type and Destination

The second major finding of this study is that Gender, Destination, Program Type and Stay Type are not predicted to have a significant impact either on the development of students' intercultural competence nor on minimizing the gap between self-assessed and actual intercultural competence. In the literature review of Chapter Two, it is noted that gender has often received attention in previous studies, under the assumption that female students are likely to be more active in engaging with intercultural environments. For example, Vande Berg et al. (2009) concluded that female students, as seen by their IDI scores, made greater statistically significant achievements than male students in gaining intercultural competence. Nichols (2011) concluded that gender difference is an important factor in the development of intercultural competence from study abroad programs. Furthermore, Thomlison (1991) also found that females experience more changes related to cultural awareness through study abroad. By contrast, this study concludes that the factor of gender does not have a significant influence on either the increase in development scores or on reducing the gap between self-assessed and actual intercultural competence. A possible reason for this may be that the difference between male and female students was not statistically significant. In this study, the average change in score between pre and post-study

abroad periods among female students was 2.415, while the score among male students was 1.952. Thus one cannot say that there is no difference between male and female students but the difference was not statistically significant among all eight variables. This result was revealed because this study used not only descriptive statistics, which were employed by previous studies, but also inferential statistics which makes possible more elaborated statistical analysis. Nonetheless, this study does not claim that there would have been no statistical significance in previous studies if they had used inferential statistics.

Second, Program Type also proved to be a statistically insignificant factor. As noted in “Short and Long-term Study Abroad Programs” in Chapter One, many Japanese students participate in study abroad programs to gain intercultural experience and improve language proficiency. This suggests that program type, regardless of whether it is an English language, cultural, or academic credit program, should not be a major point to consider for Japanese students. In fact, text mining analysis reveals that many students realized the importance of developing English language proficiency and the importance of understanding and accepting cultural differences for the purpose of communicating with people from different cultures. By contrast, none wrote about what they learned from the academic portion of their programs. This qualitative analysis result supports the quantitative analysis result: that Program Type is not a significant factor in predicting the development of intercultural competence.

Third, regarding Stay Type, this study had findings similar to those of previous studies. Vande Berg et al. (2009) showed that there is no relation between home-stay and the development of intercultural competence. Rather, the study demonstrated that quality interaction with locals is what matters most. Home-stay has the potential to develop intercultural proficiency when students forge quality relationships with their host families. How students interact with locals is more important than what form of residence they adopt. On the other hand, Marion (1980)

demonstrated that American students who lived with other Americans and international friends developed more intercultural competence than those who had home-stays or lived with locals. A major reason given for this finding was that people in home-stays or who lived with locals were more likely to become more conservative and nationalistic about their own culture. Similarly, in this study, some Japanese students wrote in their reflection papers that living with other Japanese students gave them the opportunity to share the fun and difficulty of experiencing cultural differences while, at the same time, motivating them to engage with different cultures. By contrast, while home-stay provided good opportunities to interact with locals, some students wrote that they were reluctant to engage in deep discussions about cultural differences, not only from lack of English proficiency but also due to their concern about giving offense, by discussing negative aspects of local cultures. These findings indicate that it is important to consider the quality of interaction with local populations, rather than forms of stay type.

Furthermore, it should be noted that these findings do not suggest that it is okay to ignore Program Type or Stay Type when making arrangements for study abroad programs. Although the two variables are not statistically significant by themselves, they should be considered as a relevant component of study abroad programs. For instance, Table 4.13 shows that for students who took pre-departure orientation and had home-stay, cultural programs were more effective than English language programs. Also, home-stay proved to be more beneficial than dormitory-stay for students who did not take a pre-departure orientation and entered an English language program. Therefore, it is suggested that study abroad coordinators consider the two variables as components of a comprehensive study abroad arrangement, according to types of students.

The final factor not recognized as significant for the development of intercultural competence is Destination. This study chose the two North American countries, Canada and the United States, for its destination countries. It might be the case that a study comparing a North

American country to an East Asian country that shares more cultural background and similarities with Japan would yield a different finding, with respect to Destination.

Factor 3 – Prior International Experience

The third major finding is that Prior International Experience 1 (i.e. 21 days or fewer of experience abroad) can be predicted to influence a negative change in the development of intercultural competence in comparison to Prior International Experience 0 (i.e. no prior international experience). In other words, Prior International Experience 0 is predicted to have a better impact on the development of intercultural competence. This means that students who have no prior international experience can be expected to develop their intercultural competence more than students who have up to 21 days prior international experience. Likewise, Prior International Experience 1 is also estimated to have a negative influence on reducing the gap between self-assessed and actual intercultural competence, compared to Prior International Experience 0.

The result of this study is different from previous studies reviewed in Chapter Two. Vande Berg et al. (2009) examined how previous experience living in different cultures affected intercultural competence. The authors concluded that there was no significant difference in the development of intercultural competence between students with prior international experience and those without. Williams (2005) indicated that exposure to different cultures before study abroad positively influenced the development of intercultural competence, albeit more so for women than men.

By contrast, this study shows different results from the two previous studies: that students without prior international experience have a greater chance of developing intercultural competence than students with up to 21 days prior international experience. When scores for pre-

study abroad ICC of students with up to 21 days are examined in more detail, furthermore, this negative impact was noticeable in students with low scores for pre-study abroad ICC.

This suggests that students with up to 21 days prior international experience would best be served by careful arrangement of their study abroad programs to reduce the influence of negative variables. This study found that taking pre-departure orientation is the best option. Pre-departure orientation increases the probability of developing intercultural competence, regardless of other variables.

This study does not provide, from text mining analysis, a specific reason as to why Prior International Experience 1 is estimated to have a negative impact on both the development of intercultural competence and on reducing the gap between self-assessed and actual intercultural competence. According to W-Curve Theory, the Stress-Adaption-Growth Model, and DMIS and IDC, the theoretical models relating to intercultural competence reviewed in Chapter Two, people who experience difficulty adapting to different cultures are closer to adapting to those environments, compared to people who experience their cultural immersion as a kind of fun. The text mining analysis found that students with up to 21 days prior international experience tended to reflect on both the fun and difficulty of adapting to difference cultures. By contrast, students without prior international experience were more likely to describe differences between Japanese and local cultures. However, quantitative analysis indicates that Prior International Experience 1 is predicted to have a negative impact, compared to no prior experience.

A hypothesis to explain this result is that students with up to 21 days prior international experience were in the shock/disorientation stage of W-Curve Theory or in the stress phase of the “back and forth” movement between stress and adaptation in the Stress-Adaption-Growth Model. Both models agree that people have a “back and forth experience” between experiencing difficulty and progress as they seek to adapt to different cultures. One possibility is that students

with up to 21 days prior international experience experienced honeymoon periods shortly after they arrived in their destination countries and then regressed in the course of a “back and forth” experience of adaptation. To this problem there might be two possible solutions. First, students in short-term study abroad programs are encouraged to have arrangements made to provide them with experiences that will enable them to overcome this difficulty while in an intercultural environment. For example, it might be arranged to have Japanese students join group work programs consisting of people from different cultures. In such a program, Japanese students would experience the challenge of understanding and accepting the different values and modes of thought exhibited by group members from other cultures. Interacting with people from different cultures and experiencing both difficulty and progress in achieving a common goal might inspire students to reflect on the nature of the difficulties they encountered and overcame. Such deliberate arrangements of study abroad programs should be encouraged, to aid students in learning how to acquire intercultural competence. Second, students with short prior international experience, if they can afford it, should be encouraged to join longer study abroad programs. It would allow them more time to overcome difficulties and find solutions through their own trial and error. At any rate, this finding at least shows that the growth curve of intercultural competence may not be linear but rather a back-and-forth curve, as evident from both quantitative and qualitative analysis employed in this study.

Factor 4 – Prior Language Proficiency

This study examines the impact of four levels of Prior Language Proficiency on the development of intercultural competence. The four variables are Prior Language Proficiency, 0, 1, 2 and 3, which are categorized according to English language test scores from 0 (no score) to 3 (advanced level). This study found that Prior Language Proficiency 3 (i.e. TOEFL 500 or higher)

is predicted to have a significant impact on the development of intercultural competence. Text mining analysis demonstrates that students with Prior Language Proficiency 3 have a mindset that enables them not only to understand, but also to accept cultural differences. It suggests that they are at an advanced level of intercultural competence. Looking at scores for pre-study abroad ICC more closely, furthermore, one can see that students with a more advanced prior language proficiency exhibit more improvement in intercultural competence afterwards. On the other hand, this study revealed that there was no correlation between language proficiency and improvement in intercultural competence in students with lower pre-study abroad ICC.

By contrast, there is no significant statistical impact on the development of intercultural competence for Prior Language Proficiency 0 (no English language score), 1 (TOEFL 449 or less) and 2 (TOEFL 450-499) students. The results indicate that the three levels of English language proficiency are not significant factors. However, this does not mean that English language proficiency is not required to develop intercultural competence. What this study demonstrates is that English language proficiency is essential to have interaction with people in Canada and the United States but it does not influence the development of intercultural competence directly as a significant factor.

On this point, previous studies reviewed in Chapter Two commonly acknowledged the impact of foreign language proficiency on the development of intercultural competence. Smith et al. (2003) showed that greater language proficiency led to greater cultural understanding and greater ability to form good relationships with host-country nationals. Vande Berg et al. (2009) also concluded that prior language study is statistically significant in the development of intercultural competence in study abroad. This study follows these previous studies but contributes a more detailed examination of the impact of foreign language proficiency, as this study examined the impact of four different levels of proficiency to determine if any of them are

significant factors. Results show that only advanced level proficiency has a significant impact on the development of intercultural competence.

A more interesting finding of this study is that Prior Foreign Language 1 students actually extended, rather than reduced, the gap between self-assessed and actual intercultural competence. This result might have two possible explanations. First, students at an intermediate level of foreign language proficiency are likely to overestimate their intercultural competence. Second, these students are likely to be confused about the differences between foreign language proficiency and intercultural competence. It sometimes happens in real life that people who enjoy a certain level of foreign language skills perceive themselves as cosmopolitan. Likewise, Japanese people often see people who can speak English as “international people” or *global jinzai*. This is an especially strong tendency in Japan, where society encourages people to develop English language proficiency. Many Japanese assume that the ability to speak some English also confers a capability to survive in intercultural environments. These two explanations suggest that students need some guidance, (such as can be given in pre-departure orientation) to correctly understand the difference between foreign language proficiency and intercultural competence. Otherwise, some students might leave for study abroad without having a clear understanding of these two very different skill sets. It is a risk for students if they are confused over their goals for study abroad.

Difference between Short and Medium-Term Study Abroad Programs

Research question III in this study is “What, if any, are the differences between short and medium-term study abroad programs, in the degree to which they develop intercultural competence among study abroad students?” This study explores the assumption that study abroad program duration may influence the degree of change in students’ intercultural competence. As

noted in Chapter Two, many previous studies examined the influence of program duration. The first type of studies indicated the superiority of longer-term programs over shorter-term programs. For example, Engle & Engle (2004) compared the development of intercultural understanding between students who entered a year-long program and a semester-long program and found longer term programs superior for developing intercultural understanding. Also, Kehl & Morris (2008) concluded that students who entered full semester programs showed significantly higher levels of global mindedness than students who entered study abroad programs up to 8 weeks. The second type of study focused on the effect of short-term study abroad programs. For instance, Mapp (2012) examined students who entered a two-week program in Ireland, Thailand and Vietnam. They concluded that qualitative results showed that students developed the capability to understand other cultures and develop cross-cultural skills. Gilin & Young (2009) examined students who joined a 10-days program in Italy. They found that those students deepened their empathy and respect for other cultural groups. Finally, Poole & Davis (2006) examined students who joined a two-week program in Mexico and found they developed an understanding of Mexican culture and history.

Based on the data analysis presented in Chapter Four and earlier discussion in this chapter, this study presents two important findings related to this question. The two multiple regression analyses demonstrated that there is no statistically significant difference between the effects of short and medium-term study abroad programs, for the purpose of developing intercultural competence. In general however, medium-term study abroad programs do tend to show a higher probability for leading students to develop intercultural competence. Furthermore, Table 5.1 indicates more detailed analysis revealing two major differences in the educational effectiveness of short-term and medium-term study abroad programs. It indicates that the lower a student's pre-study abroad ICC is, the more effective short-term study abroad programs tend to be,

while the higher a student's pre-study abroad ICC, the more effective medium-term study abroad programs tend to be. For example, among students who joined short-term study abroad programs, 25 of 32 (78.1 percent) students in Denial increased their Developmental Score, while only 46 of 110 students (41.8 percent) in Minimization increased their score. By contrast, 21 of 39 students (53.9 percent) in Minimization developed the score among students who participated in medium-term study abroad programs. In other words, determining pre-study abroad ICC can be an effective factor in deciding the appropriate duration for a study abroad program. Therefore, program duration is not necessarily the determining factor but there is a need to consider which duration is better for students.

Table 5.1.

Change of Developmental Score by Pre-Study Abroad Orientations between Short and Medium-term Study Abroad Programs

Medium-term Study Abroad Programs

	Denial	Polarization	Minimization	Acceptance	Total
Score Down	2 (25.0%)	15 (41.7%)	18 (46.1%)	3 (100%)	38
Score Up	6 (75.0%)	21 (58.3%)	21 (53.9%)		48
Total	8	36	39	3	86

Short-term Study Abroad Programs

	Denial	Polarization	Minimization	Acceptance	Total
Score Down	7 (21.9%)	44 (40.0%)	63 (57.3%)	4 (66.7%)	118
Score Up	25(78.1%)	66 (60.0%)	46 (41.9%)	2 (33.3%)	139
No Change			1 (0.8%)		1
Total	32	110	110	6	258

Furthermore, this finding also provides more detailed implications about program duration. This study demonstrates that Pre-Departure Orientation is the most significant factor in the development of students' intercultural competence. Table 4.8 illustrated that among students who did not take pre-departure orientation, those who entered medium-term study programs were more likely to develop intercultural competence than those who entered short-term study programs. However, short-term study abroad students who took the orientation were more likely to develop their intercultural competence than medium-term students who did not take the orientation. The short-term study abroad students who did not take pre-departure orientation showed the lowest potential for developing intercultural competence. By contrast, students who took pre-departure orientation and entered medium-term study abroad programs showed the highest potential.

Moreover, Prior International Experience for students who took pre-departure orientation and joined medium-term programs is a significant variable. Students with Prior International Experience 2 had the highest possibility of developing intercultural competence. In comparing students in the three Prior International Experience categories (i.e. 0, 1 and 2), students who did not take pre-departure orientation commonly had a lower probability of developing intercultural competence than students who took the orientation.

Conclusion

The purpose of this chapter was to deepen understanding about what variables in students' profiles and program profiles have a significant impact on the development of intercultural competence. Through four analytical approaches, this chapter demonstrates the impact of each single variable and also their impact when combined with other factors. Through this approach, this study establishes that the eight independent variables examined should not be

interpreted alone when a variable has demonstrated significant impact in the development of intercultural competence. Rather, it is more important to consider all eight independent variables in various combinations, to determine the best combination to provide participating students with the best possible study abroad experience, for the purpose of helping to develop their intercultural competence. This chapter suggests that study abroad coordinators at home universities need to arrange study abroad programs (including pre-departure orientations) according to student profiles (Gender, Prior International Experience and Prior Foreign Language Proficiency) and program profiles (Program Duration, Program Type, Stay Type, Pre-Departure Orientation and Destination).

Compared to previous studies, there were three distinctive characteristics of the findings in this study. First, this study supported Barron's (2003) and Pedersen's (2010) findings, that providing students with a learning orientation in the basics of intercultural study and local cultures before they leave for destination countries contributes to ensuring productive study abroad experiences and the subsequent development of intercultural competence. Furthermore, both Vande Berg et al. (2009) and Marion (1980) indicated that the quality of interaction with people in destination countries is more important than stay type itself. This study had a similar finding, that the quality of intercultural experiences in destination countries is crucial to develop intercultural competence while stay type is not a significant factor.

Second, this study had more elaborated results in the relation between prior-foreign language proficiency and programs duration, in that it examined these impacts according to different student types. Both Smith et al. (2003) and Vande Berg et al. (2009) indicated that prior foreign language proficiency is a significant factor. Engle & Engle (2009) and Kehl & Morris (2008) mentioned that longer-term study abroad programs are more productive than shorter-term study abroad programs. Giving a different perspective, Mapp (2012), Gilin & Young (2009) and

Poole & Davis (2006) showed the positive impact of short-term study abroad programs of two weeks. As for prior-international experience, Vande Berg et al. (2009) concluded that it is not a significant factor, while Williams (2005) had the opposite conclusion. However, these studies did not examine the impact of program duration according to different student types. This study provided more elaborated results based on student types.

Third, this study showed different results in relation to gender from those of previous studies. Vande Berg et al. (2009), Nichols (2011), Thomlison (1991) found that female gender constituted a positive impact. However, this study had no significant results for gender in Japanese students.

Based on the findings of this chapter, the next will discuss the implications for study abroad programs at institutional (university) levels as well as for international higher education polices for cultivating *global jinzai* at the national level. At the institutional level, the next chapter will mainly make recommendations for study abroad coordinators and university leaders at home universities, for the purpose of helping them arrange programs that will assist their students in developing their intercultural competence. At the national level, by contrast, the next chapter will examine Japanese international higher education polices for cultivating *global jinzai*, as reviewed in Chapter Two, and will discuss how findings in this study can be employed to formulate policies that will help students develop intercultural competence through study abroad programs.

Chapter Six: Implications of the Study at the Institutional and National Levels

By conducting a comparative statistical analysis of study abroad students and control group students, this study demonstrated study abroad to be significantly effective in the development of intercultural competence. However, it also showed that the educational effectiveness of study abroad was not uniform for all students but differed depending on student and program profiles. It indicates that the educational effectiveness of study abroad could be heightened by arranging programs according to student profile. In other words, just going on study abroad may or may not be beneficial. Rather than simply sending more people to increase the number of study abroad students, a focus should be placed on program arrangements and the development of students' intercultural competence. This chapter presents major findings and implications of the study for planning at the institutional level and for international higher education policy at the national level.

Implications for Institutional Program Level

Analysis at the institutional level can be divided into two major sub-levels: institutional program level and institutional policy level. For institutional program level, two major points should be considered to maximize development of students' intercultural competence through study abroad programs. The first point is the importance of understanding students' pre-study abroad ICC. The second point is to maximize the degree of development of students' intercultural competence by the arrangement of appropriate study abroad programs. By contrast, institutional policy level covers university curriculum design and faculty and staff development related to international education, for the purpose of effecting the two points mentioned in the program policies level.

Importance of Understanding Students' Pre-Study Abroad ICC

Regarding the pre-study abroad period, the most important finding in this thesis, for international education affairs administrators, who control all international and intercultural education programs at a university, is the importance of determining students' already existing intercultural competence (or pre-study abroad ICC). This is the first step administrators can take to arrange study abroad programs which maximize their positive impact. The degree of development of ICC was not uniform for all 344 students surveyed in this study. Developmental differences depended upon what types of study abroad programs were provided to students holding specific degrees of pre-study abroad ICC.

For example, although the duration of study abroad was not found to be statistically significant, a more detailed analysis of the duration revealed two important major differences in the educational effectiveness of short-term and medium-term study abroad programs. First, the lower a student's pre-study abroad ICC is, the more effective short-term study abroad programs tend to be, while the higher a student's pre-study abroad ICC, the more effective long-term study abroad programs tend to be. In other words, determining pre-study abroad ICC can be an effective factor in deciding the appropriate duration for a study abroad program. Second, the larger a student's gap between his or her self-assessed and actual intercultural competence is, the more effective medium-term study abroad programs tend to be. Meanwhile, short-term study abroad programs are more effective for outstanding students with a smaller gap.

This means that to ensure the development of intercultural competence, short-term study abroad programs are more effective for students with lower initial intercultural competence, but medium-term study abroad programs allow a certain degree of immersion in an intercultural environment to alleviate the gap between self-assessed and actual intercultural competence. Therefore the gap between self-assessed and actual intercultural competence can serve as the basis

for determining whether a student should go on a short-term or medium-term program. Before a university chooses to prioritize pre-study abroad ICC or the gap between self-assessed and actual intercultural competence, it must first decide what kind of students it wants to produce.

This study indicates that analysis of students' pre-study abroad ICC reveals that the impact of short-term study abroad programs is higher for students with a low pre-study abroad ICC than for students with a high pre-study abroad ICC. For this reason, understanding pre-study abroad ICC is necessary for providing students with a more educationally effective study abroad experience, even for a short-term program. Due to the three barriers to joining study abroad programs pointed out in Chapter Two, i.e. financial problems, timing conflict between study abroad and job hunting, and the lack of a university support system at the home campus before study abroad, Japanese students have trouble participating in medium or long-term study abroad programs. Demonstrating that short-term study abroad programs can also be effective is a significant discovery of this study, as it presents a possible approach to overcoming those barriers.

This study demonstrates that using standardized instrumental tools can be helpful in identifying students' pre-study abroad ICC. However, the IDI used in this study is not free and IDI users are required to attend a seminar and get a license. For this reason, it might be the case that not all international educators at Japanese universities are able to use IDI. As an alternative, it might be possible to find a free tool from the aforementioned 44 instruments (see Chapter Two) applicable to assessing intercultural competence. However, there are two potential drawbacks to this method. First, international educators need to have a certain level of English proficiency to understand the function of each tool (i.e., what kind of research exploration an instrumental tool is useful for), as these tools were created in English speaking countries. Second, they would also need a certain degree of analytical skill to understand the findings a tool delivers (i.e., how the delivered results should be interpreted). Especially in non-English speaking countries such as

Japan, these two factors are critical issues, because international educators are not necessarily trained in analytical English skills. Given this, as a solution, this study suggests that qualitative analysis results found in this study can be applied to understand students' pre-study abroad ICC. As part of its qualitative analysis, this study posed a question to students: "what did you learn the most though study abroad programs to develop your intercultural competence?" to find out what factors contributed to changes in students' intercultural competence between pre-and post-study abroad periods. By examining students' answers, this study found that students who took pre-departure orientation before study abroad were more reflective in their understanding of cultural differences, while students who did not take the orientation emphasized the elements of cultural difference only in terms of differences per se, such as lifestyle between Japan and destination countries. The result followed the DMIS and IDC, the theoretical models of this study, indicating that a person who is aware of components of cultural differences is in a more advanced stage of intercultural competence than a person who only recognizes the elements of cultural difference. If study abroad international educators are unable to use a qualitative instrument to assess students' pre-study abroad ICC, it would be helpful for them to ask students to write a paper about their perspectives toward different cultures, as a way of determining their pre-study abroad ICC.

Data Evidenced Arrangement for Enhancing the Effectiveness of Study Abroad

The next major point to be considered is how international educators can maximize the degree of development of students' intercultural competence. This study provides three major findings.

First, this study finds that the most important factor in enhancing the educational effectiveness of study abroad vis-a-vis the development of intercultural competence is ensuring that students participate in pre-departure orientation. The effectiveness of pre-departure

orientation was significant, regardless of the scores registered for pre-study abroad ICC. Likewise, regardless of the gap between self-assessed and actual intercultural competence, students who participated in pre-departure orientation improved their intercultural competence, compared to those who did not participate in pre-departure orientation. In fact, this study found that the higher a student's pre-study abroad ICC is, the more effective is pre-departure orientation for further increasing the growth rate in ICC. Similarly, the smaller the gap between a student's self-assessed and actual intercultural competence, the more effective pre-departure orientation is in further reducing this gap. By contrast, students with low pre-study abroad ICC are expected to have a higher probability of developing intercultural competence than students with high pre-study abroad ICC. Likewise, students with a wide gap between self-assessed and actual intercultural competence are expected to reduce the gap in the post-study abroad period even more fully than those with a narrow gap. Therefore, one of the most important findings of this study is that pre-departure orientation has extremely important implications for study abroad, and international educators should take this into account.

Second, regarding prior proficiency in the language of the destination country, this study revealed that students who have high English language test scores (i.e. TOEFL 500 or higher) had a statistically significant greater chance of improving their intercultural competence in study abroad programs. When scores for pre-study abroad ICC are examined closely, the higher the student's language proficiency, the more likely they are to improve their ICC. By contrast, the correlation between language proficiency and improvement in intercultural competence grows weaker for students with low ICC. More specifically, prior foreign language proficiency does not necessarily translate into intercultural competence. In the qualitative analysis of prior foreign language proficiency, this study demonstrated that students with low English language proficiency focused more on having fun than with understanding intercultural differences. A

reason was that they could not have profound experiences of cultural difference in communicating with people from different cultures because of their low English language proficiency. This study thus showed that English proficiency is essential for developing intercultural competence.

However, this study also suggests that teaching the English language is not in itself enough to develop students' intercultural competence through study abroad programs. For the majority of students with a middle or low level of English language proficiency, it is recommended that intercultural education be provided to develop their intercultural competence in addition to English language education.

In short, prior foreign language proficiency is only useful when a student has a certain level of pre-study abroad ICC. In other words, to enhance the development of intercultural competence before and after study abroad, the extent to which international educators can improve pre-study abroad ICC is an important factor in terms of prior language proficiency as well.

Third, 22 or more days of prior international experience was found to have a consistently positive impact on study abroad, regardless of the score for pre-study abroad ICC. This means that more than three weeks of international experience has a significant impact on the effectiveness of the development of intercultural competence through study abroad. Meanwhile, this study also found that three weeks or less experience was found to weaken the likelihood of developing intercultural competence through study abroad, compared to no experience abroad. This weak impact is noticeable in students with low scores for pre-study abroad when scores for pre-study abroad ICC are examined in more detail. It suggests that international educators would be strongly advised to make students with less than three weeks of prior experience abroad take pre-departure orientation to increase their pre-study abroad ICC as much as possible.

To summarize the micro-level implications at the institutional level, the following four suggestions can be made to international educators. First, this study shows that recognizing students' pre-study abroad ICC is essential to arranging study abroad programs. For example, pre-study abroad ICC is a valid criterion for determining program duration in terms of the effectiveness of short and medium-term study abroad programs. Therefore, international educators should take pre-study abroad ICC into account. This study suggests both quantitative and qualitative methods for assessing ICC. Second, improving a student's pre-study abroad ICC as much as possible is essential for effectively improving his or her post-study abroad intercultural competence. Thus, not only study abroad programs but also education before study abroad is extremely important. This study proposes that student participation in pre-departure orientation is extremely important for elevating the educational effectiveness of study abroad. By taking pre-departure orientation, students with low pre-study abroad ICC can be expected to have a high probability of developing post study abroad ICC, while students with a high pre-study abroad ICC are estimated to have a high growth rate in developing post-study abroad ICC. That means that pre-departure orientation is effective for all students, regardless of their level of pre-study abroad ICC. Third, there is no direct correlation between language proficiency and intercultural competence. It is very important for international educators to recognize that language education is not enough to develop intercultural competence and it should be augmented by intercultural education.

Finally, prior international experience of more than three weeks is directly correlated to improvement in intercultural competence, but experience of three weeks or less has no statistically positive impact on improvement. Thus, international educators should take into account that prior international experience by itself does not contribute effectively to the development of intercultural competence.

Implications for Institutional Policy Level

These findings provide very helpful empirical data for international educators to arrange their study abroad programs. Furthermore, the findings raise crucial implications for institutional policies that should be considered by university leaders who are responsible for determining curriculum.

First, this study shows that improving a student's pre-study abroad ICC is essential for effectively improving his or her post-study abroad intercultural competence. This clearly indicates that providing students pre-departure orientation is extremely important. However, out of the 344 students surveyed for this study, only 52.6 percent (181 of 344) participated in pre-departure orientation, because many universities and educational institutions did not provide it. On the other hand, many of them provide English language training programs such as daily English conversation and TOEIC or TOEFL classes for prospective students joining study abroad programs. A major reason for providing English language programs is the assumption that English language proficiency is not a skill that can be cultivated during the relatively short period of a study abroad program. Therefore, it is better that students be given language education long before they enter their study abroad program, to develop the skills they will need to interact with English speakers in their destination countries. In other words, providing English language instruction before study abroad is regarded as a way to enhance the educational effectiveness of study abroad programs.

Likewise, this study suggests that it is very important for university leaders to recognize that students do not necessarily develop intercultural competence just from participating in study abroad programs. The development of intercultural competence through study abroad programs, like that of English proficiency, can be enhanced by home institutions and universities offering pre-study abroad cultural instruction.

Second, there is a need to pay attention to methods for evaluating students' intercultural competence. As this study indicates, the question of how students' intercultural competence ought to be evaluated remains a major agenda item in this research field. Many universities and educational institutions attempt to determine the impact of study abroad programs qualitatively, mainly from reflection papers written by students in the post-study abroad period. Not only do these institutions lack quantitative data, but many do not attempt to measure students' intercultural competence before they study abroad. This study clarifies a variety of empirical data through a quantitative approach and examines factors yielding empirical data through a qualitative approach. However, one finding of this study is that factors generating some quantitative results cannot be clearly explained through the study's qualitative analysis. As mentioned in Chapter Three, mixed methods yield deeper research findings because one method complements the other. Nonetheless, methods still need to be refined to deepen understanding of the factors that contribute to the development of intercultural competence. The single evaluation approach, through students' reflection papers, though popular at universities, does not sufficiently aid understanding of how students develop their intercultural competence. Given this, this study suggests that evaluation of intercultural competence should be deepened both vertically and horizontally. "Vertical" refers to the quantity of assessment. Only pre-and post-study abroad period evaluations are not enough. In addition, on-site assessment, especially for students on medium-term study abroad programs, might be a way to more deeply explore how students' intercultural experiences in destination countries relate to the development of their intercultural competence. "Horizontal" refers to the quality of assessment. In this approach, a quantitative and qualitative analysis that incorporates a variety of perspectives from professors, international educators and administrators, not just study abroad coordinators, would be desirable. Assessments by students and study abroad coordinators only, might limit the possibility of capturing students' performance accurately.

Based on the above, university leaders might want to consider how they train assessment professionals. In this study, the evaluators of students' intercultural competence at Japanese universities were either study abroad coordinators or professors who accompanied students to their destination countries. Given that assessing intercultural competence is very difficult, it might be helpful to gain additional perspectives from other parties who have a relationship with the student, such as other professors, English language instructors, academic tutors, academic administrative staff, other students, support staff etc. University leaders might consider providing training programs to such people, so that they could learn the basic concepts related to assessment of intercultural competence. In promoting internationalization, many Japanese universities are promoting faculty development to improve teaching skills in English and staff development to perform administrative work in English. To promote the internationalization of the university, intercultural education is just as important as English language education.

Implications for International Higher Education Policy at the National Level

This study is just one analysis of the effectiveness of intercultural competence gained from study abroad programs for Japanese students, but its findings can serve as a reference for Japanese policies to cultivate *global jinzai* and for MEXT's university support programs to cultivate *global jinzai*. The drastic increase in the national budget to aid universities in sending Japanese students to foreign universities, between 2008 and 2014, represents the fruit of MEXT's efforts to cultivate *global jinzai*. Nonetheless, this study provides three major findings for better arrangement of this support.

Looking back at the rationale of the Japanese government in promoting *global jinzai* mentioned in Chapter Two, first, one crucial point is that *global jinzai* is recognized as a promising human resource to revitalize the Japanese economy, given grim predictions of Japanese

economic decline, because of the shrinking Japanese population and the maturing domestic consumption market. Given this forecast, in METI's survey, 74.1 percent of Japanese corporations which are willing to expand into overseas markets have the goal of employing more *global jinzai* employees, who can lead that expansion. Specifically, *global jinzai* can be defined as persons with at least three major competencies: foreign language proficiency (to be able to operate a business in the foreign language of the host country), intercultural competence, (to understand cultural differences, adapt to them, and to effectively interact with people from different cultures), and social competence, which refers to basic social and adult business skills, such as a can-do spirit. The more these competencies are recognized, the more demand, among Japanese corporations, for *global jinzai* employees. However, none of MEXT's programs supporting universities in cultivating *global jinzai* includes intercultural competence in its evaluation criteria. Instead, one common theme among these programs is their strong focus on sending Japanese students for study abroad. For example, under the Re-Inventing Japan Project, a major funding program, there are 16 CAMPUS Asia exchange programs with partners in China and Korea, 12 exchange programs with the United States and EU countries, and an ASEAN International Mobility for Students program with six Southeast Asian countries: Malaysia, Indonesia, Thailand, Vietnam, the Philippines and Brunei. In all of the programs, the primary agenda is the assurance of program quality. For instance, all three of the aforementioned programs tout the importance of mutual credit recognition and academic performance evaluation within a common framework. However, when one looks at the evaluation criteria of nominated Japanese universities for the MEXT programs, the indicators for measuring program achievement comprise a large number of numerical targets, such as outbound student numbers, and TOEFL and TOEIC scores, with no performance indicators for intercultural competence. In this study, foreign language proficiency and intercultural competence have been treated as separate factors because foreign language

education was not found to directly contribute to increased intercultural competence. Thus, university education and MEXT's programs are failing to focus on how to cultivate a sufficient degree of intercultural competence among students who are the most promising candidates for *global jinzai*. Inasmuch as the MEXT's programs aim to support universities in cultivating *global jinzai* who will contribute to Japan's economy and society, and intercultural competence is defined as one of the three primary qualities of *global jinzai*, evaluating student performance in intercultural competence would seem both logical and necessary. Additionally, to show the world that *global jinzai* (or more accurately, candidates expected to become *global jinzai* in the future) produced by Japan's universities are of a high caliber, it will be necessary to assure the quality of their intercultural competence.

The second finding is the need to have international education professionals who will promote education for intercultural competence at universities. In educating more students to be future *global jinzai*, it is necessary to cultivate more specialists who engage in intercultural education. In the request to universities regarding faculty and specialist development for *global jinzai* education in the three major MEXT's funding programs, there are three major requests in the Top Global University Project: increase the proportion of Japanese faculty members who received doctoral degrees from foreign universities, increase the proportion of foreign faculty members, and implement faculty development programs for improving teaching skills in English. However, none of them mentions the need to cultivate intercultural education specialists. This state of affairs might be based on the assumption that international educators at universities have enough skills to implement intercultural education and that universities have enough educators to offer education to all motivated Japanese students to become *global jinzai*. However, this study questions the assumption by referencing the fact revealed in this study that only 52.6 percent (181

of 344) students had an opportunity to take pre-departure orientation. Many of them were not offered it by their home universities.

The third finding is that, in order to promote the cultivation of *global jinzai*, Japanese universities should respond to policy demands for more opportunities to engage in practical training, such as overseas internships and overseas service-learning. This is because students want to participate in study abroad not just to learn, but also to hone their intercultural communications skills and practical skills, by interacting with foreigners in more hands-on situations. In cases such as these, the role of intercultural competence becomes even more important. Therefore, determining how to evaluate it is an unavoidable issue, an issue for which this study presents a method of approach.

In summation, the clear rationale of Japanese government is to cultivate *global jinzai*, to counter the Japanese economic and social developments reviewed in Chapter Two. The government has even increased the budget to support universities to cultivate *global jinzai*. However, one serious impediment to the cultivation of *global jinzai* is the lack of government vision and master planning. Although the Japanese government has implemented three major funding programs since 2011, it at this point lacks a coordinated strategy to cultivate *global jinzai*. For example, according to what criteria is a person judged *global jinzai*? This section demonstrates that there is no clear vision of what degree of intercultural competence is required to qualify as *global jinzai* (e.g., what level in six orientation of DMIS should be required to qualify as *global jinzai*?) even though intercultural competence is one of the three basic competencies of *global jinzai*. What Japan needs is a comprehensive vision connecting all stakeholders, such as higher education institutions, industries, and public sector and government bodies. It should create a vision of *global jinzai* and a coordinated strategy, finding solutions that are not based in political rhetoric, but based in reality for furthering the cultivation of *global jinzai*.

Implications for Current Studies in Intercultural Competence and Study Abroad

As indicated in Chapter Two, few Japanese studies have been conducted on the development of intercultural competence in Japanese students through study abroad. A major reason is that many previous studies in this field focused on receiving international students from overseas to Japan, instead of sending Japanese students to foreign countries. This is because MEXT's policies for internationalization of higher education particularly focused on receiving international students as illustrated by the budget allowance to support international students in Table 2.1 on page 32. The shift in emphasis to sending Japanese students abroad began in 2011, when MEXT started to implement the Re-Inventing Japan Project, as the first specific program to promote sending Japanese students to foreign higher education institutions.

By contrast, many previous English studies focused on the development of intercultural competence, as reviewed in Chapter Two. However, Chapter One noted some limitations to those studies. First, many included less than 50 students. Second, many were limited to students at a single higher education institution. Third, many dealt only with American students. Finally, the research method used in most studies was either a quantitative or qualitative examination after return from study abroad.

Based on these points, the findings of this study point to the importance of intercultural competence as a research field in two major ways. First, this study explored the concrete factors impacting changes in students' intercultural competence, not only through descriptive statistics but also by using inferential statistics. Although the sample size of this study is relatively large compared to many previous studies, it is smaller than the systematic consortium study project conducted by Vande Berg et al. (2009). Nonetheless, the uniqueness of this study is that it applied inferential statistics to account for the degree of differences based on three aspects of student profiles and five aspects of program profiles. There are relatively few previous English studies

which analyzed multiple variables from the perspectives of both inferential quantitative and reflective qualitative research approaches. Second, it is at least the first study on the topic of the development of intercultural competence among Japanese students through study abroad written in English. MEXT has promoted sending more Japanese students to foreign universities to foster *global jinzai*. If MEXT's aim is successful, foreign host universities will have more Japanese study abroad students. Given this, there is an emerging demand for host universities to gain a better understanding of intercultural learning among Japanese students. This study is valuable in light of the limited amount of research on this topic written in English.

This study contributes to Japanese higher education especially in three areas. First, this study is one of the first that has specifically focused on the development of intercultural competence among Japanese students through study abroad programs. Furthermore this study goes beyond a small sample-sized case study, as it examined 344 Japanese students from 13 different institutions. Second, research on the development of intercultural competence among Japanese students through study abroad has a short history. As a new topic in Japanese higher education research, many current studies are reflective analyses based on students' reflection papers written in the post-study abroad period. By contrast, this study used a mixed method approach and provided empirical data on the development of intercultural competence in Japanese students through study abroad. Third, the empirical data was prepared for international educators as a practical reference which can be referred to when they coordinate study abroad programs. This study also accounted for degrees of difference in the development of intercultural competence based upon three aspects of student profiles (Gender, Prior International Experience and Prior Language Proficiency) and five aspects of program profiles (Program Duration, Program Type, Stay Type, Pre-Departure Orientation and Destination). These variables can be

utilized to determine the extent to which, in various combinations, they affect the development of intercultural competence.

Therefore, this study is currently one of the most comprehensive, analytic and practical empirical studies that has been carried out so far on the development of intercultural competence of Japanese students through study abroad.

Future Studies

There are four major promising areas for future studies; research design, methodology, collaboration between international education and other disciplines, and Japanese policies to cultivate *global jinzai*.

Regarding research design, future study will be required to focus more closely on exactly *how* students develop intercultural competence through study abroad programs. This study sought to identify the factors that contribute to the development of students' intercultural competence through study abroad programs. However, this study did not investigate in-depth the question of what specific intercultural experiences in destination countries contribute to the development of intercultural competence, nor what kinds of education in pre-departure orientation at home universities contribute to that development. In order to conduct these contextual analyses, this study concludes that more in-depth qualitative research is necessary. The results of this study were obtained from both a quantitative and qualitative analysis. However, as mentioned in Chapter Three, more weight was given to the quantitative analysis. Because of this research approach, for instance, no detailed analysis was made regarding the specific content of pre-departure orientation curricula. Insofar as participation in pre-departure orientation is the most significant factor in developing intercultural competence between the pre and post-study abroad period, more research into the content of pre-departure orientation and student learning will be

necessary. It will require greater focus on pedagogical analysis, such as course content and classroom activity in pre-departure orientation. Likewise, students' intercultural experiences in destination countries also needs to be explored in greater depth.

The second point of research design is data collection. Since most previous studies of intercultural competence have been conducted on American students, this study is significant in that it focused on Japanese students. That being said, it is an empirical study of students dispatched to North America (i.e., Canada and the United States). Going forward, studies that deal with a wider range of destination countries will be required to enhance the reliability of the data and help answer questions such as whether or not the outcomes would be different for North America and the countries of East Asia, with which Japan has more cultural similarities.

The second promising area for future study is research methodology. Assessment of intercultural competence requires more than a point-to-point evaluation. This study demonstrated the weakness of a single method of evaluation based on the content analysis of students' reflection papers in the post-study abroad period. Because of a lack of empirical data regarding Japanese study abroad students, this study conducted an empirical analysis to evaluate students' intercultural competence in the pre-and post-study abroad periods. In this research design, pre-departure orientation is understood as preparatory education in the immediate pre-study abroad period. Thus, the definition of pre-departure orientation in this study was limited to sessions designed to prepare students for study abroad through classes on intercultural understanding, classes on local culture and customs, and English conversation practice and the like. However, the impact of pre-departure orientation on pre-study abroad ICC cannot be clearly separated from the impact of what students learned through their home university's curriculum before their orientation. One possible future study might entail a detailed analysis of both pre-departure orientation content and an assessment of what students previously learned from their home

university's curriculum. The importance of linking study abroad to the broader university curriculum, including pre-departure orientation, before sending students abroad, as suggested by this study, is something that universities need to consider. Furthermore, as shown by the W-Curve Theory, the growth curve for intercultural competence bends back and forth, so a more detailed analysis of why this is so should be conducted by way of an on-site assessment, especially for students on medium-term study abroad programs. Capturing the impact of study abroad programs more precisely would require tracing students' learning and their intercultural competence from the time they first receive intercultural education at home universities.

A third promising area for future study is collaboration between international education and other disciplines. One of the significant benefits of collaboration would be to discover possible solutions to the potential problem of using IDI. That is, to develop a made-in-Japan intercultural assessment inventory. Needless to say, developing an instrumental tool to assess the cognitive developmental process of cultural adaptation is beyond the scope of international education coverage. Rather, making an assessment needs to be considered from three major perspectives; statistical, epistemological and that of international education. In the development of such a tool, a major consideration would be how the concepts of an epistemological model exactly apply to an assessment tool technically, with consideration of what the results revealed by the tool bring to international education. For this, at least the three perspectives, including the epistemological perspective to make a conceptual model, the statistical perspective to apply the conceptual model to an instrumental tool, and the international education perspective to consider the usability of the tool in real education, are essential factors. Therefore, exploring the possibility of the benefit of collaboration among different disciplines on this topic is a promising area for future studies.

The last area for future study is Japanese *global jinzai* policy. As an agenda item for Japanese *global jinzai* policy analysis, there is a need to examine global human resource development policies in other countries. It seems that the Japanese government uses the concept of intercultural competence interchangeably with other concepts related to intercultural competence. In fact, there are many types of intercultural related competence, such as global mindedness, global awareness and global citizenship. Compared to global mindedness, which refers to business negotiations in intercultural environments, for example, intercultural competence relates more directly to daily life. Given that the concept of *global jinzai* was developed mainly for economic and industrial purposes, the concept of intercultural competence may not be an exact cognate. The strictly intended meaning of *global jinzai* in itself might be a matter for investigation. With respect to the above, it is the role of Japanese higher education to conduct comparative research to analyze different concepts of intercultural competence. Understanding deeply what capacities in students Japan really needs to develop should be carefully examined, otherwise there is a risk that *global jinzai* may be rhetoric rather than reality.

Concluding Remarks

This study examined four research questions, the first of which was: “To what degree do Japanese study abroad programs that send students to Canada and the United States have a measurable impact on their intercultural competence between their pre and post- study abroad periods?” In this study, study abroad was shown to have a statistically measurable impact when students who studied abroad were compared to control group students who never studied abroad.

The second question was: “What factors in study abroad programs contribute, either positively or negatively, to the development of students’ intercultural competence?” In response to this, this study demonstrated that participation in pre-departure orientation and advanced

proficiency in the language of the destination countries (i.e., TOEFL scores of 500 or higher) were statistically significant positive impact factors. Meanwhile, shorter terms of prior international experience and lower proficiency in the foreign language spoken in the destination countries (i.e., TOEFL scores of 449 or lower) were shown to be negative impact factors. Gender, program type and stay type and destination were not found to have a statistically significant impact. On the other hand, positive impact was strongly influenced by whether or not students participated in pre-departure orientation. This influence was found to be even stronger in students who participated in a pre-departure orientation for whom the positive impact of other factors was reduced. Furthermore, when scores for pre-study abroad ICC were examined more closely, it was found that the degree of impact of each factor differed depending on the score level of intercultural competence, which means study abroad programs must be arranged according to the students' detailed score levels for intercultural competence.

The third question was: “What, if any, are the differences between short and medium-term study abroad programs, in the degree to which they develop intercultural competence among study abroad students?” Although program duration was not found to be statistically significant, it was revealed that specific outcomes could be expected from students recommended to participate in medium-term study abroad programs or short-term study abroad programs depending on their pre-study abroad ICC scores.

Finally, the fourth question was: “Through the results of the above analyses, what implications are there for Japanese international higher education policies at the national and institutional levels in the promotion of study abroad programs?” This chapter not only presented five perspectives that program coordinators at institutions should take into consideration to improve the effectiveness of study abroad, it also examined how the findings and data from this study could be applied to MEXT's higher education internationalization policy.

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Appendices

Appendix A (English version)

Invitation Email to Participants (for Professors)

(text body)

Dear ...

I'm a Ph.D. student in the Department of Leadership, Higher and Adult Education of the Ontario Institute for Studies in Education at the University of Toronto. I'm currently conducting research for my doctoral thesis on "**Assessing Intercultural Competence: A Comparative Study of Japanese Students in Study Abroad Programs.**" The study will provide valuable empirical data on Japanese students' development level of intercultural competence between before and after their periods of study abroad in the **Canada and the United States**, shed light on the educational effectiveness of study abroad in each country, and identify the factors yielding the differences. This study is conducted under the supervision of Dr. Ruth Hayhoe.

I would like to invite you to participate in my study. In concrete, I would like you to request your students who will join in study abroad programs to participate by taking the Intercultural Development Inventory (IDI), a professional measurement tool of intercultural competence, to measure their development level of intercultural competence before and after their periods of study abroad. Also I would like to request your students to answer online questionnaire and reflection papers about study abroad. If you agree to participate in this study, I will visit your office and provide more detailed information about this study.

Neither you nor your students nor your university will be personally identified in my research project. Please see the attached informed consent form for details on the objectives of this study, its data collection methods, and your rights as a participant. If you have any question about the study or your participation, please contact Shingo Hanada at shingo.hanada@utoronto.ca or (080)-4178-9957. You may also contact my supervisor, Dr. Ruth Hayhoe at ruth-hayhoe@sympatico.ca or +1-416-978-1213.

Thank you in advance for your consideration of this request.

Sincerely,

Shingo Hanada

Ph.D. student (& Assistant Professor at National University Corporation Ehime University)

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Dr. Ruth Hayhoe (Supervisor)

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Appendix A (Japanese version)

大学
様

トロント大学オンタリオ教育研究所
花田 真吾

日本人大学生の海外留学による異文化適応力涵養に関する調査（ご協力をお願い）

時下ますますご清栄のこととお慶び申し上げます。

さて、突然のご依頼で誠に恐縮でございますが、この度、研究プロジェクトにご協力を賜りたく、本状をお送りさせて頂きました。

近年、グローバル人材の育成が社会に求められている中、私は、求められる資質の一つである「異文化適応力」に着目し、日本人の大学生が、海外留学を通して身につけ得る異文化適応力のラーニングアウトカム（学習効果）についての実証をすべく、研究に取り組んでおります。

つきましては、海外留学プログラムを積極的に推進されている貴学に、ぜひご協力を賜りたく、海外留学プログラムのご担当者様、日本人学生で海外留学予定者の皆様に、下記の通りご依頼申し上げます。

記

1. 対象：米国、カナダに留学を予定している日本人学生
2. 内容：異文化適応力測定尺度 IDI のオンライン質問票へのご回答（留学前後の合計 2 回）
オンラインリフレクションシートへのご回答

以上

連絡先:

研究実施者 花田真吾
トロント大学オンタリオ教育研究所 高等教育・国際比較開発教育研究科 博士課程
国立大学法人愛媛大学 教育・学生支援機構 講師
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Appendix B (English version)

Consent Form (for professors)

(written on OISE/UT letterhead as attachment to the invitation email)

Dear Participant:

I would like to invite you to participate in my study on "**Assessing Intercultural Competence: A Comparative Study of Japanese Students in Study Abroad Programs.**" This study is conducted under the supervision of Dr. Ruth Hayhoe. The data is being collected for the purposes of a PhD thesis and perhaps for subsequent research articles.

1. Objectives of This Study

This study aims to analyze empirically the educational effectiveness of study abroad programs for Japanese students that aim to cultivate intercultural competence. To put this in concrete terms, this study will measure the development level of intercultural competence of Japanese students before and after their periods of study abroad in the **Canada and the United States**, shed light on the educational effectiveness of study abroad in each country, and identify the factors yielding the differences. I would like to invite your university to join in this study because your university is a leading university in developing study abroad program in order to cultivate global human resources.

A unique aspect of this study is its focus on the educational effectiveness of study abroad programs intending to cultivate intercultural competence in Japanese students, an area in which there has been very little empirical research so far. Additionally, since there are few studies detailing the reciprocal relationships between the dependent variable of intercultural competence developed in Japanese students while on study abroad programs and the independent variables of Student Characteristics and Experiences, I believe this study has significance primarily in terms of the following potential outcomes.

2. Research Methods

This study involves three phases of analyses using both quantitative and qualitative methods. The first phase of quantitative analysis in this study is to judge the extent of the development of students' intercultural competence between pre- and post-study abroad using the Intercultural Development Inventory (IDI), which specializes in judging one's intercultural competence by calculating its development score. This study will survey about **200 Japanese students**, who study abroad in **the United States and Canada**. In total, approximately **100 students** will be surveyed for each country. I will invite participating students from about **12 Japanese universities** that join in study abroad programs. The location of the universities will be taken into account: universities in **Tokyo, Kansai, Shikoku, Kyushu and Chuugoku areas**. Students will take the IDI twice; before they study abroad and after they study abroad and will be examined for the degree they develop intercultural competence through study abroad. Students will take approximately 20 minutes to take the IDI on each occasion.

The second phase of quantitative analysis in this study is to examine the factors which yielded differences in intercultural development between students. Using changes in the IDI score between pre and post-study abroad as dependent variables, correlations with independent variables will be examined.

The third phase is qualitative analysis. This analysis will be divided into two streams: interview with professors and online pre-study abroad questionnaire and post-study abroad reflection paper to students. First, the investigator will conduct face-to-face interviews with **professors** who are in charge of study abroad coordination at the home universities in Japan by visiting them in their offices. The objective of these interviews will be to ask them to join in this study and understand the key learning components of study abroad and pre-departure intercultural programs. Each interview will be approximately 30-60 minutes long. Second, online pre-study abroad questionnaire and post-study abroad reflection paper reflection papers will be conducted to students. The purpose of this reflection paper is to gain some understanding of the factors contributing to differences in score development.

3. Expected Research Results

After analyzing the data, I will report to you the average IDI score of your students and comparative data with the students of other universities upon request, but neither the names of the students nor the names of the universities will be revealed.

It could be used as a reference for developing the most academically effective study abroad programs for each student characteristics. For example, if the student characteristics include no prior international experience, language proficiency equivalent to a 550 on the TOEFL Paper Based Test, male or female gender, a study abroad duration of six months and a particular type of student exchange program, and if the kinds of program experience in study abroad that possess a high significance in terms of development of intercultural competence are clarified, then program arrangements that incorporate the most useful or effective experiences would be possible. The study would thus be highly significant in terms of the empirical results it could provide that might contribute to improving the short-term exchange programs in which Japanese student participation rates are especially high.

Two countries were selected as the primary host countries for Japanese students in this study. The two countries are important in terms of national policy on global Human resources (Jinzai) policy. This study should thus be socially useful, given its overlap with broader policy discussions in Japan at the present time.

It will be valuable to disseminate the results of this study throughout Japan and the host countries that have been identified so that educators and researchers can gain a better understanding of Japanese international students. A study in English of the educational effectiveness of study abroad for developing intercultural competence in Japanese students is a highly significant endeavor in light of the relatively limited amount of research on this topic in an international as well as a Japanese context.

5. Research Ethics

This study will be carried out in accordance with the University of Toronto's ethical standards for research. Your participation is completely voluntary. You are free to decline to request your students to take the IDI and to decline to answer any question during the interview; a specific explanation is not required. You may withdraw from the study without consequence at any time before this study is completed; any information will then be eliminated from the project. No value judgments will be placed on your responses. At no time will you be judged or evaluated and at no time will you be at risk of harm. Before your participation is confirmed, this informed consent form will be reviewed and you will be asked to sign the form. You will be asked whether you want the interview to be audio-recorded and only with your permission will that be done. Within four weeks of the interview, you will be sent a summary report of the interview and asked to correct any errors of fact, interpretation or omission. Your students' personally identifiable information in taking the IDI will be stored electronically and anonymously. The study results will not be published other than in standard academic venues. Your identity will remain confidential (only pseudonyms will be used). All the data collected from the interviews will be kept in strict confidence and stored in a locked cabinet at my office and only the researcher can access to the data. There are no foreseeable risks to your participation in this study.

You will be given the option of receiving a report of the study at the end of this study. If you are interested, the report about the average IDI score among your students and the average scores of students at other universities will be emailed to you when the study is completed. (The names of students and universities will not be revealed) You can also access the thesis, which will be located in the OISE/UT thesis collection and which can be accessed electronically in the University of Toronto Research Repository (T-Space) at <https://tspace.library.utoronto.ca/handle/1807/9944>.

Your signature below indicates that you understand the above conditions of participation in this study. If you have any question about the study or your participation, please feel free to contact me at Shingo Hanada at shingo.hanada@utoronto.ca or (080)-4178-9957. You may also contact my supervisor, Dr. Ruth Hayhoe at ruth-hayhoe@sympatico.ca. or +1-416-978-1213. Finally, you may also contact the U of T Office of Research Ethics for questions about your rights as a research participant at ethics.review@utoronto.ca or 416-946-3273.

Name of Participant

Signature

Date

Please initial if you would like the average IDI score of your students. It will be e-mailed to you after completion of the study:___

Please initial if you agree to have your interview audio taped:___

Please keep a copy of this form for your record. A copy of this consent will be left with you, and a copy will be taken by the researcher.

Sincerely,

Shingo Hanada

Ph.D. student (& Assistant Professor at National University Corporation Ehime University)

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Appendix B (Japanese version)

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トロント大学オンタリオ教育研究所

花田 真吾

本研究プロジェクトの概要

1. 目的

本研究は、以下を明らかにすることを目的とします。

- ・ 海外留学による異文化適応力涵養への学習成果を実証する。
- ・ 異文化適応力涵養に効果的な留学の経験を実証する。

2. 調査対象

米国、カナダに海外留学する日本人学生（正規学生のみ）

3. 趣旨

本研究は、グローバル人材に求められる主要な資質の一つである異文化適応力（文化的背景による価値観やコミュニケーション方法などに差異を持つ人々と協働でき、異文化を相乗効果として新しい価値を生み出す力）の涵養について、日本人学生の海外留学による学習成果の実証データを獲得することを目指します。具体的には、IDIにて判定した留学前後の異文化適応力の判定スコアの変化を生み出した要因を実証すべく、個々の学生を以下の学生特性で分類し、学習効果が高い経験特性を実証します。

4. 期待される研究成果

- ① 海外留学プログラムの開発に際し、各学生特性を念頭にいた効果的なプログラム設計を行うための参考データとして活用できる実証データを獲得します。例えば、グローバル人材育成では言語研修など短期留学の推進が奨励されていますが、学生特性別に教育効果が高い経験特性が実証されることで、限られた留学期間において学習成果を高めるために参考となるデータとします。
- ② 本研究は、各学生特性に応じて学習成果が高い留学中の体験が存在するという仮説に基づいており、学生特性別に異文化適応力の成長度に優位性のある経験特性に相違点がある結果が導き出されることが予想されます。
- ③ 本研究の成果は、日本国内の留学プログラムに携わる教員のみならず、渡航先大学の留学生受入れ当者や外国の教育研究者にも日本人留学生に対する理解を深めてもらうことに意義があることを踏まえ、英語で執筆し、海外学会発表および海外主要ジャーナルへの投稿を目指します。

5. 個人情報の取扱い

トロント大学倫理委員会が定める規定に基づき、本研究プロジェクト実施において、以下の事項を遵守いたします。

1. 貴学および学生の個人情報については、すべて匿名として取扱います。
2. 本研究プロジェクトにおいて得られた情報は、研究実施者（花田真吾）、アドバイザー（Dr. Ruth Hayhoe, Dr. Jane Knight, Dr. Glen Jones）を除く第三者には公開いたしません。
3. IDI オンラインアンケート、オンラインリフレクションペーパーのいずれにおいても、質問への回答は任意です。
4. 本研究プロジェクト開始後、いずれの段階においても辞退することが可能です。

6. 研究実施体制について

本研究は以下の体制で実施いたします。

・ 研究実施者：

氏名：花田真吾（トロント大学オンタリオ教育研究所 国際比較開発教育研究科 博士課程）
 （国立大学法人愛媛大学 教育・学生支援機構 講師）

住所：University of Toronto, Ontario Institute for Studies in Education

252 Bloor Street East, M5S 1V6 Canada

電話: 080-4178-9957（日本国内）

E-mail: hanada.shingo.mg@chime-u.ac.jp

・ 研究指導教員

氏名：Dr. Ruth Hayhoe（トロント大学オンタリオ教育研究所 高等教育・国際比較開発教育研究科 教授）

氏名：Dr. Jane Knight（トロント大学オンタリオ教育研究所 高等教育・国際比較開発教育研究科 教授）

氏名：Dr. Glen Jones（トロント大学オンタリオ教育研究所 高等教育・高等教育研究科 教授）

住所：University of Toronto, Ontario Institute for Studies in Education

252 Bloor Street East, M5S 1V6 Canada

電話：+1-416-978-1213（カナダ）

代表者 Email: ruth-hayhoe@sympatico.ca

本研究にご協力頂ける場合は、以下にご署名をお願いいたします。

氏名

署名

日付

調査実施の流れ

本研究は以下の通り実施致します。

1. 貴学へのご訪問：

貴学を訪問させて頂き、ご担当者様に本研究の概要、具体的な実施についてご説明させて頂きます。また、貴学の留学プログラムについてヒアリングをさせて頂きたく存じます。



2. 第1回 IDI オンライン質問票回答のご依頼：

海外留学前の異文化適応力を測定するため、海外留学を予定している日本人学生さんを対象に実施させて頂きます。貴学ご担当者様から学生さんに IDI 測定と渡航前アンケートへの回答に利用する URL 情報をお送り頂く、もしくは研究実施者に学生さんのメールアドレス情報を教えて頂ける場合は研究実施者から学生さんにご連絡させて頂きます。

その他、実施方法にご希望がある場合は、お申し付けください。



3. 第2回 IDI オンライン質問票、オンラインリフレクションシート回答のご依頼：

海外留学後の異文化適応力を測定するため、「2」にご協力頂いた学生さんが海外留学から帰国された後に、研究実施者より改めて IDI オンライン質問票にご回答頂くための URL をお送りさせて頂きます（第2回測定）。

また、オンラインリフレクションシートへの回答につきましても合わせてご依頼申し上げます。



4. IDI 結果通知：

ご回答頂いた2回分の IDI オンライン質問票を分析した測定結果レポートと全国共通図書カードを、ご担当者様を通じて各学生様にお送りいたします。（研究実施者から学生さんに直接にお送りすることも可能です。）



5. 調査結果のご報告

ご希望の場合は、本研究プロジェクトの成果報告書をご担当者様にお送り致します。

Appendix C (English version)**Consent Form (for students)**

(written on OISE/UT letterhead)

Dear Participant:

I would like to invite you to participate in my study on "**Assessing Intercultural Competence: A Comparative Study of Japanese Students in Study Abroad Programs.**" This study is conducted under the supervision of Dr. Ruth Hayhoe at the Ontario Institute for Studies in Education, University of Toronto. The data is being collected for the purposes of a PhD thesis and perhaps for subsequent research articles.

This study will look at the extent of the development of participants' intercultural competence between pre- and post-study abroad using the Intercultural Development Inventory (IDI), which specializes in judging one's intercultural competence by calculating its development score. First, participants will take the IDI twice; before they study abroad and after they return from study abroad and will be examined for the degree they develop intercultural competence through study abroad. Participants will take approximately 20 minutes to take the IDI on each occasion. Second, participants will take approximately 10 minutes to answer an online questionnaire and reflection papers about study abroad when they take the IDI.

This study aims to analyze empirically the educational effectiveness of study abroad programs to cultivate intercultural competence in Japanese students. To put this in concrete terms, the study will measure the development level of intercultural competence of Japanese students before and after their periods of study abroad in the **two countries**, in order to shed light on the educational effectiveness of study abroad in each country, and identify the factors that contribute. I invite you to join in this study because your professor informed me that you will join in a study abroad program this (summer/winter/spring).

This study will be carried out in accordance with the University of Toronto's ethical standards for research. Your participation is completely voluntary. Before your participation is confirmed, this informed consent form will be reviewed and you will be asked to sign the form. If you agree to participate in this study, please sign the consent form online before you take IDI. If you want to request a paper copy, please request the investigator via postal mail using a stamped envelope, given to you by your professor to send the form back to the investigator. The investigator doesn't want you to feel obliged to participate. Your professor also will know not whether you are participating or not. You are free to decline to take the IDI or to decline to answer any question during the questionnaire or reflection paper; a specific explanation is not required. You may withdraw from the study without consequence at any time before this study is completed; any information, whether in written form or audiotape, will then be eliminated from the project. No value judgments will be placed on your responses. At no time will you be judged or evaluated and at no time be at risk of harm.

Your personally identifiable information in taking the IDI will be stored confidentially. You will be requested to submit your name, sex, English language proficiency and prior international experience as part of the IDI test. However, the name of participants is number-coded and will not be revealed in the thesis (pseudonyms will be used). The IDI administrative company uses the personal information only for the score and feedback reports to individual students. The study results will not be published other than in standard academic venues. Your identity will remain confidential. All the collected data will be kept in strict confidence. There are thus no foreseeable risks to your participation in this study.

You will be given the option of electing to receive a report of the study at the end of this study. If you wish, I will also email you the report about your IDI score when the study is completed.

If you are not given username and password to log in IDI from your professor or study abroad coordinator, please access to <https://goo.gl/fXpcYK>. The investigator will send you username and password after he confirmed your online signature. If you already have them by answering online questionnaire, please access to IDI, <http://v3.idiassessment.com>.

Your signature below or online indicates that you understand the above conditions of participation in this study. If you are interested in participating in this study and sign paper-based consent confirm, please send your email address to Shingo Hanada at shingo.hanada@utoronto.ca or telephone me at (080)-4178-9957. I will let you know how to access the IDI. If you have any question about the study or your participation, please feel free to contact me at the email address and telephone number. You may also contact my supervisor, Dr. Ruth Hayhoe at ruth-hayhoe@sympatico.ca or +1-416-978-1213. Finally, you may also contact the U of T Office of Research Ethics for questions about your rights as a research participant at ethics.review@utoronto.ca or 416-946-3273.

Name of Participant

Signature

Date

Email Address

Please initial if you would like your individual IDI scores for pre-study abroad. The investigator will e-mail them to you after completion of the study: ___

Please initial if you would like your individual IDI scores for post-study abroad. The investigator will e-mail you after completion of the study: ___

Please keep a copy of this form for your record. A copy of this consent letter will be left with you, and a copy will be taken by the researcher.

Sincerely,

Shingo Hanada

Ph.D. student (& Assistant Professor at National University Corporation Ehime University)

Department of Leadership, Higher and Adult Education

Ontario Institute for Studies in Education

University of Toronto

252 Bloor Street West

Toronto, ON M5S1V6 CANADA

Telephone: +81-80-4178-9957

E-mail: shingo.hanada@utoronto.ca

Dr. Ruth Hayhoe (Supervisor)

Professor, Department of Leadership, Higher & Adult Education,

Ontario Institute for Studies in Education, 6th Floor

University of Toronto

252 Bloor Street East, M5S 1V6

Canada

416-978-1213

ruth-hayhoe@sympatico.ca

Appendix C (Japanese version)

異文化適応力測定のご案内

トロント大学オンタリオ教育研究所の花田真吾です。このたびは、・・・大学・・・先生にご協力頂き、海外留学する皆さんへ異文化適応力測定（Intercultural Development Inventory）のご案内をいたします。

私は、トロント大学オンタリオ教育研究所の博士論文研究において、海外留学が皆さんの異文化適応力の成長に及ぼす影響について調査しています。異文化適応力とは、文化的背景による価値観やコミュニケーション方法などに差異を持つ人々と協働できる力を指します。

グローバル化により、多くの日本企業が海外事業を展開している中で、企業が求める人材のキーワードの1つとして「グローバル人材」があげられています。グローバル人材とは、社会人としてグローバルな舞台に積極的に挑戦し活躍できる人材であり、具体的な資質として「社会人基礎力」、「外国語運用力」と並んで「異文化適応力」が求められています。異文化適応力の涵養には、実際に異文化を体験することが推奨されており、海外留学はみなさんにとって異文化適応力を高める絶好の機会となります。

そこで、海外留学を通じてみなさんの異文化適応力がどのように変化するのかについて、異文化適応力測定を受けて把握してみませんか？日本語でのマークシート式質問票を用意しています。興味のある学生は、別紙の概要を参照の上、以下の要領で回答してください。この測定は通常 22 米ドルの費用がかかりますが、今回は無料です。所要時間は 20～30 分程度です。ご不明な点等があれば、お気軽に下記までご連絡下さい。

1. 測定質問票の回答方法

以下にアクセスして、Username と Password を入力して下さい。

- URL: <http://v3.idiassessment.com>
- 教員または留学コーディネーターから Username と Password を受けとっていない方は、以下の渡航前アンケート (<https://goo.gl/fXpcYK>) に回答してください。記入いただいたメールアドレスに Username と Password をご連絡します。
- 回答時に同意欄への記入をお願いします。
- 留学終了後に、帰国者向けの質問票を通知します。今回と留学後の合計 2 回受けて頂き、留学前後の異文化適応力の成長度を測定します

2. 結果通知

- 結果レポートを email にて通知します。
- 参加謝礼として、アマゾンギフト券 500 円を email にて進呈します。
- 個人の測定結果を大学教職員等の第三者に公開することはありません。

連絡先：花田真吾（トロント大学オンタリオ教育研究所）
 Email: shingo.hanada@icloud.com
 住所： 252 Bloor Street West, Toronto, Ontario, M5S1V6

本研究プロジェクトの概要

4. 目的

本研究は、以下を明らかにすることを目的とします。

- ・ 海外留学による異文化適応力涵養への学習成果を実証する。

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8. 本研究プロジェクト開始後、いずれの段階においても辞退することが可能です。

・ 研究指導教員

Dr. Ruth Hayhoe (トロント大学オンタリオ教育研究所 高等教育・国際比較開発教育研究科 教授)

Dr. Jane Knight (トロント大学オンタリオ教育研究所 高等教育・国際比較開発教育研究科 教授)

Dr. Glen Jones (トロント大学オンタリオ教育研究所 高等教育研究科 教授)

住所：University of Toronto, Ontario Institute for Studies in Education

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代表者 Email: ruth-hayhoe@sympatico.ca

Appendix D

Interview Questions for Professors

1. What were the driving forces behind your institution's establishment of study abroad programs?
2. Why does your institution choose to form study abroad partnerships with universities in the United States and Canada?
3. What are the common forms of study abroad programs (exchange, one-way from your institution, language study, service-learning, internship and etc.)?
 - What benefits has your institution thus far gained through the partnership with the universities in the two countries?
 - What benefits have your students thus far gained through those partnerships with the universities in the two countries?
 - What are the challenges your institution has experienced so far in the partnerships with institutions in the two countries?
 - How do you evaluate students' learning outcomes of study abroad (quantitative data, reflection paper and etc.)?
 - What are the challenges your institution has experienced so far in the evaluation?
4. Does your institution provide students to take pre-departure orientation?
 - What kind of orientation programs your institution provides?
 - Does your institution provide particularly intercultural learning programs?

Appendix E (English version)

Online Pre-Study Abroad Online Questionnaires

1. Please write your surname and first name.
2. Please write your email address (It will be used to send you IDI username and password and IDI results).
3. Please choose your registered gender.
4. Please write the length of study abroad program (e.g. 21 days).
5. Please write your prior international experience (e.g. Homestay for 2 weeks. If you don't have experience, please write "0").
6. If you have, please write your TOEIC score (If you don't have score, please write "0").
7. If you have, please write your TOEIC score (If you don't have score, please write "0").
8. If you have taken any other English test, please write the name of test and your score.
9. If you read consent letter and agree to participate in this study, please write your signature.

Online Reflection Paper Questions

1. What did you learn in study abroad programs that most helped you to develop your intercultural competence?
2. What factors in study abroad programs contribute, either positively or negatively, to the development of students' intercultural competence?

Appendix E (English version)**海外留学渡航前アンケート**

*必須

1 **氏名（ローマ字）** * 姓名の順番で記入してください。

（例：Yamada Taro）

2 **Eメール** * PDFを添付ファイルで受け取れるアドレスを記入してください。

3 **性別** * 1つだけマークしてください。

男性 女性

4 **留学期間** * 今回の留学期間を日数で教えて下さい。

（例：21日間）

5 **今回の海外留学の前の海外経験**

（例：ホームステイでアメリカに2週間）

該当しない場合は「なし」と記入してください。

6 **言語能力（TOEIC）**

TOEICの得点を記入してください。受験していない場合は0を記入してください。

7 **言語能力（TOEFL）**

TOEFLの得点を記入してください。受験していない場合は0を記入してください。

8 **言語能力（その他）**

試験名と得点または級を記入してください。（例：英検 2級）

9 **同意確認** *

本研究への協力について、別紙の同意書の内容を読み、同意する場合は、氏名を署名してください。

海外留学リフレクションシート

1. 今回の留学を通じて自分の異文化への適応力・理解力を高める機会となったと考える体験について教えて下さい。
2. 今回の留学での学び・経験を今後どのように活かしていきたいと考えますか？

Appendix F



UNIVERSITY OF
TORONTO

OFFICE OF THE VICE PRESIDENT, RESEARCH

PROTOCOL REFERENCE # 28385

December 10, 2012

Dr. Ruth Hayhoe
OISE/UT: DEPT. OF THEORY & POLICY
STUDIES IN EDUC.
OISE/UT

Mr. Shingo Hanada
OISE/UT: DEPT. OF THEORY & POLICY
STUDIES IN EDUC.
OISE/UT

Dear Dr. Hayhoe and Mr. Shingo Hanada,

Re: Your research protocol entitled, "A comparative analysis of Japanese students studying abroad in the United States, Canada, China and Korea: Assessing intercultural competence"

ETHICS APPROVAL

Original Approval Date: December 10, 2012
Expiry Date: December 9, 2013
Continuing Review Level: 1

We are writing to advise you that the Social Sciences, Humanities, and Education Research Ethics B has granted approval to the above-named research protocol under the REB's delegated review process. Your protocol has been approved for a period of **one year** and ongoing research under this protocol must be renewed prior to the expiry date.

Any changes to the approved protocol or consent materials must be reviewed and approved through the amendment process prior to its implementation. Any adverse or unanticipated events in the research should be reported to the Office of Research Ethics as soon as possible.

Please ensure that you submit an Annual Renewal Form or a Study Completion Report 15 to 30 days prior to the expiry date of your current ethics approval. Note that annual renewals for studies cannot be accepted more than 30 days prior to the date of expiry.

If your research is funded by a third party, please contact the assigned Research Funding Officer in Research Services to ensure that your funds are released.

Best wishes for the successful completion of your research.

Yours sincerely,

Sarah Wakefield, Ph.D.
REB Chair

Dean Sharpe
REB Manager

OFFICE OF RESEARCH ETHICS

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