An exploration of undergraduates' intercultural development: a case study of an internship abroad program

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AN EXPLORATION OF UNDERGRADUATES’ INTERCULTURAL DEVELOPMENT:
A CASE STUDY OF AN INTERNSHIP ABROAD PROGRAM

By
Jennifer Fong

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ABSTRACT

This mixed-methods case study examined the intercultural development of US students participating in a summer internship abroad program. Using Kelley’s (1995) Construct of Cross-Cultural Adaptability and Bennett’s (1986, 1993) Developmental Model of Intercultural Sensitivity, the study explored changes in cross-cultural skills and how students perceived cultural differences during the intercultural experience. Kolb’s (1984) Experiential Learning Theory also provided a framework in understanding intercultural development. Data from pre and post-program surveys (Cross-Cultural Adaptability Skills Inventory), pre and post-program interviews and field observations provided insights into students’ intercultural development.

Although quantitative and qualitative data indicated growth in different dimensions, students reported improvements in coping with challenges, remaining open to new experiences, accepting cultural differences, and developing greater levels of independence and self-confidence. Some participants displayed greater understanding and sensitivity towards cultural differences, while other students did not. These findings underscore the importance of program interventions, such as guided reflections and cultural mentoring, to enhance intercultural learning.

Results of this study suggest a short-term summer internship abroad program can have positive effects on participants’ cross-cultural adaptability skills, including emotional resilience, flexibility and openness, perceptual acuity, and personal autonomy. Other beneficial outcomes include the positive influence on students’ career and academic aspirations. Lastly, data analysis revealed the significance of participants’ starting conditions and program design on student learning. Based on these results, international educators and practitioners can further address the challenges related to evaluating the effects of programmatic structures and facilitating effective short-term exchanges abroad.
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CHAPTER ONE
INTRODUCTION

SIGNIFICANCE OF PROBLEM

Education abroad has become a primary avenue for students to develop cross-cultural skills and global awareness (Deardorff, 2006). According to the International Institute of Education, the number of US students participating in education abroad grew to 332,727 students – a 38 percent increase between 2008 and 2018 (IIE, 2018a). A large percentage of participants enroll in short-term programs, with 65 percent of the education abroad population selecting programs fewer than eight weeks, compared to just 3 percent in traditional year-long programs (IIE, 2019). Shorter programs allow for a greater number of students to participate in international exchanges, due financial, academic, or personal reasons that may not allow for longer periods abroad (Gaia, 2015). In response, institutions have begun to offer a wider spectrum of short-term experiences abroad such as summer internships, service-learning, and research exchanges, which have more than doubled in the past five years (IIE, 2019). These experiential learning opportunities promote a variety of beneficial outcomes, including intercultural sensitivity, cultural knowledge, and personal and professional growth (Davis & Mello, 2003; Matherly, Phillips & Chapman, 2015).

Despite the growing popularity of short-term experiential programs, evidence of their effectiveness yields mixed results. With regards to program duration, studies have generally shown that “longer is better” (Dwyer, 2004; Medina-Lopez-Portillo, 2004; Vande Berg, 2009). Bloom & Miranda (2015) reported few significant changes in cross-cultural outcomes in a four-week study abroad program in Spain, and Demetry & Vaz (2017) found little gains in students’ intercultural sensitivity measures in an eight week project-based experience in Thailand. On the other hand, Chieffo & Griffiths (2004) study of 2,300 students in a four-week program showed significant
gains in intercultural awareness, personal development, and communication skills compared to the on-campus student group. It is important that more studies are conducted on the effectiveness of short-term programs to better understand what extent students learn from their intercultural experiences.

Over the years, the education abroad narrative has centered on the notion that learning happens automatically through exposure and immersion in other cultures (Vande Berg, 2009). However, recent research indicates this assumption to be largely unsupported. Participants of education abroad programs “do not begin to develop interculturally – gaining the capacities to shift cultural perspective and to interact more effectively and appropriately with culturally different others – simply by virtue of going abroad” (Vande Berg, Paige & Lou, 2012, p. 20). Other scholars concur exposure to different cultures is necessary, but insufficient to promote cross-cultural awareness and understanding (Amir, 1969; Vande Berg, Balkcum, Scheid & Whalen, 2004). Students seem to learn best when immersive experiences are combined with supportive interventions, which help them to become more self-reflective, culturally self-aware, and aware of “how they know what they know” (Chang et al., 2021; Vande Berg et al., 2012, p. 21).

Furthermore, there is growing concern from educators and researchers to demonstrate positive student outcomes in response to “a growing demand for cross-cultural adaptability in employees” (Kitsantas, 2004, p. 2). The connection between international experience and graduate employability in becoming increasingly evident (Crossman & Clarke, 2010). In an effort to understand the value of intercultural skills in the modern workplace, a British Council 2013 survey on human resource managers at 367 large employers in nine countries stated:

The modern workplace is increasingly globalised and competitive. Communicating with customers, colleagues and partners across international borders is now an everyday occurrence for many workers around the world. Consequently, employers are under strong
pressure to find employees who are not only technically proficient, but also culturally astute and able to thrive in a global work environment (p. 3).

Students with transferable skills, related to cross-cultural communication, global perspective, and openness in culturally diverse contexts will become valuable to employers (Shaftel, J., Shaftel, T., & Ahluwalia, 2007). In addition, approximately 65 percent of students entering primary school today will work in jobs that do not yet exist, requiring notably different skillsets (World Economic Forum, 2016). To be effective in the 21st century, the National Education Association (NEA, 2012) encourages the teaching of creativity, critical thinking, communication, and collaboration in diverse settings, which will require to some extent intercultural competence. “Students engaged in international experiences, like study abroad, develop additional socioemotional skills, including greater resiliency, an increased capacity to innovate, and the ability to deal with unfamiliar environments” (US Department of Education, 2021). This demonstrates the growing significance of cross-cultural opportunities for experiential learning. Participation in short-term programs can be a way to help in the acquisition and development of cross-cultural competencies. Yet, more research is needed to show to what extent programs help achieve the desired learning outcomes.

**PURPOSE OF STUDY**

The purpose of this case study was to examine the development of cross-cultural skills and intercultural sensitivity of undergraduates participating in a summer internship abroad in Taiwan. Due to the recent growth and relative newness of experiential programs, formal research is not as robust compared to traditional study abroad programs. Information collected on ‘non-credit educational experiences’ by the US Doors Report – the most comprehensive data source on international exchanges for American students – was first published in 2014 (IIE, 2014a). Thus,
there are limited mixed-methods studies on the impact of internship programs and intercultural development. Examining international collaborations that provide a unique context for students to develop global awareness and practical career-related skills (Matherly, Phillips & Chapman, 2015) can help to better understand the knowledge, awareness, or skills students acquire interning in another culture. Findings might also illustrate how experiential programs contribute to intercultural learning in ways that are distinct from academic study abroad programs.

Many empirical studies of short-term exchanges utilize quantitative approaches to demonstrate measurable outcomes from education abroad (West, 2015). However, evaluating student learning through statistical means may not accurately reflect the growth that occurs. Demetry & Vaz (2017) assessed students’ intercultural competence with a pre and post-program Intercultural Development Inventory. While participants of the 8-week research abroad program showed no significant intercultural gains, qualitative results revealed “some positive learning outcomes that nonetheless did not translate into the significantly high standard required for advancement on the IDI” (p. 27). The authors advise using an appropriate survey measure and multiple instruments to better examine intercultural development. As Convey (1995) asserts, “the experience abroad cannot be fully quantified: the outcome has to be measured in terms of the quality of the experience and of the skills acquired, particularly of transferable skills” (p. 142). Thus, this research contributes toward the limited studies utilizing multiple methods to explore what and how students learn in a short-term program abroad.

Another objective of this study was to further explore three possible reasons for negative findings from short-term program research, related to 1) evaluating programs that require too few interactions with host residents, 2) not aligning instruments in mixed-methods studies, and 3) examining outcomes across different programs. The program design of the PIRE internship
addressed these issues by first, incorporating frequent interactions with people in the host culture through almost daily collaboration on research projects with peers and professors, and spending time together during cultural activities and field trips. Students also had the opportunity to interact with professionals in their field at internship sites or seminars hosted by the institutions. In this sense, engaging in the host culture was not limited to the participants’ peers or people in the same age range.

To address the second explanation, the interview protocol from this study was modified to align with the four cross-cultural scales of the quantitative measure and included developmental questions about how students made sense of intercultural encounters abroad (Hammer, 2012). This approach was chosen in order to create a stronger relationship between the survey and interview findings and further validate the two types of data. It also provided an in-depth understanding of how students’ perspectives about cultural differences shifted throughout the program. And third, this case study analyzed two different cohorts (2018 and 2019) who participated in the same summer internship program. The program characteristics remained the same every year creating consistencies across programs. For instance, the duration, pre-departure curriculum, cultural activities, student accommodations, and field trips to historical sites were consistent each summer. The following is a description of the program.

**PROGRAM DESCRIPTION**

The summer internship program was part of a five-year interdisciplinary project headquartered at a public research university in the Northeast US (East Coast University or ECU as named in this study). Due to the global health crisis and travel restrictions, the summer internships scheduled for 2020 and 2021 were canceled. This study explored the intercultural
experiences of US interns from the 2018 and 2019 programs. Each summer, program faculty chose about a total of ten US students from Atmospheric Science and Social Science disciplines based on gpa, prior academic/research experiences, and personal essays of interest to participate in an eight-week internship focused on understanding extreme weather events in Taiwan. The program was highly selective and fully-funded for participants, however, students from traditionally underrepresented groups were given priority.

To prepare for the trip, students attended 12 hours of culture classes introducing Taiwanese culture, such as commonly used phrases, foods, social customs, and various aspects of daily life. Before leaving, interns were assigned to specific research projects under the guidance of graduate students and program professors at the participating institutions in Taiwan. Students were also given the option to sit in and listen to atmospheric science seminars hosted by governmental organizations. Cultural immersion was emphasized throughout the program with field trips to historical sites and weekly cultural activities with local students. Interns had leisure time during evenings to socialize or explore the sites. At the culmination of the program, the interns gave final presentations and received constructive feedback from faculty members.

The program was designed to provide opportunities for undergraduates to gain professional research experience in another country, while developing cross-cultural skills sets. The primary objectives for the summer internship program were: 1) to train students with the necessary knowledge and skills to be effective in addressing global climate issues, 2) to foster a culture of interdisciplinary research, and 3) to build cross-cultural skills and awareness among participants through education abroad programming. This study examined how well the program met the third objective by examining changes in students’ cross-cultural skills and intercultural sensitivity from participation in a summer internship program.
RESEARCH QUESTIONS

The objective of this mixed-methods case study was to examine students’ cross-cultural skills before and after a short-term internship program using pre and post-program surveys, interviews, and field observations. In addition, the research sought to understand how students’ perceptions of cultural differences between the US and Taiwan shifted during the program. The following research questions guided this study:

1. To what extent do students’ cross-cultural skills change over the course of a summer internship abroad program as measured by the Cross-Cultural Adaptability Inventory (CCAI) and interviews? What factors relate to any changes?

2. How is the intercultural learning evident from the quantitative findings similar to or different from the qualitative findings? What are plausible explanations?

3. How are students’ perceptions of cultural differences between the US and Taiwan affected by participating in a summer internship abroad program?

The use of multiple data sources was chosen to evaluate the program and its participants’ experiences in greater depth (Creswell & Clark, 2007). However, evaluating the complexity of the human learning experience often requires multiple approaches. As Convey (1995) states, “the experience abroad cannot be fully quantified: the outcome has to be measured in terms of the quality of the experience and of the skills acquired, particularly of transferable skills” (p. 142). The use of only anecdotal or quantitative evidence, albeit valuable, may not accurately reflect intercultural learning. For this reason, utilizing multiple data sources was chosen to allow for both objectivity and nuances, that may not be illustrated with the use of only one type of measurement (Creswell, 2003).
THEORETICAL BASIS FOR THE STUDY

Three frameworks focused on cultural understanding and development were used to guide the data analysis. First, the construct of Cross-Cultural Adaptability acted as the primary framework in interpreting the quantitative and qualitative findings. In order to be effective in diverse cultural contexts, an individual needs to learn how to communicate and relate with individuals different from oneself (Bennett, 2009; Deardorff, 2006, p. 247). This requires a specific set of knowledge, skills, and attitudes. Kelley and Meyer (1995a) posit four skills areas are fundamental for effective cross-cultural communication and interaction: emotional resilience, flexibility/openness, perceptual acuity, and personal autonomy.

Emotional resilience is the ability to cope with challenges and react positively to new experiences. Being among people culturally different from oneself can be confusing and lonely. It is important to learn to tolerate strong emotions and cope with uncertainty and stress. Flexibility includes being able to adapt to different situations with openness. This includes tolerance, lack of rigidity, and comfort with individuals who may not share similar ways of thinking or acting. Perceptual acuity is the ability to notice verbal and non-verbal behaviors. It includes, “being able to read people’s emotions, being sensitive to one’s effects on others and communicating accurately” (Kelley & Meyers, 1995a, p. 15), which can be useful when engaging with people from another culture. Lastly, personal autonomy is the ability to be self-directed and self-confident. When interacting with people who do not share the same values and beliefs, it is important to have a strong sense of identity. People high in this dimension have their own personal system of values, take responsibility for their decisions, and respect the decisions of others. These four abilities are linked to cross-cultural effectiveness and cultural adaptability (Kelley & Meyers, 1995a).
The corresponding Cross-Cultural Adaptability Inventory (CCAI) was chosen as the primary instrument to examine any changes in students’ intercultural development. Prior studies that utilize the CCAI instrument have demonstrated its use in a variety of education abroad programs and with diverse student populations (Black & Duhon, 2006; Williams, 2005). A primary objective of the summer internship was to facilitate cross-cultural skills, thus the CCAI was deemed an appropriate instrument to evaluate changes in intercultural learning.

Second, the study explored how students’ perceptions of cultural difference changed over the course of the internship. Effective intercultural skills include an ability to be aware of and understand how cultures are distinct from each other. For this study, culture is defined as the distinctive features of a group, including the lived experiences of individuals based on relations with a particular ethnicity, nationality, etc. (Forum on Education Abroad, 2011, p. 37). This encompasses the social manners, religion, systems of belief, dress, and rituals of the group. Rosenzweig (1994) continues the definition of culture as a “set of taken-for-granted assumptions, expectations, or rules for being.” Due to these variances between groups, cultural conflicts can arise. Becoming aware of these cross-cultural differences in behaviors, beliefs, values, and language, can contribute toward understanding another culture at a deeper level.

The process of becoming more sensitive to and engaging with cultural differences is described by Bennet’s (1986, 1993) Developmental Model of Intercultural Sensitivity (DMIS). Underlying the theory is the assumption that as one’s awareness of cultural difference becomes more complex and sophisticated, one’s intercultural competence increases (Bennett, 1993). Multiple studies on the effectiveness of short-term programs and intercultural learning utilize the DMIS to guide their research (Demetry & Vaz, 2017; Jackson, 2008; Vande Berg, 2009). The primary concepts of ethnocentrism and ethnorelativism are at the center of the framework. Six
kinds of experiences of cultural difference are illustrated across a continuum from the ethnocentric stages of Denial, Defense, and Minimization, followed by the ethnorelative stages of Acceptance, Adaptation and Integration. According to this theory, the development of intercultural sensitivity occurs through a sequence of observing, making sense of, and experiencing cultural distinctions (Bennett, 1993). Hence, this theoretical framework was chosen to examine how students came to view and interact with cultural differences and whether they developed a better understanding of their own culture and the host culture following the program.

Finally, the Experiential Learning Theory (ELT) was used to better understand the learning process involved in students’ intercultural experiences. ELT emphasizes learning as a developmental process, in contrast from traditional theories that define learning in terms of fixed behaviors and outcomes (Watson, 1928). In other words, it is a holistic process “whereby knowledge is created through the transformation of experience” (Kolb, 1984, p. 41). The theory is composed of four main stages of learning: (1) experiencing, (2) reflecting, (3) thinking, and (4) acting/experimenting. Education abroad is viewed as a form of practical learning where students engage in novel experiences in a foreign culture, reflect upon and think about their experiences, and abstract new ideas to apply in future situations. Bandura (1986) states practical experience is one of the most impactful ways to acquire knowledge and develop new skills. Experiences outside the classroom may lead to new perspectives and creating connections that facilitate transformative changes (Deardorff, 2011). Thus, Experiential Learning Theory provided a framework in better understanding how and what students learned from the summer internship experience abroad. These findings may provide insights into areas of short-term program improvements to optimize intercultural learning.
DEFINITIONS OF TERMS

In order to provide consistency throughout the proposal, the following terms used in this research study are defined: Cross-Cultural, Cross-Cultural Adaptability, Culture, Education Abroad, Experiential Learning, Intercultural, Intercultural Competence, Intercultural Learning, Intercultural Sensitivity, Internship Abroad, and Short-Term Education Abroad Program.

- **Cross-Cultural** – the comparisons made between two cultures and the phenomena involved in crossing cultures, such as the adaptation to different societies and the impacts this has on the members of each culture (Forum on Education Abroad, 2011, p. 37).

- **Cross-Cultural Adaptability** – the ability to adapt living in another culture and effectively interacting with people different from oneself (Kelley & Meyers, 1995a). This involves the use of communication (Hammer, Gudykunst & Wiseman, 1978), emotional intelligence (Kim, 2001; Ting-Toomey, 1999) and other interpersonal skills.

- **Culture** – the set of distinctive features of a society or social group, which include the lived experiences of individuals based on associations with a language, ethnicity, nationality, gender, etc. (Forum on Education Abroad, 2011, p. 37).

- **Education Abroad** – encompasses educational activities occurring outside the participant’s host country that contribute toward learning and development. These programs include, but are not limited to: credit or noncredit study abroad, internships, service-learning projects, cultural excursions, and research opportunities (Forum on Education Abroad, 2011; Helms & Brajkovic, 2017).

- **Experiential Learning** – an active learning process, “whereby knowledge is created through the transformation of experience” (Kolb, 1984, p. 41) or ‘learning by doing.’
• **Intercultural** – the dynamics involved when people of different lived experiences or cultures interact with one another.

• **Intercultural Competence** – the ability to relate with those who do not share the same culture, ethnicity, language, or other common experiences (Forum of Education Abroad, 2011). More specifically, it is a set of knowledge, skills, and attitudes that support effective and appropriate interactions in a variety of cultural contexts (Bennett, 2009).

• **Intercultural Learning** – study of and application of knowledge about different cultures, including a heightened awareness and sensitivity towards cultural differences and similarities. The main goal of intercultural learning is the development of intercultural competence, or a greater ability to interact effectively across cultural contexts (Bennett, 2009).

• **Intercultural Sensitivity** – the ability of “being aware that cultural differences and similarities exist and have strong effect on values, learning, and behavior (Stafford, et al., 1997). In other words, it is “the ability to discriminate and experience relevant cultural differences” (Hammer, Bennett & Wiseman, 2003, p. 422), with the objective to become more competent in different cultural settings.

• **Internship Abroad** – work experience in another country usually with a professional organization, a research group, or institute allowing hands-on training with an educational purpose in the student’s major area or professional interest (UM, 2013).

• **Short-Term Education Abroad Program** – an educational program taking place in another county lasting eight weeks or less. This may include summer, January, or other terms of two months or less in duration, excluding the pre-departure preparation or post-return activities (Forum on Education Abroad, 2011).
CHAPTER TWO
LITERATURE REVIEW

The primary purpose of this study is to examine the cross-cultural adaptability and intercultural sensitivity of participants of a summer internship abroad program. The literature review will explore recent trends in cultural exchanges at US institutions and the significance of education abroad. The chapter details the theoretical frameworks guiding this research and outlines empirical studies on the relationship between education abroad and intercultural development. Lastly, primary gaps and weaknesses in the literature are addressed.

PART I
EDUCATION ABROAD IN THE US

Education Abroad Trends

The top three fields US education abroad participants major in are STEM (26%), Business Management (21%), and Social Sciences (17%) (IIE, 2019). The percentage of students from the engineering and science fields has almost doubled up from 13% just ten years ago (IIE, 2010). While the sample size of this case study (n=8) was relatively small, six of the eight undergraduates were from the physical sciences and two from social sciences. The demographics of the study’s sample reflected the national averages of education abroad participants in the US, which are comprised primarily of Caucasians (70%), followed by Hispanics (11%), Asian (8%), African American (6%), Multiracial (4%), and American Indian (0.5%) (IIE, 2019). Today’s undergraduate population also shows an increasing proportion of non-traditional part-time students with full-time jobs, who are over the age of 25 (NCES, 2019). In an effort to appeal to a greater number of students, institutions are now offering a wider spectrum of programs.
In particular, short-term programs are the most common type of undergraduate study abroad, making up 65 percent of all US participants (IIE, 2018a). Shorter programs have become a popular alternative and provide an opportunity for students to experience an international exchange without the expenses, foreign language requirements, or time away from campus and home that are often required of semester or year-long programs (Gaia, 2015). Short-term programs can range from one to eight weeks and are often faculty-led. They may also involve various elements such as homestays, travel to multiple sites, and service or a research component (Forum on Education Abroad, 2011). Credit or non-credit internships, research abroad, and volunteerism are also increasing in popularity amongst undergraduates. Although still a small percentage of the aggregate education abroad population, 38,401 students participated in some type of non-credit internship, service learning, or research abroad program in the 2017-2018 academic year – a 61 percent increase from five years ago (IIE, 2019).

With the recent health crisis, however, academic mobility and education abroad opportunities have significantly declined due to travel restrictions, limited funding, and safety reasons. The Institute of International Education’s study on the effects of the pandemic indicates that 43 percent of 414 US responding institutions have canceled all study abroad programs while just over half offered a global experience in the summer of 2021 (Martel & Baer, 2021). Nevertheless, these are signs of a possible rebound. Approximately 50 percent of institutions in the same report offered in-person study abroad in fall 2021 and 54 percent plan to offer programs abroad again by spring 2022, with numbers expected to increase (Martel & Baer, 2021).

Student interest in international experiences also remains high as reflected in their expectations for college. An American Council on Education report showed nearly 80 percent of prospective college students stated that the opportunity to participate in international programs
positively impacted their college selection. Over a third of the same respondents wished to acquire career-related work experience or intern in another country (ACE, 2008). The millennial generation has grown up in a diverse era of globalization and is increasingly connected to the world through technology and the internet. Thus, college-bound students “demonstrate high levels of global awareness, and significant proportions anticipate international learning experiences in college” (ACE, 2008, p 1).

**Education Abroad Significance**

Education abroad has become a well-known avenue to facilitate cross-cultural skills needed to compete in an interconnected world. The importance of developing global awareness and intercultural competence is reflected at the national levels. The US Department of Education’s international strategy lists as its first objective, “to increase global and cultural competencies of all US students,” and to help individuals attain meaningful employment (US Department of Education, 2018). In 2005, the Commission on the Abraham Lincoln Study Abroad Fellowship Program set an ambitious goal of one million students studying abroad by 2016-17 (NAFSA, 2005). While this goal has yet to be attained, there were ten consecutive years of growth – a 38 percent increase in US students studying abroad before the year 2020. The vision of the Commission continues today and is outlined in their report:

> What nations don’t know can hurt them. The stakes involved in study abroad are that simple, that straightforward, and that important. For their own future and that of the nation, college graduates today must be internationally competent (NAFSA, 2005).

As students today engage in diverse teams and environments, developing a wide range of cross-cultural competencies has become increasingly important (Chalkiadaki, 2018; Tillman, 2014). In other words, to be effective in a diverse world requires more than acquiring information
but learning the values and skills reflective of a global world (Bakhtiari and Shajar, 2006). Dr. Allan E. Goodman, the President of the Institute of International Education, echoes the notion that education abroad is an effective way to foster global citizens: “International experience is one of the most important components of a 21st-century education, and study abroad should be viewed as an essential element of a college degree” (IIE, 2014).

Moreover, companies are becoming more global and the workforce more diverse than ever before (Molinsky, Davenport, Iyer & Davidson, 2012). Employers increasingly expect incoming graduates to possess interpersonal and cross-cultural abilities (Damari et al., 2017). A large-scale study of 836 managers from US companies in a variety of industries reported that ‘appreciation for cross-cultural difference’ was the most important international skill sought by companies. Additionally, employees’ international work experience was considered important by 80 percent of managers and of great importance to 43 percent of managers. The authors recommend US universities place a “stronger emphasis on integrating international and cross-cultural topics into all curricula, since these skills seem to be universally needed by business, even at the entry level” (Daniel, Xie & Kedia, 2014, p. 35)

Interestingly, a large survey by the Collegiate Employment Research Institute of multinational firms, reported that while over 65 percent of respondents considered work-related experiences, such as internships and career-related summer co-ops as significant in the employability of candidates, only 30 percent reported study abroad as essential and only 2 percent as highly important (Gardner, Gross, Steglitz, 2008). However, when study abroad was presented as a list of cross-cultural competencies in the study, employers positively reacted, revealing the skills and knowledge acquired from the experience abroad were valued over the international experience itself (Gardner et al, 2008; Tillman, 2014). Thus, research focused not only on what
students are learning from their intercultural experiences, but how they can translate the competencies gained, may support their learning and future employability.

PART II

EDUCATION ABROAD STUDIES

Program Duration

This section highlights significant findings from research conducted on the effect of program length on intercultural learning. Many scholars assert longer durations abroad are needed to participate in the target culture and to develop intercultural sensitivity (Dwyer, 2004; Leong and Ward, 2000; Medina-Lopez-Portillo, 2004). Dwyer (2004) assessed the effects of program variables on the intercultural development of 3,723 education abroad alumni from various programs between 1950 to 1970. Using a survey designed from guidelines of the International Education of Students (IES) Model Assessment Program to examine the impact of specific features, such as housing, duration, and participation in an internship, the results suggest students who studied abroad for at least one semester had the most significant growth in academic, career, intercultural and personal development outcomes (Dwyer, 2004).

Despite the conclusion that longer was generally better, summer term participants showed the most enhanced academic interest compared to all other programs. “In some categories of factors, summer students were as likely or more likely to achieve sustainable benefit from studying abroad in comparison with semester students,” with the explanation that, “well-planned, intensive summer programs of at least 6 weeks duration can have a significant impact on student growth across a variety of important outcomes” (p. 161). However, the study does offer details for what comprises a well-planned program or possible reasons for their effectiveness.
Medina-Lopez-Portillo (2004) compared the findings from US students participating in either a seven-week or sixteen-week program in Mexico. Findings from pre- and posttest Intercultural Development Inventory survey showed over 65 percent of the sixteen-week program students advanced to the next stage in intercultural sensitivity. In contrast, 31 percent of the seven-week summer program participants moved to the next stage of development. Interestingly, students in the shorter program exhibited more nationalism and appreciation of American culture, whereas the semester group became more critical and discontented with the US. However, combined with qualitative interviews, “the overall scores fail by themselves to capture the complexity of the phenomena under investigation” and thus, “future research on the development of intercultural sensitivity should also rely on multiple methods of collecting data” (p. 192, 193).

Research should continue to explore the impact of short-term programs and their effectiveness, particularly since nearly 65 percent of all US participants select programs fewer than eight weeks. Shorter programs can still be worthwhile intercultural learning opportunities for students who may be unable or unwilling to participate in longer international experiences. Research on short-term experiences have documented a variety of beneficial outcomes including: cross-cultural tolerance, openness to diversity, global awareness, and personal and professional development (Anderson, Lawton, Rexeisen & Hubbard, 2006; Black & Duhon, 2006; Gaia, 2015).

**Research Gaps and Needs**

Most research to date on short-term studies yield inconsistent findings. There are at least three explanations for the mixed results on short-term program effectiveness. A first explanation is the evaluation of programs designed with differing levels of interactions with local residents. This is based on the finding that shorter programs provide less time and fewer opportunities for
students to engage with host nationals (Bunch et al., 2018). Frequent contact with individuals in a foreign culture has been associated with positive intercultural outcomes (Heinzmann et al., 2015). If short-term programs are not designed to encourage interactions with host nationals on a regular basis, it may not lead to significant changes in participants’ development. Lemmons (2015) characterizes this tendency to avoid engaging as taking the path of least resistance. When students primarily interact with people similar to them (US classmates) they miss out on learning from individuals who have different ways of thinking and doing.

Citron & Kline (2002) describe how this can happen in homestay situations where students of similar backgrounds are placed together. The “shadow culture” of the group can create distance and restrict student engagement with the host community. In short-term program evaluations, this lack of learning may be recorded as insignificant or negative growth compared to participants of programs that facilitate regular contact with those in the target culture. Thus, varying program designs that require or encourage different levels of contact with the host nationals might contribute towards the mixed results seen in short-term program research. The PIRE internship program was designed to require frequent contact with work colleagues in the lab and local residents during cultural activities, field trips, and navigating daily life in Taiwan as students were largely responsible for buying their own meals and taking transportation to and from various locations.

A second explanation for the mixed findings relates to studies using one approach to evaluate intercultural outcomes. Studies utilizing only quantitative or qualitative measures may not provide a full picture of learning and leave out details not captured with the use of multiple methods. In addition, the use of different measures to assess learning can lead to inconsistent results across studies. Many studies using the Intercultural Development Inventory (IDI), for
example, report limited if any significant gains in intercultural learning outcomes (Jackson, 2008; Demetry & Vaz, 2017; Georgia Institute of Technology, 2011). However, many studies using the Cross-Cultural Adaptability Inventory or Intercultural Sensitivity Inventory yield significant gains across most of the measured intercultural competencies (Black & Duhon, 2006, Mapp, 2012; Shaftel, J., Shaftel, T., & Ahluwalia, 2007; Williams, 2005). This could be due to the insensitivity of instruments or targeting different subscales. Demetry & Vaz (2017) suggest the IDI assessments have a “significantly high standard required for advancement” and “may not be the appropriate tool to judge the quality of education abroad programs or to characterize student learning outcomes” (p. 26, 27). Instead, they recommend its use as a longitudinal measure or using multiple methods to evaluate intercultural competence.

The variation in evaluations and instruments used to assess short-term programs may explain conflicting outcomes. Even within mixed-methods studies challenges exist in reconciling the learning outcomes evident from statistical measures with qualitative measures and vice versa. Hammer (2012) asserts using developmental interviews, where students are asked about specific situations and to describe their perceptions of the incident, may create a stronger correlation between the survey and interview data. In an effort to better fit the quantitative and qualitative measures, this study modified the interview protocol questions to align with the four cross-cultural scales of the CCAI (Kelley & Meyers, 1995a). The CCAI dimensions were also used to thematically organize and analyze the interview responses.

A third explanation for the mixed findings from short-term program research reflects the wide range of activities and types of programs examined. Donnelly-Smith (2009) describes how there are a plethora of short-term programs ranging from week-long or four to eight week programs, in conjunction to single or multi-courses conducted during the academic winter or summer terms.
Many programs include several different elements including faculty-led trips, homestays, and service or research components. Eight primary factors that differentiate education abroad programs include: program duration, language competency, required language use, the role of faculty, coursework, mentoring or guided cultural reflection, experiential learning initiatives, and housing. The different composition of programs and other factors create complexity in evaluating the effectiveness of international experiences (Engle & Engle, 2004).

In the Georgetown Consortium Project examining 61 different types and durations of education abroad programs, it was concluded that “far too many of the study’s students, when left to their own devices, failed to develop effectively, even when they had been ‘immersed’ in another culture” (Vande Berg, 2009, p. 10; Vande Berg et al, 2004). The study underscores the challenge in identifying what factors contribute toward students’ regression or learning – although cultural intervention and longer program duration were associated with the most intercultural gains. The varying impacts from different program characteristics may be a primary reason for mixed results on short-term programs. It is also important to note that any of these explanations can exist at the same time, complicating the results of short-term program findings. The exploration of two groups of PIRE undergraduates in the same internship program reduced likelihood of mixed results from varying program structures. The design of the 2018 and 2019 summers programs remained largely the same, with the exception that the 2019 program had included more culture-specific knowledge as part of the curriculum in the pre-departure course.

Lastly, many literature studies examining education abroad focus on international programs in countries where English is the dominant language (Anderson, Lawton, Rexeisen & Hubbard, 2006; Black & Duhon, 2006). Three out of the top ten destinations for US education abroad students are in native English-speaking countries (UK, Ireland and Australia) (IIE, 2019).
Evaluating programs in non-English speaking countries could provide more relevant information on the intercultural learning that occurs when the contrast between home and host culture is greater. Scholars have written of the heightened challenges for individuals to adapt and live in the host culture when this is the case (Brein & David, 1971; Church, 1982). Students whose first time traveling abroad might experience this to a higher degree due to culture shock or resistance to differences in the culture they are not accustomed to. This case study evaluates a program where Western students intern abroad in a non-native English-speaking country in Eastern Asia. As the number of students opting for places where they are immersed in very different cultures continues to grow, this research may provide essential insights in preparing and supporting students during the intercultural exchange.

**PART III**

**THEORETICAL FRAMEWORKS**

The four primary theoretical models and conceptual constructs used to guide this study include: (1) Intercultural Development; (2) Cross-Cultural Adaptability Construct; (3) Developmental Model of Intercultural Sensitivity (DMIS); and (4) Experiential Learning Theory (ELT). The first section introduces intercultural development through the lens of the umbrella term ‘intercultural competence.’ The following sections detail the four cross-cultural skills, intercultural sensitivity, and the experiential learning process.

**Intercultural Development**

In the education abroad literature, intercultural competence has been referenced by multiple terms: cross-cultural effectiveness, cultural intelligence, adaptability, global awareness, and intercultural sensitivity. For purposes of this study, intercultural competence (IC) refers to the
ability to communicate and relate effectively in cross-cultural settings (Forum of Education Abroad, 2011). Thomas (2006) expressed intercultural competence as the capacity for individuals to thrive in cross-cultural situations. Byram (1997) further specifies it as, “knowledge of others and self; skills to interpret and relate; skills to discover and/or to interact; valuing others' values, beliefs, and behaviors; and relativizing one's self” (p. 34). A widely accepted definition from a Delphi study of intercultural scholars states intercultural competence as, “the ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills, and attitudes” (Deardorff, 2006, p. 247).

Given the complexity of the concept, the distinction between intercultural competence and intercultural sensitivity is important to make. Intercultural competence refers to the external behaviors visible in intercultural interactions, whereas intercultural sensitivity refers to underlying worldviews that influence how one engages with cultural differences (Hammer, Bennett & Wiseman, 2003). However, they are not mutually exclusive. Higher levels of intercultural sensitivity allow for increased effectiveness, and thus greater competence in other cultures (Cushner, McClelland & Safford, 2012). Hampden-Turner and Trompenaars (2000) posit that intercultural competence can be developed by “recognizing cultural differences, respecting them, and ultimately reconciling them” (p. 249).

Intercultural scholars have created models highlighting three primary areas of competence: (1) behavioral or one’s actions, (2) affective or one’s feelings, and (3) cognitive or one’s thoughts and values (Bochner, 2003; Byram, 1997; Chen & Starosta, 1996). The development of such skills is essential in order to be able to relate with individuals who do not share the same culture, ethnicity, language, or other common experiences (Bennett, 2009; Forum of Education Abroad, 2011). In particular, education abroad participants need to adapt to new environments and develop
effectiveness in their cultural exchanges. Kim (1991) and Kelly & Meyers (1995a) refer to similar dimensions in the concept of cross-cultural adaptability, which will be discussed later in the chapter. Following is a brief description of each of the three components that comprise intercultural competence.

The affective or emotional dimension refers to how well an individual handles stressful situations and overcomes obstacles in new environments. It is often associated with what Bandura (1986) termed self-efficacy, or one’s belief in meeting challenges and achieving goals. Participants of education abroad can experience varying mental and emotional confusion that may shift their perspectives (Bennett, 2004). However, this can also be an opportunity for transforming one's perspectives and behaviors in the host culture. This ability to bounce back from difficulties and adapt to unfamiliar situations entails emotional resilience (Kim, 2001).

Other scholars have focused on specific behaviors that lead to more optimal interactions in the host culture. Cognitive abilities such as suspending judgment, tolerating ambiguity, cultural empathy, and patience contribute towards effectiveness in foreign environments (Argyle, 1994; Cui & Van den Berg, 1991; Deardorff, 2006; Ting-Toomey, 1999). Hammer, Gudykunst, and Wiseman (1978) argue that interpersonal relationships and competent communication are primary predictors of one’s ability to function in different cultural environments. Furthermore, becoming aware the influence of one’s own culture is essential to understanding other cultures (Byram, 1997).

Thus, increasing sensitivity and understanding of cultural differences are central to intercultural development. For this study, the Cross-Cultural Adaptability Construct and Developmental Model of Intercultural Sensitivity provide an intercultural development framework for exploring how students are learn from and are impacted by cultural difference. The Cross-Cultural Adaptability Inventory was used to examine external and observable (e.g. behaviors,
actions, and abilities) of students, while the Developmental Model of Intercultural Sensitivity theory was used to interpret the internal and less observable (e.g. perceptions, beliefs, and attitudes) of participants.

**Conceptual Definition: Cross-Cultural Adaptability**

Given the ever-changing nature of the world, to be competent in foreign settings requires a certain level of adaptability (Kim, 2001). When students decide to cross cultures during an education abroad experience, the unfamiliarity of the environment can cause a considerable amount of stress and confusion (Kim, 2001). Oberg (1960) first introduced this phenomenon as culture shock, whereby a conflict between the individual's identity and perceptions in the host culture causes a negative psychological response. If students cannot create social ties or adjust during a period of time in the host culture, adverse effects on their readiness for learning, academic performance, or personal development might occur (Otten, 2003).

Cross-cultural adaptability goes beyond awareness and focuses on specific communication and behavioral skills vital for successful cross-cultural interactions. Ruben (1977) and Ruben and Kealey (1979) identified seven behavioral skills essential for effectiveness in the new environment: display of empathy, communication of respect, role behavior flexibility, keenness for knowledge, willingness to interact, interaction management, and tolerance for ambiguity. Sercu (2005) further expands upon these characteristics noting an interculturally competent individual has:

- The willingness to engage with foreign culture, self-awareness and the ability to look upon oneself from the outside, the ability to see the world through one’s eyes, the ability to cope with uncertainty, the ability to act as a cultural mediator, the ability to evaluate others’ points of view, the ability to consciously use culture learning skills and to read the cultural context, and the understanding that individuals cannot be reduced to their collective identities (p. 2).
Thus, becoming effective in another culture requires using one's knowledge, skills and attitudes in a specific cultural context. The following describes the four skill dimensions derived from the CCAI inventory that this study further explores.

Table 2-1. Four Dimensions of the Cross-Cultural Adaptability Inventory

<table>
<thead>
<tr>
<th>CCAI Scale</th>
<th>Cross-Cultural Skill Description</th>
</tr>
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<tbody>
<tr>
<td>Emotional Resilience</td>
<td>Ability to rebound from challenges, cope with stress and the unfamiliar, and maintain a positive attitude</td>
</tr>
<tr>
<td>Flexibility/ Openness</td>
<td>Ability to be tolerant of differences, non-judgmental, enjoy various ways of thinking and behaving</td>
</tr>
<tr>
<td>Perceptual Acuity</td>
<td>Ability to be empathetic and attentive to verbal and nonverbal behaviors and communication dynamics</td>
</tr>
<tr>
<td>Personal Autonomy</td>
<td>Ability to be self-directed, have a personal system of values and beliefs, respects themselves and others</td>
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**Emotional Resilience.** An individual with emotional resilience can effectively deal with the stresses and challenges of unfamiliar situations. Participants of education abroad will experience varying levels of mental and emotional confusion (Bennett, 2004), particularly for first-time travelers. However, this confusion may also be an opportunity to shift one’s perspective and grow, leading to more adaptive and appropriate behaviors (Kim, 2001). Furthermore, Kelley and Meyers (1995b) suggest developing emotional resilience allows a person to bounce back from difficulties and deal with confusion or mishaps with a positive attitude. The ability to manage psychological stress and regulate emotions is a standard indicator of how well an individual adjusts to a new environment (Hammer, Gudykunst & Wiseman, 1978; Ting-Toomey, 1999).

**Flexibility and Openness.** Adapting to different ways of thinking and behaving in a new culture requires an ability to remain open-minded, tolerant, and a willingness to engage in new experiences (Kelley and Meyers, 1995b). Bochner (2003) wrote about this as ‘cognitive flexibility.’
In addition, staying open to different ideas, values, and beliefs is necessary for building and maintaining harmonious relationships with culturally different individuals. Thus, someone strong in the flexibility dimension exhibits non-judgment and is comfortable with all kinds of people (Kelley and Meyers, 1995b; Ting-Toomey, 1999).

**Perceptual Acuity.** This dimension is referred to as cultural empathy or nonjudgmental perceptiveness (Williams, 2005). It encompasses how well an individual perceives verbal and nonverbal behaviors to effectively relate to the host culture (Kelley and Meyers, 1995b). It is placing yourself in someone else's shoes, "seeing the world through another’s eyes, hearing as they might hear, and feeling and experiencing their internal world” (Ivey, Ivey, and Simek-Morgan, 1997 cited in Zhu, 2011). Argyle (1994) notes that interactions between people are primarily influenced by social rules and are a "highly rule-bound activity," even though most are unaware of this (as cited in Bochner, 2003, p 8). Thus, attentiveness to social and communication dynamics helps build interpersonal relationships and effectiveness in other cultures (Kelley and Meyers, 1995a).

**Personal Autonomy.** Finally, an individual with personal autonomy maintains a personal set of values, beliefs, and viewpoints while respecting others. Interacting in a culture with different values and norms can bring into question one’s own, thereby creating stress (Kim, 2001). When a person has a strong self-concept and takes responsibility for oneself, this internal locus of control guides their actions (Ting-Toomey, 1999). They possess personal stability in an uncomfortable environments. Kelley and Meyers (1995b) posit this intercultural skill is foundational to effective cross-cultural interactions and building relationships with individuals different from oneself.

The four adaptability traits comprise one's ability to adapt effectively in diverse cultural contexts (Kitsantas, 2004). The theoretical framework of intercultural sensitivity and the concept
of cross-cultural adaptability detail the particular set of skills that influence and support students' learning processes toward becoming more interculturally competent.

**Developmental Model of Intercultural Sensitivity**

A widely-used model to assess how individuals interpret and interact with cultural difference is Bennett’s (1986, 1993) Developmental Model of Intercultural Sensitivity (DMIS). The DMIS has been applied as an educational research frame to examine the intercultural experiences of education abroad students for more than two decades. The model explores the worldviews and associated behaviors and attitudes or individuals and groups in relation to cultural differences (Bennett & Bennett, 2004). The underlying assumption of the framework is that “as one's experience of cultural difference becomes more complex and sophisticated, one's potential competence in intercultural relations increases” (Hammer, Bennett & Wiseman, 2003, p 423). Therefore, the more one can perceive cultural nuance and subtly, the more likely one can function effectively in cultural settings (Bennett, 2004).

In general, ethnocentrism or the experience of one's own culture as “central to all reality” (Bennett, 1993, p. 30) and ethnorelativism or the experience of one’s culture “understood within a cultural context” (p. 46) are at the core of the model. An individual with ethnocentric worldviews can be seen as “avoiding cultural difference, either by denying its existence, by raising defenses against it, or by minimizing its importance.” Whereas an individual with ethnorelative orientations may be viewed as someone “seeking cultural difference, either by accepting its importance, by perspective to take into account, or by integrating the whole concept into a definition of identity” (Bennett, 2004, p 62). Six developmental stages of from ethnocentrism to ethnorelativism are
spread on a continuum, illustrated in Figure 2-2. The following is a brief description of each stage:

Denial, Defense, Minimization, Acceptance, Adaptation, and Integration.

Figure 2-1. The Development Model of Intercultural Sensitivity Stages


**Ethnocentric Worldviews.** The first three stages of denial, defense, and minimization reflect a more ethnocentric worldview. Denial of cultural difference represents a viewpoint that sees one’s culture as more ‘real’ than others or as the only one. Individuals in this state are disinterested or avoidant of other cultures, typically by creating physical or psychological distance from the differences (Bennett, 2004). Defense is the idea that one’s culture is the only good one. Cultural superiority and the ‘us versus them’ mentality aim to protect one’s personal views in this state. Minimization of difference assumes that certain aspects of one's own culture are universal. Though this stage represents greater tolerance, it overlooks unique differences between cultures. This may be illustrated with phrases such as, "after all, we're all human" or “all human beings are the same,” thereby excusing any need to recognize, understand, or adapt to various cultural patterns (Bennett, 1993, 2004).

**Ethnorelative Worldviews.** The subsequent three phases demonstrate an ethnorelative worldview. The Acceptance stage refers to experiencing one's own culture as "just one of a number of equally complex worldviews" (Bennett, 2004, p. 70). Acceptance does not equate to liking or agreeing with cultural differences. Individuals in this state remain curious and respectful, for
instance, of the values and behaviors of those in other cultures. Adaptation moves beyond simply being aware of the influence of one's cultural worldview. It is a conscious shift in mental perspective to the 'insider's point of view (Paige, Jacobs-Cassuto, Yershova, & DeJaeghere, 2003) and may include changes in behavior.

Lastly, Integration of differences reflects operating from a bicultural or multicultural perspective, rather than identifying with any particular culture. The ability to adapt becomes almost second nature through sustained and substantial effort to become competent in other cultures (Bennett, 1993). This theoretical model and the four dimensions of cross-cultural adaptability provided a framework for analyzing any student changes in intercultural development. In addition, international experiences such as internships abroad are increasingly acknowledged as a form of experiential learning involving reflection and integration. The following theory guided the analysis of this study to understand the intercultural learning process of participants.

**Experiential Learning Theory (ELT)**

David Kolb (1984) defines ELT as a “process whereby knowledge is created through the transformation of experience” (p 41). The theory is based on the tenet that learning is a holistic and experiential process, rather than one that is fixed or based on absolutes (Kolb, 1984). It evolved from the prior works of scholars such as John Dewey, Kurt Lewin, and Jean Piaget, who researched adult developmental learning processes (Miettinen, 2000). ELT is distinguished from traditional educational theories that define learning solely in observational behaviors and outcomes (Watson, 1928; Skinner, 1974). The experiential learning process aligns with Mezirow’s (1991) ten phases of transformative learning based on hands-on activities that, when combined with knowledge, leads to a learning process that goes beyond normative purposes and can foster change in one's
perspectives. These changes occur in various stages. Kolb’s Experiential Learning Cycle (Figure 2.3) depicts the cyclical process, involving four primary phases of learning: 1) concrete experience, 2) reflective observation, 3) abstract conceptualization, and 4) active experimentation.

Figure 2-2. Kolb’s Experiential Learning Cycle

Kolb's (1984) theory provides the proper context to assess students’ intercultural learning from an experience abroad. First, engaging in novel experiences is the first stage in the learning process. It is through the experimentation and connection of experiences where development begins. Second, observing and reflecting on the experience while identifying gaps in one’s understanding is an essential phase of the learning process. Third, is the stage of extracting ideas about what was learned and what could be changed to improve future experiences. This knowledge can guide future actions in the fourth stage of active experimentation. In essence, learning occurs
when past experiences are evaluated and help inform solving future problems or decision-making. Kolb (1984) maintains for individuals to learn from new experiences, there should be a progression through each stage (p. 30).

The experiential learning theory provides a framework for this study in helping to further understand the developmental processes involved in an intercultural experience (Ng, Dyne & Ang, 2009). Kolb (1984) argues individuals who prefer practical, real-world experiences tend to be open to new experiences and function well in unfamiliar or unstructured situations and environments. International exchanges provide students with concrete experiences and unique opportunities for active experimentation outside the classroom. As Bochner (2003) states learning in foreign cultures is an active and adaptive process rather than one that is passive. This theory may inform why some participants in short-term programs abroad improve in cross-cultural abilities and overall effectiveness in another culture, while other students do not.

ELT may also help in identifying which learning phase is missing in international experiences and contribute toward program designs that produce learning. Bennett and Salonen (2007) emphasize three main program objectives to ensure experiential learning: (1) it prepares students to learn about their own culture (pre-program), (2) it facilitates their cultural learning abroad (during the program), and (3) it integrates the learning upon returning home (post-program). This aligns with literature that highlights the need for more comprehensive support before, during, and after the international experience to optimize learning (Jackson, 2008), particularly in programs of shorter durations.

Additional scholars have supported the notion that intentional and well-designed programs can have significant impacts on students’ intercultural growth, especially in programs of fewer than six weeks (Dwyer, 2004; Nguyen, 2017). This is further elaborated by Tarrant’s (2010)
conceptual framework on global citizenship that underscores the relationship between our intercultural experiences and how we engage with the world. “By engaging in an experientially structured study abroad program, a new worldview, predicated on a change in environmentally oriented values, norms, and behaviors, is nurtured and promoted” (p. 447). Drawing on the Developmental Model of Intercultural Sensitivity and four stages of the Experiential Learning Theory provides an appropriate lens to analyze and understand changes in students’ worldviews and behaviors following a short-term internship program.
CHAPTER 3

METHODOLOGY

The objective of this study is to explore the impact of a summer internship abroad program on US students’ intercultural learning and cross-cultural skill development. In this chapter, the research design, researcher positionality, and data collection process are presented. Following is the instrumentation utilized and an analysis of both the quantitative and qualitative data. Finally, the chapter concludes with limitations of the study and a conclusion.

MIXED METHODS DESIGN

For this study, a mixed-methods approach is adopted to explore any changes in cross-cultural skills and how students made sense of their intercultural experience. Due to the nature of this research centered on cross-cultural and multidisciplinary theories, an approach that used multiple data collection methods was selected. In the education abroad arena, the optimal way to assess intercultural learning and competencies is with a mix of quantitative and qualitative measures (Deardorff, 2006; 2011). Notably, in social sciences involving human behavior, employing multiple collection techniques can facilitate a deeper understanding of the phenomenon and lend “different but complementary data on the same topic” (Creswell & Clark, 2007, p. 62; Tashakkori & Teddlie, 2010).

Mixed methods often provide a more complete and balanced representation of findings not captured with traditional research approaches (Johnson, Onwuegbuzie & Turner, 2007; Tashakkori & Teddlie, 2010). As Creswell and Clark (2007) emphasize, each method has its strengths and weaknesses, thus merging numerical and narrative data allows the researcher to facilitate a more comprehensive understanding of the problem. Furthermore, employing multiple methods can enhance the validity and integrity of one’s findings (Bryman, Becker & Sempik, 2008).
Through integrating the methods in evaluative research, Greene, Caracelli & Graham (1989) identify five potential outcomes: 1) triangulation highlights the convergence, corroboration, and correspondence across the different methods; 2) complementarity seeks to enhance, illustrate or clarify results from the other; 3) development aims to discover paradox and contradiction; 4) initiation reframes questions or results from one method type to the other; and 5) expansion seeks to extend the inquiry by using different methods for various inquiry components. For this research study, the quantitative approach helps measure students' development of a particular cross-cultural adaptability skill, while the qualitative data obtained allows for insight into each participants' individual experience and perspectives. Combining the two models provides a broader angle in understanding the intercultural learning that may have occurred due to the education abroad experience.

**CASE STUDY**

In order to explore the impact of the internship program, a case study is utilized in this research. Case study designs are used for an in-depth investigation of a program, group, or event bound by real-life contexts (Creswell & Clark, 2007). Woodside (2010) posits that case study methodology best addresses questions that require a deep understanding or description of a specific phenomenon. Additionally, it tends to be interpretive and “build upon the analysis of single settings and occurrences…and do not automatically presume that different instances can be thrown together to form a homogeneous aggregate (Hamilton, 1980, p. 79). The case study approach is appropriate for this research given the attempt to expand upon theories in the education abroad field and investigate students’ intercultural learning throughout the summer program. Yin (2006) notes that this methodology helps to answer how or why something occurs.
The case examined for this study was the US-Taiwan Partnerships for International Research and Education (PIRE) program, headquartered at East Coast University. As part of the program, interns completed a four-week culture course before leaving the US. The course introduced students to the host culture and native language for a total 12 hours of classroom instruction and pre-departure information, informing students of travel logistics and internship requirements.

Once abroad, participants attended an orientation and participated in cultural immersion activities that were designed to encourage interactions between students. Interns were then integrated into pre-existing research projects at one of the participating labs, under the guidance of faculty members and graduate students. They also had the opportunity to attend seminars from national scientists and governmental organizations hosted by the universities. Students were given free time to explore their local surroundings on weekends, while evenings were spent eating or socializing, although some students opted to focus on their research projects instead. In culmination of the program, the interns presented a final presentation and received feedback from their research advisors.

One of the main objectives of the five-year international exchange program focused on building cross-cultural skills amongst participants. In order to examine the effectiveness of a summer internship abroad program at fostering interculturally competent students, this case study was selected because of the different components of the program. The pre-departure cultural class, immersive activities, and field trips throughout their seven weeks abroad were intended to facilitate regular intercultural contact with the host community, alongside their usual interactions in the labs with peers and work advisors. While there has been research conducted on study abroad programs, there have been few empirical research studies looking at cross-cultural skill development of
students participating in a summer internship abroad program. By further exploring the effects of this case study, there may be greater insights into which program structures optimize students’ learning, particularly in shorter programs.

**INSTRUMENTATION**

In an attempt to provide a comprehensive account of students’ intercultural learning, the study employed multiple methods, including data from 1) pre-and post-program surveys using the Cross-Cultural Adaptability Inventory (CCAI), 2) qualitative data from pre-and post- interviews, and 3) field observations. The following is a description of the research design and instruments utilized in this study.

**Cross-Cultural Adaptability Inventory (CCAI)**

The CCAI was selected in this study because of its extensive use in cultural training and assessing the effectiveness of education abroad programs with university students (Davis & Finney, 2006; Goldstein & Smith, 1999; Kitsantas & Meyers, 2002). The CCAI has been analyzed through a series of factor analyses and method variance conducted by scholars to demonstrate its validity and reliability (Nguyen, Biderman & McNary, 2010). Although education abroad studies commonly include the Intercultural Development Inventory (IDI) to examine intercultural learning, the IDI assesses the intercultural sensitivity and intercultural worldviews of participants compared to the CCAI, which examine the primary attributes related to effectively adapting to cultural situations. The latter more closely supports the evaluation of students building intercultural abilities due to spending time interning in another culture. Thus, the inventory was selected to evaluate a primary objective of the PIRE program – to promote participants’ cross-cultural awareness and abilities.
Kelley and Meyer (1995b) developed the Cross-Cultural Adaptability Inventory (CCAI) to measure intercultural effectiveness. According to the CCAI manual, the test does not predict intercultural success or failure but is designed to examine one's “ability to adapt to living in another culture and to interact effectively with people of other cultures” (Kelley & Meyers, 1995a, p. 1). The 50-item questionnaire includes a 6-point Likert scale, ranging from ‘definitely not true’ to ‘definitely true.’ The inventory measures four dimensions of cross-cultural adaptability: 1) Emotional Resilience (ER), 2) Flexibility/Openness (F/O), 3) Perceptual Acuity (PAC), and 4) Personal Autonomy (PA). Each dimension on the survey consists of a different number of statements and is scored on a unique scale. ER is the largest of the four dimensions and consists of eighteen items, F/O has 15 items, PAC consists of ten items, and PA comprises seven items. Table 3-1 summarizes each of the four skill dimensions and possible scores. Detailed below are the CCAI attributes comprising cross-cultural adaptability.

**Table 3-1. Four Scale Dimensions of the Cross-Cultural Adaptability Inventory**

<table>
<thead>
<tr>
<th>CCAI Scale</th>
<th>Maximum Possible Score</th>
<th>Cross-Cultural Measurement Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Resilience (ER)</td>
<td>18 items 108 points</td>
<td>Assesses the ability to rebound from challenges, cope with stress and the unfamiliar, and maintain a positive attitude</td>
</tr>
<tr>
<td>Flexibility/Openness (F/O)</td>
<td>15 items 90 points</td>
<td>Assesses the ability to be tolerant of differences, non-judgmental, enjoy various ways of thinking and behaving</td>
</tr>
<tr>
<td>Perceptual Acuity (PAC)</td>
<td>10 items 60 points</td>
<td>Assesses the ability to be empathetic and attentive to verbal and nonverbal behaviors and communication dynamics</td>
</tr>
<tr>
<td>Personal Autonomy (PA)</td>
<td>7 items 42 points</td>
<td>Assesses the ability to be self-directed, have a personal system of values and beliefs, respects themselves and others</td>
</tr>
</tbody>
</table>

Emotional Resilience measures an individual’s ability to cope with stress and overcome challenges in new situations, while maintaining a positive outlook. Specifically, it assesses the degree to which an individual can rebound after negative experiences, try new things, and remain self-assured in the face of difficulties. One of the statement items measuring Emotional Resilience is: “I can cope well with whatever difficult feelings I might experience in a new culture.”

Flexibility/ Openness assesses the ability to interact with different kinds of people and relate to various ways of thinking and behaving. It assesses tolerance toward others, flexibility in new situations, and interest in unfamiliar people and ideas. An example statement from the FO dimension is: “I enjoy talking with people who think differently than I think.” Third, Perceptual Acuity (PAC) focuses on interpersonal relations, communication skills, and the accurate interpretation of verbal and non-verbal cues. A sample item is: “In talking with people from other cultures, I pay attention to body language.”

Lastly, Personal Autonomy (PA) measures the degree to which an individual has developed a strong belief system and values that enable one to be self-directed and confident in unfamiliar settings. It also assesses a person’s respect for oneself and others (Kelley & Meyers, 1995b), reflected in statements such as: “I feel free to maintain my personal values, even among those who do not share them.”

**Semi-Structured Interviews**

“We cannot observe how people have organized the world and the meanings they attach to what goes on in the world – we have to ask people those things” (Patton, 1980, p. 196). Individual interviews were selected as the primary qualitative method to capture the voices of respondents and share their unique perspectives and experiences (Merriam, 1988). Data from interviews
provide contextual details and explain possible gaps in quantitative findings (Patton, 2002). Face-to-face interaction and time spent in the natural setting (i.e., school, internship site) with participants were essential aspects of this research to build rapport and create a safe environment for sharing the interviewees’ personal experiences (Rabionet, 2014). In addition to the pre- and post-program survey, a semi-structured interview was conducted to gather additional in-depth information from the 2018 cohort. The 2019 cohort completed both the surveys and a pre- and post-program interview.

The interview process followed Rabionet’s (2014) six stages for designing and conducting semi-structured interviews: 1) selecting the type of interview, 2) establishing ethical guidelines, 3) crafting the interview protocol, 4) conducting and recording the interview, 5) analyzing and summarizing, and 6) reporting the findings. The semi-structured format was chosen to best suit asking about specific cross-cultural topics, but also leaving enough flexibility for students to expand upon questions or share perspectives. Thus, a set of focused but open-ended questions were created to elicit responses around how students made sense of their intercultural experience and to provide a platform for them to reflect (Esterberg, 2002). In the pre-interview, I began with a few general questions to elicit conversation and gradually moved towards the student’s background, prior intercultural experiences, and questions related to the four cross-cultural skills. Post-interview dialogue focused more participants’ experiences abroad and perceptions of the host culture. For example, the following questions were asked in the post-program interview:

- Can you give an example of a situation where you faced a difficulty or challenge while abroad and how you dealt with it?
- Can you recall an incident where you had to try something new (foods, interacting with people who had differing views, etc.) and how it made you feel?
• Looking back, can you think of a situation or incident where you perceived a cultural
difference at play?
• What cultural similarities and/or differences did you notice between the US and Taiwan?

Field Observations

As Patton (2002) notes, contact with participants in the actual setting allows for previously
unseen things to be revealed and acts as an important supplement to interview and survey findings.
Unlike the biases of self-reported surveys or interviews, observations may provide more objective
information about the participants' experiences (Hancock & Algonzzine, 2006). On-site firsthand
observations can allow for a more comprehensive and robust account of students’ experiences.
Guba and Lincoln (1981) stress the importance and value of fieldwork by the investigator,
particularly when studying human behavior:

In situations where motives, attitudes, beliefs and values direct much, if not most of human
activity, the most sophisticated instrumentation we possess is still the careful observer –
the human being who can watch, see, listen… question, probe, and finally analyze and
organize his direct experience (p. 213).

Observational data of students at internship sites and recreational activities were recorded
for approximately two weeks each summer. Field notes included any behaviors or interactions that
could relate to changes in students’ cross-cultural awareness and learning. For example, the
frequency and quality of interactions during cultural group activities, including body language and
communication styles between students and host nationals. Although field notes did not make up
significant portion of the data analysis reflected in the discussion chapter, field notes were
triangulated with survey and interview data to provide a more comprehensive picture of the participants’ cultural behaviors and attitudes in the host country.

**RESEARCH POSITIONALITY**

While researchers attempt to be objective in the collection and interpretation of information, one cannot help but influence the data from personal biases and experiences (James & Vinnicombe, 2002). In particular, as a social science researcher, I am aware of the that I will be observing and interpreting human behavior through the lens of my own cultural and personal biases. As the primary researcher of this case study, it was important to briefly share my relationship with this topic and how I addressed some of these challenges.

As a third-generation Asian American growing up in a multicultural family in the US, I was exposed early to both Western and Eastern cultures. This cross-cultural upbringing influenced the way I viewed the world and led me down a path of exploring diverse cultural environments and coming to see the power they have in shaping us as individuals. I found myself working and studying abroad for three years and became very curious about intercultural development and what made international experiences such transformative learning opportunities. Thus, this research was an attempt to better understand students’ experiences abroad and the intercultural learning processes that occur by examining changes in cross-cultural skills and perceptions prior to and after the program.

In analyzing the findings of this study, I am aware the interview and observational data were interpreted from someone with prior intercultural and travel experience. I am also familiar with some of the cultural adjustment challenges and uncertainties faced by participants being a new culture for the first time. In noting these biases, I attempted to interpret and present the data
in as objective manner as possible by asking for clarifications and explanations and receiving feedback from students on the accuracy of the findings. During the interviews, interns provided views of their own experiences and how they made sense of them, which gives rise to multiple angles of interpretation. All but one of the participants were born and raised in the US. Thus, their meaning-making and perceptions, just as my own interpretations, are the byproduct of individuals socialized in a particular Western culture. This may result in blind-spots in the data analyses, especially if viewed from a different cultural lens.

PARTICIPANTS

All participants of the study were undergraduates from the 2018 or 2019 PIRE summer internship cohorts. Students attended either East Coast University (ECU) or the partnering private research institution. Professors selected applicants based on academic eligibility requirements, including majors in either the Atmospheric Sciences or Social Sciences. There were no age restrictions for applicants. This section describes the information gathered from the demographic questionnaires.

The group consisted primarily of junior and senior-level students. Females made up a slightly more significant portion than males. Five participants were Caucasian, and three students were of either African-American, Asian, and Hispanic descent. Half of the students had previous traveling experience outside of North America to places such as Central America, the Middle East, and Africa for short periods of study abroad or recreation. One student had experience living in an Asian country for a summer, part of an international learning opportunity offered by his school. The other half of students had never traveled outside of North America before the internship program. Almost all of the participants were native English speakers with one student listing Spanish as a first language on the demographic questionnaire.
Although all twelve interns agreed to participate in the study, eight students actually completed the pre and post-program surveys, and post-program interviews. Four interns from the 2019 program also participated in an additional pre-program interview. Table 3-2 outlines the demographic data of the cohort, including: gender, age, class level, ethnicity, prior travel experience outside of the US, and English as a first language.

Table 3-2. Demographic Profiles of Participants (n=8)

<table>
<thead>
<tr>
<th>Student</th>
<th>Gender</th>
<th>Age</th>
<th>Class Level</th>
<th>Ethnicity</th>
<th>Department</th>
<th>Travel Outside US</th>
<th>English as a First Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adam (S1)*</td>
<td>Male</td>
<td>24</td>
<td>Senior</td>
<td>Caucasian-American</td>
<td>Atmospheric Sciences</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ethan (S2)</td>
<td>Male</td>
<td>23</td>
<td>Senior</td>
<td>Caucasian-American</td>
<td>Atmospheric Sciences</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Gemma (S3)</td>
<td>Female</td>
<td>22</td>
<td>Junior</td>
<td>Caucasian-American</td>
<td>Atmospheric Sciences</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Lily (S4)</td>
<td>Female</td>
<td>23</td>
<td>Senior</td>
<td>Asian-American</td>
<td>Emergency Preparedness</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Mary (S5)</td>
<td>Female</td>
<td>22</td>
<td>Junior</td>
<td>Caucasian-American</td>
<td>Atmospheric Sciences</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Naomi (S6)</td>
<td>Female</td>
<td>22</td>
<td>Senior</td>
<td>Hispanic</td>
<td>Atmospheric Sciences</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Owen (S7)</td>
<td>Male</td>
<td>21</td>
<td>Junior</td>
<td>Caucasian-American</td>
<td>Emergency Preparedness</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Vivian (S8)</td>
<td>Female</td>
<td>20</td>
<td>Sophomore</td>
<td>African-American</td>
<td>Sociology</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*S1 – S4: Participants from the 2018 summer program
S5 – S8: Participants from the 2019 summer program
DATA COLLECTION

All participants were asked to fill out a consent form and provide their contact information. The consent form described the purpose and requirements of the research study, possible risks, and confidentiality, including steps to protect their identity. The researcher's contact information was provided to address any questions or concerns. Students had the right to withdraw from the study at any time without reason or consequence to academic standing or program status. The study was conducted with the approval of the Institutional Review Board (IRB).

The demographics questionnaire and pre-program CCAI survey were emailed to each participant before the first culture classes, in the spring of 2018 and 2019. Both the pre and post-surveys were conducted online through a password-protected platform. During the first culture class, I met with students, introduced the project, and addressed any questions or concerns about the study. I also attended the remaining classes to observe the curriculum and build rapport with the interns. The post-program CCAI survey was administered two weeks after students returned to the US.

To gain insights into each student’s intercultural experience, individual interviews were conducted two weeks before (for the 2019 cohort only) and two weeks after the program (for both cohorts). Each interview lasted half an hour on average (ranging from 25 to 40 minutes) and was recorded on a digital device with the participants’ permission to ensure confidentiality. This duration was considered appropriate to give students adequate time to respond to the questions while also respecting their busy schedules. Notes and comments were made immediately after each interview to assist in forming any initial impressions and interpretations useful for data analysis (Esterberg, 2002).
As mentioned earlier, the 2018 summer research included a pre- and post-test survey, and post-program interview, whereas the 2019 study also included a pre-program interview conducted before the cultural course. Due to the pandemic and suspension of education abroad programming, data collection for the 2020 and 2021 cohorts were not possible. All statistical data was codified to maintain anonymity. The names of participants and the summer program were assigned pseudonyms to protect against identification. In addition, the university is referred to as East Coast University or ECU throughout the dissertation and not by its actual name. All survey and interview files have been kept in a secure and passcode protected location per IRB guidelines and are available only to the primary researcher.

DATA ANALYSIS

To paraphrase Hancock and Algozzine (2006), case study methodology allows the researcher to simultaneously collect and examine multiple data sources. In order to fully explore the impact of the internship program on students’ intercultural learning, numerical data from pre/post surveys were collected for comparative analyses with the qualitative information derived from interviews and observational field notes. The numerical data analysis is for heuristic purposes to discover insights and explore the meaning of the data, rather than for generalizing large sample sizes (Kleining & Witt, 2000). The following section describes the analysis conducted for the numerical and narrative data.

The first research questions from this study were: To what extent do students’ cross-cultural skills change over the course of a summer internship abroad program as measured by the Cross-Cultural Adaptability Inventory (CCAI) and interviews? What factors relate to any changes? By examining the quantitative pre and post-program CCAI surveys, participants either showed
positive or negative/no growth in the four intercultural skills. Responses to the CCAI statement items were scored on a six-point scale: 1) definitely not true, 2) not true, 3) tends not to be true, 4) tends to be true, 5) true, and 6) definitely true (see Chapter 3, Table 3-1 for possible maximum scores per CCAI dimension). To generate the pre-mean program scores, the group’s pre-scores were summed and divided by the total number of respondents for each scale (See Chapter 4, Table 4-1). The same applied to post-program mean scores. The overall percentage program change was calculated by taking the mean change divided by the pre-program mean. All eight participants completed the pre, post-program surveys and interviews.

Interview questions were modified to align with the four cross-cultural skill dimensions from the CCAI survey to examine any intercultural development changes. Using a deductive approach, the qualitative data of 12 in-depth interviews (obtained from eight students) were coded into themes guided by the four dimensions of the Cross-Cultural Adaptability Inventory and the Developmental Model of Intercultural Sensitivity framework. Similar to other studies exploring intercultural competence (Maharaja, 2018; Medina-Lopez-Portillo, 2004), the narrative data provided contextual understanding and explained the findings from the survey data to better evaluate any intercultural changes. In qualitative studies, triangulation of data often encompasses (1) direct on-site observation by the researcher, (2) asking participants for explanations and interpretations such as with interviews, and (3) analyses of documents and sites (Creswell, 2003).

The second question of the study asked: How is the intercultural learning evident from the quantitative findings similar to or different from the qualitative findings? What are plausible explanations? This question was explored by triangulating data from the pre and post-program surveys, qualitative interviews, and observations throughout the program to identify any differences between the different types of data. Utilizing the four cross-cultural dimensions from
the CCAI survey and aligning them to students’ interview responses would suggest any similarities or divergences between data findings. For instance, what areas do the quantitative data indicate progress in comparison to the qualitative data and vice versa? Additionally, the findings were corroborated by similar studies that use the CCAI to evaluate cross-cultural learning. Although quantitative results from this case study did not suggest statistical significance due to the small sample size, results were triangulated with the qualitative interviews to highlight gaps between the types of data and improvements in specific cross-cultural dimensions.

The third research question sought to answer: How are students’ perceptions of cultural differences between the US and Taiwan affected by participating in a summer internship abroad program? Using the qualitative pre and post interview responses, the data was analyzed through the lens of the Developmental Model of Intercultural Sensitivity (DMIS) to determine any shifts in students’ beliefs and views about the home or host cultures. Responses were coded into various themes in relation to the six stages of the DMIS. Interview quotations were highlighted in the Discussion chapter to communicate examples of the cultural themes and participants’ perspectives of US and Taiwanese culture.

In addition, descriptions were analyzed using the Framework Method developed by Ritchie & Spencer (1994), with the primary purpose of describing and interpreting students’ intercultural learning experience. Information from the case study was gathered and sorted based on two primary themes: 1) themes that demonstrated growth in intercultural learning based on the four cross-cultural adaptability scales of the CCAI, and 2) themes that reflected changes in cultural perspectives based on the intercultural sensitivity theory (DMIS). Five steps were involved in the Framework Method to analyze the data collected over two summers.
First, familiarization of the material required immersing myself in the data by listening to audio recordings, re-reading transcripts, and field notes until overarching ideas and patterns emerged (Patton, 2002). Second, identification of a thematic framework by connecting key ideas. Third, indexing the data and noting how they correspond to these frameworks. Fourth, illustrating data in figures or tables for better visual understanding. The fifth and final stage of mapping involved interpreting the data with an objective of “defining concepts, mapping range and nature of phenomena, creating typologies, finding associations, providing explanations, and developing strategies” (Ritchie and Spencer, 1994, p. 186). The discussion chapter outlines the significant findings and explanations uncovered from the five-step analytical process. The comprehensiveness of the framework analysis was deemed appropriate for this study as it allowed for simultaneous analysis of multiple data methods throughout the study.

**STUDY LIMITATIONS**

As with any case study, limitations are present within the boundaries of this program. One limitation involved the sample size of 8 students from two summer programs. While all the participants experienced the same program, reducing the likelihood of mixed results from program variation, the sample size did not suggest any statistically significant changes. A larger sample may have strengthened the validity of the results and the relationship between the quantitative and qualitative data. In addition, selection into the program was competitive and likely does not represent the average undergraduate at ECU. Thus, the results of this case study may not be generalizable to other programs or participants of international research experiences.

A second limitation involved the use of a self-reported measure that rely on the self-awareness and honesty of participants. While the CCAI is a validated instrument, the self-reported measure was subject to ‘social desirability bias’ and participants may have misinterpreted
questions. Interview responses may have been affected by similar influences. While it is impossible to eliminate subjectivity completely, the researcher attempted neutrality and objectivity while conducting participant interviews, recording observations, and interpreting the data. The interview protocol was also tested with interns during the pilot year and modified to avoid leading or complicated questions.

A third challenge involved the difficulty of employing a control group for this case study. While comparisons between groups could validate the intercultural effects of internship in other cultures versus home-based programs, finding a comparable group of students in a similar internship would require significant resources and coordination. To address these concerns, the research employed the use of multiple assessments in the form of pre and post-program surveys, individual interviews, and observational field notes to strengthen the results.

Lastly, data from post-program surveys and interviews were collected immediately after students returned to the US, and therefore it is not known how long the intercultural changes lasted. Longitudinal research would provide insight into any long-term effects and to what extent participants applied the skills and knowledge obtained from the international experience.
CHAPTER FOUR

FINDINGS

This mixed methods case study explored the impact of an internship program abroad on participants’ cross-cultural development. Findings from the Cross-Cultural Adaptability Inventory (CCAI) pre and post surveys are presented in the first part of the chapter. Following are the semi-structured interviews and field observations analyzed through the Cross-Cultural Adaptability construct and the Developmental Model of Intercultural Sensitivity. The study was guided by the following research questions:

1) To what extent do students’ cross-cultural skills change over the course of a summer internship abroad program as measured by the Cross-Cultural Adaptability Inventory (CCAI) and interviews? What factors relate to any changes?

2) How is the intercultural learning evident from the quantitative findings similar to or different from the qualitative findings? What are plausible explanations?

3) How are students’ perceptions of cultural differences between the US and Taiwan affected by participating in a summer internship abroad program?

These results are derived from surveys and semi-structured interviews, in addition to observational field notes taken during the internship program. Data collection and analysis conducted throughout the duration of the summer program allowed for an in-depth exploration of participants’ cross-cultural skill development and how the experience abroad impacted their perceptions of cultural diversity.

CCAI Changes in Cross-Cultural Adaptability

In order to assess changes in students’ cross-cultural skills, data from pre and post-program surveys were exported to a spreadsheet and analyzed by group and individual scores. The CCAI
is a 50-item survey using a 6 point Likert scale to measure cross-cultural adaptability based on four scales: Emotional Resilience (ER), Flexibility/Openness (F/O), Perceptual Acuity (PAC), and Personal Autonomy (PA). It is important to note each of the dimensions is scored on a unique scale as they each consist of a different number of item statements. The Emotional Resilience is the largest of the four CCAI dimensions and consists of eighteen statement items, with a maximum number of 108 points. An example statement for Emotional Resilience would be: “I have ways to deal with the stresses of new situations.” Flexibility/Openness consists of fifteen items for 90 points, with statements such as: “I believe I could live a fulfilling life in another culture.” Perceptual Acuity consists of ten items scored from 60 points. An example statement might be: “I try to understand people’s thoughts and feelings when I talk to them.” And lastly, Personal Autonomy comprises seven items with 42 points possible, with an example statement: “I feel confident in my ability to cope with life, no matter where I am.” The total maximum score for all four scales is 300 points. The pre and post program means and standard deviations for each dimension, as well as percentage changes for the group are presented in Table 4-1.

With regards to the group’s total changes on the CCAI scales, students scored higher following the completion of the internship abroad program. Compared to the initial assessment score for the group (M=236.63), scores calculated from the second assessment (M=243.75) indicated positive change overall. This trend in growth is also seen for each of the four dimensions. For the Emotional Resilience scale, students scored slightly higher after the program (M=84.63) compared to initial assessment scores (M=84.38). The Flexibility/Openness scale scored the most change (M=73.63) in comparison to the pre-program assessment (M=69.38). Regarding Perceptual Acuity and Personal Autonomy, students scored higher after the program versus before (M=51.88) and (M=49.63) and (M= 33.63) and (M=33.25), respectively (see Table 4-1).
The most noteworthy changes before and after the program were seen in the Flexibility/Openness and Perceptual Acuity dimensions, with a 6.13 percent and 4.53 percent increase, respectively. Less measurable growth was exhibited in Personal Autonomy (1.13 percent) and Emotional Resilience (0.30 percent), which did not reveal substantively significant score differences from pre to post program. The change in percentages were calculated by taking the mean change over the pre-program mean for each CCAI dimension.

The CCAI findings suggest students perceived themselves to be more open to new experiences and enjoyed different ways of thinking and behaving. On average, they reported higher levels of sensitivity and appreciation for the cultural diversity they encountered during the summer-long period abroad. Slight numerical changes in emotional resilience and personal autonomy scales reflected fewer improvements in students’ abilities to cope with and rebound from challenges and in developing greater independence and confidence.

Table 4-1. Group Changes (Δ) from Pre and Post-Program per CCAI Scale

<table>
<thead>
<tr>
<th>CCAI Dimension</th>
<th>Beginning of program</th>
<th>End of program</th>
<th>Change (Δ) from beginning to end</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Emotional Resilience</td>
<td>84.38</td>
<td>10.04</td>
<td>84.63</td>
</tr>
<tr>
<td>Flexibility/Openness</td>
<td>69.38</td>
<td>6.41</td>
<td>73.63</td>
</tr>
<tr>
<td>Perceptual Acuity</td>
<td>49.63</td>
<td>4.24</td>
<td>51.88</td>
</tr>
<tr>
<td>Personal Autonomy</td>
<td>33.25</td>
<td>1.58</td>
<td>33.63</td>
</tr>
<tr>
<td>Overall</td>
<td>236.63</td>
<td>22.28</td>
<td>243.75</td>
</tr>
</tbody>
</table>
Total changes for each student and cross-cultural scale are displayed in Table 4-2. Individually, there was a slight group increase for Emotional Resilience, in which half the students showed gains and the other half reported either no gains or decreased in score by the end of the program. Almost all participants reported an increase in Flexibility/Openness, with seven individuals improving and one regressing. Six of the eight students made gains in Perceptual Acuity, while one showed no growth and one exhibited a decrease in scores. Lastly, three students reported an increase in Personal Autonomy, while five showed minimal or no change.

Table 4-2. Pre and Post-Program Changes per CCAI Scale (n=8)

<table>
<thead>
<tr>
<th>Student</th>
<th>Emotional Resilience</th>
<th>Flexibility/Openness</th>
<th>Perceptual Acuity</th>
<th>Personal Autonomy</th>
<th>Student Gain +/- Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>0</td>
<td>+5</td>
<td>+4</td>
<td>0</td>
<td>+9</td>
</tr>
<tr>
<td>S2</td>
<td>+3</td>
<td>+9</td>
<td>+3</td>
<td>+1</td>
<td>+16</td>
</tr>
<tr>
<td>S3</td>
<td>-1</td>
<td>+2</td>
<td>+2</td>
<td>0</td>
<td>+3</td>
</tr>
<tr>
<td>S4</td>
<td>-4</td>
<td>+2</td>
<td>-3</td>
<td>-1</td>
<td>-6</td>
</tr>
<tr>
<td>S5</td>
<td>-4</td>
<td>+2</td>
<td>+1</td>
<td>-1</td>
<td>-2</td>
</tr>
<tr>
<td>S6</td>
<td>+6</td>
<td>+5</td>
<td>+5</td>
<td>-1</td>
<td>+15</td>
</tr>
<tr>
<td>S7</td>
<td>+1</td>
<td>+15</td>
<td>+6</td>
<td>+1</td>
<td>+23</td>
</tr>
<tr>
<td>S8</td>
<td>+1</td>
<td>-5</td>
<td>0</td>
<td>+4</td>
<td>0</td>
</tr>
<tr>
<td>Group Total</td>
<td>+2</td>
<td>+35</td>
<td>+18</td>
<td>+3</td>
<td>+58</td>
</tr>
</tbody>
</table>

For individual student changes, Table 4-3 details the pre and post scores and overall change by dimension. S1 consistently scored the highest at the beginning and end of the program for all four dimensions, but exhibited less overall positive change compared to students with lower starting scores. Students 2, 6, and 7 scored the highest overall changes amongst the cohorts. While Student 4, 5 and 8 scored the lowest in each of the four dimensions and had the least amount of cross-cultural changes based on the CCAI scales.
### Table 4-3. Individual Pre and Post-Program Changes per CCAI Scale (n=8)

<table>
<thead>
<tr>
<th>CCAI Scale</th>
<th>Student</th>
<th>Pre</th>
<th>Post</th>
<th>Change</th>
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<tbody>
<tr>
<td><strong>Emotional Resilience</strong></td>
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<tr>
<td>(scale: 108 points possible)</td>
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<tr>
<td>S1 104</td>
<td></td>
<td>104</td>
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<td>0</td>
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<tr>
<td>S2 71</td>
<td></td>
<td>74</td>
<td></td>
<td>+3</td>
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<tr>
<td>S3 92</td>
<td></td>
<td>91</td>
<td></td>
<td>-1</td>
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<tr>
<td>S4 83</td>
<td></td>
<td>79</td>
<td></td>
<td>-4</td>
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<tr>
<td>S5 78</td>
<td></td>
<td>74</td>
<td></td>
<td>-4</td>
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<tr>
<td>S6 85</td>
<td></td>
<td>91</td>
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<td>+6</td>
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<td>S7 84</td>
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<td>S8 78</td>
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<td>79</td>
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<td><strong>Flexibility/Openness</strong></td>
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<td>(scale: 90 points)</td>
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<td>S1 80</td>
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<td>S2 73</td>
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<tr>
<td>S3 73</td>
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<td>S4 59</td>
<td></td>
<td>61</td>
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<td>+2</td>
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<tr>
<td>S5 69</td>
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<td>71</td>
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<tr>
<td>S6 71</td>
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<td>S7 65</td>
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<td>S8 65</td>
<td></td>
<td>60</td>
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<td>-5</td>
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<tr>
<td><strong>Perceptual Acuity</strong></td>
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<td>(scale: 60 points)</td>
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<td>S1 56</td>
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<td>S2 52</td>
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<td>S3 51</td>
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<td>S4 50</td>
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<td>47</td>
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<tr>
<td>S5 50</td>
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<td>51</td>
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<td>S6 49</td>
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<td>S7 41</td>
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<td>S8 48</td>
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<td>48</td>
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<tr>
<td><strong>Personal Autonomy</strong></td>
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<td>(scale: 42 points)</td>
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<tr>
<td>S1 36</td>
<td></td>
<td>36</td>
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<td>0</td>
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<tr>
<td>S2 32</td>
<td></td>
<td>33</td>
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<td>+1</td>
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<tr>
<td>S3 34</td>
<td></td>
<td>34</td>
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<td>0</td>
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<tr>
<td>S4 34</td>
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<td>33</td>
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<td>S5 34</td>
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<td>S6 33</td>
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<td>32</td>
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<td>S7 32</td>
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<tr>
<td>S8 31</td>
<td></td>
<td>35</td>
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<td>+4</td>
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</table>
Figure 4-1 shows the number of participants in each of the four dimensions, based on positive (green) or negative/no changes (red) based on the initial and post assessment scores. The highest number of students with score improvements was in the Flexibility/Openness dimension (7 students), followed by Perceptual Acuity (6 students), Emotional Resilience (4 students), and then Personal Autonomy (3 students). Personal Autonomy was the dimension with the highest number of students with no-growth or negative outcomes. According to the instrument, the group scores demonstrated that students exhibited remaining open to the differences they encountered, increased levels of cultural empathy, and learned to cope with the challenges of living in a foreign environment. However, did not show improvements in developing confidence and independence.

Figure 4-1. Number of Students with Score Changes per CCAI Dimension

While Figure 4-1 shows that the majority of students with negative or no change in Emotional Resilience and Personal Autonomy, the qualitative findings illustrate emotional resilience and personal autonomy skills as the two areas with the most positive changes. This was
demonstrated either through the interpretation of participant interview responses or from direct observations in the field. For instance, one student’s responses of how he handled language barriers at the internship site reflected the emotional resilience statements, ‘I can laugh at myself when I make a cultural faux pas’ and ‘I can function in situations where things are not clear.’ Moreover, although the group had a positive CCAI score, some participants regressed in multiple dimensions after the summer program abroad. Individual readiness and prior intercultural experiences seemed to play important roles in the students’ learning process. The interpretation of possible factors influencing the results are discussed in chapter five.

Students’ Voices on their Intercultural Experience

Development of Cross-Cultural Adaptability Skills

The qualitative findings of this study are presented as individual excerpts from participants and analyzed through the dimensions of the Cross-Cultural Adaptability Inventory. For instance, for the theme Emotional Resilience, I asked specific questions to assess how students found ways to deal with stresses and to cope with the unfamiliarity of living and interning in a foreign culture. Interestingly, students most often articulated examples of emotional resilience and personal autonomy in interview responses, despite students reporting less measurable CCAI changes in those two dimensions. This finding was also supported by my observations of students at their internship sites and during cultural activities and local trips, in which a sense of independence, confidence and dealing with difficulties with a positive attitude were displayed. The comparison between the survey and interview findings are displayed in Table 4-4.
Results suggest students found ways to adjust to the challenges and difficult feelings of navigating life abroad and developed a greater sense of self-confidence and autonomy. Although they became more sensitive toward cultural similarities and differences between US and Taiwanese culture, a few students appeared less aware of the role they played in their interactions and displayed a lack of understanding towards the cultural diversity. The findings also indicate the importance prior cross-cultural experiences had on an intern’s ability to adjust to the culture effectively. This outcome is consistent with other reports that propose an individual’s starting conditions, including previous experiences abroad and the frequency of contact with locals, are
significantly correlated with their levels of intercultural growth (Behrnd & Porzelt, 2012; Heinzmann, et al., 2015).

**Emotional Resilience**

According to the CCAI, the ability to regulate one’s emotions and maintain a positive attitude in the face of obstacles is a primary cross-cultural skill (Kelley & Meyers, 1995a). Although this dimension yielded the least positive change based on the survey results, the qualitative findings suggest that the majority of students developed ways to cope with the various challenges of their cross-cultural experience effectively. Students reported adapting to feelings of uncertainty and culture shock by confiding in their classmates and sharing their struggles. As a result of the internship, a few participants expressed a new belief in themselves and that if given the chance, they would consider living or working in another culture. Students appeared to develop emotional resilience mostly related to stresses from their internship projects and the ambiguities and challenges of living in what felt like a very foreign environment. For half of the interns, the summer abroad program was their first international experience.

Ting-Toomey (1999) suggests emotional resilience is a necessary ability to develop, particularly for first-time travelers, who may experience higher levels of psychological stress. For some students, the biggest challenges were experienced in the first few weeks; however by the end of summer, the feelings of overwhelm subsided. Gemma, a first-time traveler, had a negative change in Emotional Resilience. In her pre-interview, she spoke of, “expecting complete culture shock.” However, in her post-program interview, she expressed her enthusiasm for the internship abroad program and ended up “loving it.” Despite a few setbacks with her research project, she also stressed how becoming self-reliant in the lab had a positive impact on her being able to retain
and utilize information. Her initial discomfort at the beginning of the internship eased as the program progressed and slowly felt more comfortable in her surroundings.

Ethan, who had never traveled outside the US before, recalls how establishing connections once abroad helped him adjust quickly:

I didn't find it too stressful. Of course, there were certain problems like ordering food, but I managed. I would say the beginning was difficult, just because you don’t have the creature comforts from home…maybe a bit of culture shock and overwhelm. Hanging around students and getting to know people I worked with in the program helped me feel more at home…I guess it’s similar to any situation living abroad and just feeling a bit like isolated in the beginning, but as time goes on you feel more acclimated to your surroundings.

Owen, on the other hand, displayed a rather quick adjustment to the host culture, engaging with locals and immersing himself upon arrival. Although he mentioned being worried about logistics before leaving, he believed in his ability to cope with the unfamiliar, stating in the pre-interview, “I’m definitely up for the challenge” and “I’m going in head first.” He attributed his enthusiasm to his upbringing in a “melting pot,” particularly of Asian cultures. When asked about his experience upon returning, he said living in another country before in addition to this program, now solidified his interest working abroad. In addition, he posits that learning the native tongue in high school was useful in building connections and overcoming the language barrier that he noticed his classmates struggled with:

I think my Mandarin Chinese skills and them [local interns] wanting to practice English was a driving factor in our communication. It definitely helped because I wasn’t afraid to make mistakes. I would say things in Chinese and of course get it wrong. But by the end of the program, we would just laugh about it. In some ways, Google translate brought us together…we would put a word in and both learn something new.
Owen used the language barrier and humor as a means of connecting with others in a positive way, rather than as deterrents in communicating with his non-native English speaking peers.

Similarly, Naomi, an international student attending ECU, exhibited a capacity to adjust to the unfamiliarity of a new environment, as reflected by her behaviors in the host culture. She immediately immersed herself in cultural activities and established relationships with her peers and locals. On the survey, she reported the highest increase in the ER dimension from the cohort. Having interned abroad before and moving to the US a year ago, she was familiar with the homesickness and challenges of living in foreign cultures:

It's been a year since I moved from my home country. I've done a few internships in other countries for three months at a time. So that was probably when I started to get used to being away from home. At first, it’s difficult to go to another place, like the US, and have a strong accent. I struggled a lot to communicate. But it gets easier with time. I learned how to express myself better…this program helped me to realize that there's a lot I haven't seen and that I want to go to other places in the world.

In contrast, other interns explained how differences in language and daily norms led to feeling isolated and further challenges in adapting to the environment. Although Mary had prior experiences in college with international students, she admitted she felt “ignorant” of other cultures. She expressed her hesitation toward embarking on her first experience in another country with the language barrier being her biggest concern:

I am the kind of person who lets anticipation build up in their head. I know it’s going to be fun once I'm there… but the uncertainty of not being able to get where I need to go or buy something I need and not be able to communicate that, that freaks me out.

Her CCAI results indicated a negative score in ER, the lowest among her classmates. Observational notes from the field show Mary’s uncertainty shaped her experience throughout
program. By the end of the summer, she reported how she struggled to adjust to the new surroundings:

The hardest thing to adjust to was the heat. It was hard to feel motivated to leave my dorm room and it put me in a grumpy mood. I was hesitant to go eat at more places because I didn't know how to ask for what I wanted. If I asked in English they would give me the wrong thing…so I stuck to the same four places to eat. The guys went to the night markets a lot, but I wasn’t very comfortable not being able to speak the language.

Despite also having a negative score in this dimension, Lily learned to cope with challenges throughout the program by appreciating the support offered by others. “I made pretty good friends with them [her US classmates] because we confided in each other when we had our complaints. I'm not sure what I would've done if they weren’t there.” She mentioned the many dinners where they exchanged stories and solutions over the course of the seven weeks, thus becoming “like my family.” Similar to prior education abroad reports, students who shared similar struggles were able to reframe their experiences and form a unique ‘kinship’ during their time abroad (Dorsett, Lamar & Clark, 2019; Younes & Asay, 2003).

Being exposed to a foreign cultural environment, the majority of students learned to develop coping strategies while maintaining a positive mindset. Challenges abroad may introduce additional psychological stresses, yet also act as important opportunities for individuals to foster intercultural development (Kim, 2001). Students who adjusted more quickly most often mentioned a collaborative approach to overcome uncomfortable feelings and ambiguity. This allowed students to recognize that others experienced similar intercultural challenges and to process events that may have been more difficult to do on their own, especially during a fast-paced program.

Alexander et al. (2021) suggest that through sharing their observations and feelings, students may feel less alone in their experiences abroad and benefit from reciprocal peer learning where they can both provide and receive mentoring from one another. In assessing the
development of emotional resilience, the majority of participants’ responses and behaviors reflected an increased ability to deal with the stresses of the new environment, regardless of their unique situations.

**Flexibility and Openness**

Remaining open to and enjoying different ways of thinking and behaving is often considered a key skill area for students working in multicultural environments (Lisak & Erez, 2015). Although flexibility was reported as the dimension with the most positive quantitative change for the group, findings from the qualitative data point out that not all students demonstrated an appreciation for the cultural differences they encountered. However, many participants shared experiences of trying new things and a willingness to interact with host nationals. The ‘friendliness’ and ‘welcoming’ spirit of the people stood out in the intern's responses, as well as the ‘interesting’ and ‘delicious,’ but ‘weird’ food items.

Ethan, who had the second highest increase among his classmates in Flexibility/ Openness, demonstrated a willingness to try new foods despite his initial hesitation, commenting, “even though I was afraid to try some foods I thought were strange, I did my best to try them before judging them as good or bad.” He described the impact of a cultural activity that challenged him to try a variety of local delicacies:

Participating in the eating contest helped me get outside my comfort zone and try things I definitely wouldn’t have tried on my own, like pig’s blood. It wasn’t the best. But after that, I made more of an effort to eat the local foods instead of like fast-food or Western restaurants. I’m glad because I would’ve missed out on a lot of good stuff.

In the pre-departure culture class, the students were offered the chance to try some native foods from the host culture. Naomi found them to be tasty but still had doubts once abroad, noting
in her pre-interview, “it's going to be hard for me because I don't eat a lot of different foods….so trying new things will be hard. I'm kind of scared because of that.” She was surprised, however, to discover her liking for the cuisine and the commonalities between hers and the host culture, particularly through celebrating food:

When I got there, it didn't even feel like I was in another part of the world. Obviously, there are differences, but I could feel the humbleness of the people… and food is such an important part of their culture. I really felt like I was at home. In my culture, food is everything! At every party and every reunion, it's the main thing…even though we were miles and miles apart, we still share these similarities.

Moreover, Naomi made deeper connections with her own culture, particularly around religion and language. For her, learning the host culture’s language was fun but difficult, as it differed a lot from English and her mother tongue. Exposure to religious differences abroad stimulated a deepened understanding of her own views on religion. Prior to the program, she explained religion as a "set of rules to be followed.” Upon finishing the program, she expresses religion in Taiwan as one that instead comprises a number of religions that carry guidelines:

I got to experience more of their beliefs and customs. It was impressive to see how there can be more than one deity or god. That was something very different from home because we only have one main religion and that's Christianity. Everything is so structured and based in exact beliefs and you have to believe in only one god. I felt like in Taiwan, they don’t judge you if you don't believe in something. Back home, if you're not Christian, it's kind of weird. So I really like how they practice religion in Taiwan, it’s more flexible compared to what I’m used to.

Owen, who had the highest increase in Flexibility/Openness, described his multicultural background, which he posits allowed him to adjust to diverse environments more easily and value other cultures. He remained open to new experiences, such as conversing with locals. “When this older man came up to me at the bus-stop, instead of avoiding him like I might’ve in the States, I
actually spent half an hour having a conversation with him…I learned so much about him and his culture.” His response reflects the Flexibility/Openness questionnaire statement related to an openness to engaging with individuals from other cultural backgrounds, “When I meet people who are different from me, I am interested in learning more about them.” Owen also recognized the popularity and value of convenience stores and night markets in bringing people together. “They’re such an integral part of their culture. I saw how happy people were doing something that’s not like sophisticated or fancy, but in a sense, raw. I really appreciated that.”

These observations align with studies that report international service-learning opportunities yield increased levels of participants’ open-mindedness and flexibility (Jones & Abes, 2004). However, further analysis of interview responses after the internship suggests some students became less open to exploring the diversity in their cross-cultural encounters. Vivian, for instance, reported distancing herself from exchanges with locals, noting differences that made her feel uncomfortable, such as people picking their noses or not saying “bless you” after sneezing. There was also a lot of staring, “…people in the States do that, but it was a lot more there.” Mary also noted multiple cultural differences that she did not like or understand.

In reflecting on cultural comparisons, reports show that students can sometimes become more nationalistic as a result of their time abroad, particularly those from programs in non-English speaking countries where the differences are greater between home and host cultures (Maharaja, 2018) or in shorter-term programs in which students have fewer opportunities to familiarize themselves with the culture (Medina-Lopez-Portillo, 2004).
**Perceptual Acuity**

The ability to perceive verbal and non-verbal cues without judgment is foundational for understanding people who are different from oneself. The analysis of qualitative findings demonstrates a motivation from students to place themselves in another’s shoes and explore the cultural differences they encountered. Responses suggest students were learning to perceive and interpret patterns through the lens of the host culture. As Owen recalled while greeting locals:

I am used to giving handshakes when meeting people in the US, especially in more formal settings. But when I tried to with my professors and interns, some seemed surprised. So I introduced myself by making eye contact and smiling instead, and that seemed to work better.

Naomi noticed differences in communication styles. “They're not as loud as Americans. They're calmer and more reserved...that was another thing that I was like ‘this is different.’ Maybe if I were raised in their culture I would communicate in a similar way.” Additionally, she exhibits a willingness to learn more about the locals and engage in new activities and events. Both Naomi and Owen were attentive to contrasts in the way people communicated and behaved, displaying an awareness of non-verbal cues and motivation to adjust their behaviors accordingly.

Similarly, Ethan demonstrated a willingness to explore and interpret the differences he encountered through building relations with his local classmates. Through observations and field notes, he interacted more frequently and spent much of his time at events and informal activities. Despite not knowing Mandarin, he presented himself in a non-judgmental way and paid attention to social cues while communicating with others.

However, indicators pointed towards some students’ struggle to interpret cultural behaviors or perceive the role they played in communications with host nationals. Despite her gains in perceptual acuity, Mary’s responses reflect less ability to understand how the unique context could
offer an alternative explanation for unfamiliar behaviors. For instance, she expressed uneasiness with the amount of support received from the professors while abroad, stating, “Getting that amount of attention from professors, always making sure we’re okay on a daily basis, wasn’t what we were expecting from strangers. We were very confused and felt like we didn’t deserve it.” This contact challenged the students’ ideas and expectations upon arriving to the host culture; moreover, her use of the word “strangers” indicates a level of doubt and is unable to view the professors’ actions through the lens of the cultural context, perhaps denoting an invitation to their community.

In sharing how locals were uncomfortable or hesitant to speak English, many students attributed this unwillingness as a perceived barrier to effective communication and a primary reason for not building relationships. As Mary expressed, “I think the biggest challenge is they’re [the locals] very very shy speaking English.” When conversing in English with fellow interns, Adam stated, “these people tried, but some didn’t have the courage to use their English or they couldn’t, so they just didn’t.” The use of the words ‘these people’ could indicate a sort of distance placed between himself and those who are culturally different and might not speak the same language.

Despite the group’s overall positive CCAI change in perceptual acuity and students reporting differences in culture, Medina-Lopez-Portillo (2004) cautions that students of summer or semester long programs are just beginning “to see the proverbial tip of the cultural iceberg” and require more time in a culture before they can “fathom the complexities of the target culture below the water line” (p. 195-196). Consequently, the cohorts identified relevant distinctions about variations they experienced but were less able to perceive the underlying reasons and values behind why such differences existed.
**Personal Autonomy**

The majority of students expressed taking more initiative and developing greater independence as a result of their internship experience. Ting-Toomey (1999) referred to this as having an internal locus of control and being self-directed. Others found the program had a significant impact on their future academic and career-related goals. The new settings challenged students to step outside their comfort zone and foster a degree of independence throughout the program. Upon arriving, Owen described immersing himself in the culture as much as possible:

The trip gave me a new sense of independence. Unlike my last trip, I didn’t wait for anyone to go out with. I enjoyed not following any certain plan when I had free time and to go with the flow…I took the metro on my own often. I got to see new sights and get off the beaten path.

Although independence entails more than doing as one pleases, his intention to utilize his time independently demonstrates a certain level of self-direction. Other participants connected their independence to successfully purchasing bus tickets, ordering food, asking strangers for help, or other aspects of navigating life abroad.

Despite reporting a negative score on the survey, Lily explored new leadership roles and relationships, guiding her classmates around the city and stepping in when help was needed. She communicated regularly with her peers and professors at the internship site, raising questions when necessary. “I learned to be proactive instead of reactive…that helped me learn a lot about myself.” Trying on new roles and facing challenges with her classmates seemed to impact her self-confidence and competence, as she commented, “I didn’t realize the difference until I came back home. I was independent before, but going abroad to Taiwan was a different story…I feel much more capable in doing things I didn’t think I could.”
Similarly, students like Gemma noticed her self-reliance grow, particularly in the lab, solving problems and making decisions independently instead of relying heavily on her professors for solutions. In addition to developing greater levels of independence, scholars suggest service-learning based experiences, such as overseas internships, may positively influence participants’ post-graduation plans (Dwyer & Peters, 2004; Matherly, et al, 2015). These findings are supported by the interns’ newfound confidence and the positive impact on their academic and professional paths. Adam noted that before the trip he was less certain of his direction after completing college. However, he realized his readiness to move forward upon returning. “I have much more confidence in myself to succeed in this major now and further motivation to be a physical scientist.” Although he preferred to stay in the US for his career, he admitted, “the experience bolstered my interest to explore the rest of the world and maybe not live in the US my whole life.”

Lily also recognized new opportunities to explore post college, noting, “I am definitely thinking of a career or job abroad now. The experience in Taiwan and the connections I made with the professors helped me see that it’s possible and rewarding to work in another country.” Comparatively, Owen who entered the program already intending to, “see what it's like living in a different country for an extended period of time” felt the internship experience validated the next steps on his emerging professional path. While multiple factors beyond the international experience may have influenced his decision, he commented, “this program and the State Department internship have solidified my interest in working in the foreign service…I plan to take the test this year in hopes of becoming an American working abroad.”

In brief, the qualitative indicators show the internship experience abroad contributed substantially towards students’ development of coping strategies, a sense of openness to cultural differences, as well as a new sense of independence and belief in themselves. Students began to
perceive cultural differences and modify their behaviors in response to their intercultural encounters in the host country. Also expressed were the willingness and enthusiasm to partake in future academic and professional opportunities in different countries as a result of the international internship. Participants’ perspectives and observations on the cultural diversity encountered are discussed in the following section.

**Students’ Perceptions of Cultural Diversity**

The qualitative results in this section were analyzed using an interpretive approach within Bennett’s Model of Intercultural Sensitivity (1993) and is focused on how students made sense of their international experience. The model is not one that assesses knowledge, attitude or skills. Sometimes individuals can collect knowledge about a certain culture, but may not truly experience it until a deeper understanding is developed from the ability to perceive “culture as a context” (Bennett, 2004, p. 68). To see one’s culture as just one of many equal but unique cultures in the world is essential to developing global competencies. Thus, the data presented explores how interns’ perceptions of cultural differences were affected by participating in the program, including the influence of their own contextual cultural backgrounds. Most students showed a heightened sensitivity and acceptance of the various ways the host culture differed from American culture. For other students, though knowledge growth was displayed in their responses, some exhibited difficulties in adjusting and resistance toward the cultural diversity once abroad.

**Critique and Distance from Cultural Differences**

Mary shared how her “sheltered” upbringing up in a homogenous community in the US made her apprehensive towards the internship abroad. She enjoyed growing up in a predominantly
Caucasian environment, however highlighted her awareness that, “everyone lives their life a
different way.” There was a sense of guilt in her self-examination in which she admitted to feeling
“bad for being ignorant.” Although she had often traveled within the US, this was her first time
living abroad and was, “waiting for the culture shock to hit.” Mary’s intercultural encounters with
the host culture prior to the trip entailed living with her college roommate from China, which she
admitted exposed her to many new things about Asian culture and mannerisms.

In describing her roommate’s style of communication, she recalled how she was, “so so so
blunt and would say exactly what she’s thinking. It was surprising to me that some of the things
she would say are normal, whereas here in America we're very guarded.” She described how the
style is less direct in the US and that, “we like to beat around the bush when we say things…I think
in talking with her though, it’s helped a lot to understand how this other group lives.”

Though she expressed a greater acknowledgment of differences and admitted, “everyone’s
mannerisms are different,” there is a more surface-level understanding of cultural differences that
lead to stereotypical perceptions. In the DMIS Defense stage, a polarized ‘us versus them’
mentality is at times identified in Mary’s responses to describe her interactions. Such views are
evident in reflections on her prior experiences with students from different Asian cultures:

I think the Chinese girls definitely have a way of seeing themselves and how they want to
be perceived. In America, there are more people who just don't care about their appearance
I guess. It's not as strong as in Korea, my other roommate is obsessed with Korean culture
and they're really really into appearance. It was interesting walking around campus with
my roommates….they can look at different groups of kids and say ‘oh look those are the
Chinese kids, those are the Korean kids’ just by what they wear. Whereas, I still can’t tell
the difference.

After Mary’s return to the US, her observation of the host culture’s communication
remained unchanged. “I think the bluntness thing still applies. Sometimes it's more obvious
depending on the person and how much English they know.” While she is able to make distinctions in the way people converse in the host culture, Bennett (2004) notes how the inability to see a communication style as a byproduct of being socialized in a particular culture leads to the assumption that everyone would or could use the same style. This idea that individuals may simply be using a culturally different pattern of communication is thus overlooked.

Mary reflected on the value of education in the host culture and how students perceive school. “In the US, a huge part of college is partying and drinking. Most of the people we talked to don’t do any of that…they’re there to study, and not to have a social life.” In addition, she offered several critiques on eco-friendly initiatives and social norms she observed while abroad. “I was blown away by the eco-friendly initiatives, the US could learn a lot. But people there use so much plastic and throw trash on the streets, so I'm not sure if it's really working.” Her interview responses include an ability to reflect upon and challenge cultural customs, an important skill for intercultural growth (Dorsett, Larmar & Clark, 2019). However, her perception remains more of a critical analysis of the host culture, which is connected with the ethnocentric phases of the DMIS model (Bennett, 2004).

For Vivian, the intercultural encounters while abroad caused frustration and a sense of conflict. She noted in her pre-departure interview her concerns including, “being looked under a microscope as a person of color.” Although she did not have many negative experiences with people treating her differently because of her ethnicity in the US, she acknowledged her apprehension of what it may feel like in another country. Her prior international experiences were each fewer than two weeks, but remained eager to travel and “learn more about other cultures and getting more of the local feel.”
Once abroad, she became more aware of the contrasts between herself and the host nationals and came to interpret some interactions as unpleasant. For example, Vivian recalled, “people would stare at my hair because they would be amazed by it. But it didn’t really bother me.” When asked for possible explanations for their behavior, she responded, “because their hair is different than mine, and theirs can't do what my hair can.” She expressed the need to remove herself from the uncomfortable feelings caused by such realizations by spending less time engaging with locals. These behaviors are supported by the DMIS Model’s Defense phase where more distance is created between the individual and culture.

Despite the Mary and Vivian’s initial interest and curiosity to learn about Taiwan and the culture in the pre-interviews, post-program responses and observational results reflected a physical and psychological space created in an attempt to distance themselves from the differences. The tendency to avoid or confront such cultural differences through distancing oneself does not allow for the cultural realities to be acknowledged (Bennett, 2004). Both students mostly stayed at the dormitory and internship sites and limited themselves to situations that required minimal interactions with locals.

Similarly, Adam, who participated in the return-interview only, recalled his overall experience as stress-free, yet exhibited some resistance towards experiencing the culture itself. “I had no problems while I was there. I was expecting to not know Mandarin because I don’t know how to speak the language and I expected it to be different.” In describing the differences between the two cultures, he noted, “They’re similar. People are similar around the world, it [the host culture] was nothing surprising…Taipei is very similar to NYC, and the basic systems are the same.”
Thus, a few of the interns who participated in the program exhibited characteristics from the DMIS ethnocentric worldviews, in particular, the Defense and Minimization stages, where an individual dwells in ‘us versus them’ thinking or creates distance between themselves and cultural differences. In an attempt to acknowledge cultural variations between the host and American culture, for instance, one student stated, “our cultures overlap…I didn’t notice much difference between the two.” Here, distinctions are overlooked, which dismisses the need for an individual to recognize or adapt to cultural patterns. Hammer (2008) posits that emphasizing cultural commonalities may in fact, “mask a deeper awareness of ‘privilege’ and may lead to an overestimation of one’s own cultural sensitivity or competence” (p. 250). Conversely, other students in the program tended to demonstrate increased awareness and acceptance of their personal and cultural identities as a result of their time abroad.

**Acceptance and Appreciation for Cultural Differences**

One aspect of the Developmental Model of Intercultural Sensitivity (DMIS) is developing an awareness and appreciation for the contrasts between cultural contexts. “As one’s experience of cultural difference becomes more complex and sophisticated, one’s potential competence in intercultural relations increases” (Hammer, Bennett & Wiseman, 2003, p 423). Thus, moving towards effective behaviors in relating to cultural differences requires viewing the world through cultural frameworks beyond one’s own. Students often described the cultural variations ranging from communication styles, social norms, and aspects of daily life.

For Owen, coming from a multicultural background and being exposed to a number of cross-cultural experiences and customs, particularly from Asia, played a significant role in his desire to immerse himself in the host culture:
One of the things that had a profound effect on my upbringing and my desire to be more involved with the Asian culture is when I was in the 6th grade, my family would go almost every weekend to Chinatown in NYC and eat at the restaurants and go shopping…That along with studying Chinese in high school definitely made me more interested in Chinese and Asian cultures more than any other culture.

After the program, Owen describes the significance of night markets and the frequency of eating in the host culture. Despite the casualness of the events, for Owen, he found them to be quite meaningful. His comparison in how people went about their daily lives and the normalcy of informal gatherings reflected an awareness and appreciation for the host culture. The immersive experience made him realize rules he took for granted in the US:

A lot of aspects of life seem to not follow the same safety standards I was used to. I wouldn’t say they don’t follow rules. They are very strict with some things like the metro subway… for instance, I was nearly run over a few times by motorbikes. Seeing a family of four on a motorbike or people driving around with propane tanks on the back. I was like ‘what are you doing?’ I still rode bikes around the city, but cringed that no one was wearing helmets. The focus on safety was something I appreciated a lot more when I got back home.

Owen displays an acknowledgement of formalities and safety rules between American and Taiwanese cultures with the acceptance that one is not better than the other, but simply is different. In being exposed to new and uncomfortable situations abroad, he developed a better appreciation for some aspects of American culture. Though his responses are his own analysis of the way things are in the host culture, it shows an attempt to relate to and experience it from more than just his own cultural perspective – a key component in the Acceptance phase. Although he may question or not fully understand the values behind the differences he experienced, a sense of respect and curiosity is present.

For some of the students, the internship experience provided an opportunity to enhance their understanding for the culture and its people. Placing themselves in the shoes of host nationals
was one way. For instance, Naomi’s cognizance of struggling as a non-native English speaker led her to empathize with her peers:

I felt like I could relate to them [the locals]. I know how much they struggle to say everything right. I always felt like an outcast at my internships in the US because I couldn’t speak English fluently. But there, we never talked about our accents or brought up how my English wasn’t good. And that felt nice. That I think was the main reason why I clicked with them so fast…I just tried to understand what they were going through.

She mentioned how women dress more conservatively, however, expressed her understanding that cultures are a mix of individuals making it difficult to generalize. “You’re going to find so many different people and cultures anywhere that it's so hard to say Americans or Taiwanese act like this or that way.” Another primary aspect of the Acceptance phase is the strong acknowledgement of cultural differences. Though students may not agree with or understand the reason for such differences, exposure can challenge their established opinions leading to evolved ideas and attitudes. Before the trip Naomi experienced incongruence between her own perspectives about religion, yet remained accepting and respectful:

At the beginning when I took the culture class I was like, “but why do they have religions, if they aren't required to follow them?” It was confusing at first, since I’ve always known religion to be a set of rules. But after spending time there, I’ve come to see that it’s viewed differently and that’s okay…I really like the acceptance and the spirituality of religions there. Even if it’s different from how my culture views religion, I respect their views much more since spending time there.

The recognition that practicing religion in various ways is both necessary and positive is an important step away from the Minimization phase whereby an individual tends to “bury difference under the weight of cultural similarities” (Bennett, 1993, p. 41). The qualitative findings show a deepened awareness of identity and culture as she re-evaluated her prior views about religion. Respecting others’ beliefs and personal values, regardless of one’s own agreement or
liking of them, is characteristic of someone with intercultural competence. From observational field notes, Naomi actively sought out cultural activities, organized informal hangouts, and spent ample time with local students outside of the internship.

Ethan came away with a curiosity in not only pursuing work abroad, but also in exploring other Asian cultures. “This trip sparked an interest in exploring Asia more. I’m definitely motivated to explore that part of the globe and similar cultures.” Based on the qualitative findings, both Ethan and Naomi reflected growth in the Acceptance and movement toward the Adaptation phases of the DMIS. They recalled maintaining friendships once back in the US and adopted new behaviors, such as using chopsticks, drinking tea, and signing up for courses to learn about similar cultures. The students were prompted to draw parallels between cultures and realize how such things as food brought people together, despite other differences. By staying open to seeing the world through another cultural platform, they developed a greater awareness of the many similarities and differences.

Similarly, Gemma, whose first time it was abroad, commented on the transformative impact the trip had on her and her future plans. “I feel like I could go and travel to a country I’ve never been to on my own, which I never thought possible before this internship.” Gemma reflected on her tolerance of differences she experienced, mostly related to trying unfamiliar foods:

I felt I was open before the program, but I feel more willing to try new things like foods I don’t know. Before I was a bit hesitant, just because it was my first time going abroad and I didn’t know what to expect…but as time went on I enjoyed it so much.

Although Gemma admitted her fears of culture shock before embarking on the international experience, within a couple weeks she expressed her enthusiasm and welcomed the more challenging aspects of her experience. She exhibits a sense of openness, which characterizes the
stage of Acceptance, where students are able to acknowledge cultural differences with a sense of respect and curiosity (Bennett, 2004).

About half the students were at the stages of Defense or Minimization on the DMIS and in which differences were acknowledged but reflected a more superficial understanding of the culture and resistance or neutralization of cultural dynamics. The other students moved towards and within the Acceptance stage, noticing and adjusting to verbal and non-verbal behaviors and experiencing the world through another cultural framework. They also touched the surface in understanding the myriad ways in which culture influences our behaviors and interactions. The following chapter details the interpretations and implications of these findings.

Summary

Both the quantitative and qualitative data suggest that participants learned to cope with the challenges of living in another culture, became more open to new experiences, and developed higher levels of self-confidence and awareness of cultural differences during the internship abroad program. Despite each instrument emphasizing growth in different cross-cultural skills, the findings overall show students made improvements in each of the competencies and their levels of cultural awareness.

Interestingly, students most often articulated examples of emotional resilience and personal autonomy, while the surveys indicated the fewest gains in these two areas. Students reported adapting to challenges by confiding in their classmates and sharing their struggles. While not all participants were flexible in their thinking, many shared trying different foods, exploring new places and displayed a willingness to engage with the culture. Less noticeable were participants’ cultural empathy and being aware of the role they played in their interactions and communication.
with the host nationals. Another important finding was the positive impact the internship program had on students’ self-confidence and future academic and career paths.

However, the qualitative data indicate some students experienced higher levels of culture shock and tended to withdraw from their experience by creating physical or psychological distance from the culture. This could be due to the lack of tailored support, particularly for students who had never traveled abroad before. Possible factors impacting students’ adjustment and development are further discussed in Chapter 5.
CHAPTER FIVE
DISCUSSION & CONCLUSION

The previous chapter outlined the results on students’ cross-cultural adaptability skills and understanding of cultural differences following a summer internship abroad program. This final chapter consists of a summary of the primary findings and implications. The sections included are: 1) synthesis of major findings, 2) research questions and implications, 3) suggestions and future research, and 4) conclusion.

SYNTHESIS OF MAJOR FINDINGS

Although much of the prior literature in education abroad examines semester or year-long study abroad programs, this case study explored changes in the intercultural development of students participating in an 8-week internship abroad program. The quantitative and qualitative findings suggest the experience abroad had a positive impact on cross-cultural adaptability and intercultural sensitivity. It also had a significant influence on students’ decisions about future academic and career paths. These findings corroborate previous studies on short-term exchange programs and the variety of beneficial outcomes including increased open-mindedness, global awareness, greater understanding, and cultural appreciation (Anderson, Lawton, Rexeisen & Hubbard, 2006; Black & Duhon, 2006; Czerwionka, 2015; Gaia, 2015; Matherly, Phillips & Chapman, 2015; Nguyen, 2017; Schenker, 2019; Williams, 2005).

However, not all interns made cross-cultural improvements. A few students displayed ethnocentrism as they viewed the host culture mostly through the lens of their own cultural norms and values, leading to a “us versus them” mindset (Bennett, 2004). Short-term program participants have been shown to regress in their learning or become more nationalistic due to
factors related to inadequate support or limited time to experience and participate in the culture (Vande Berg, 2009; Medina-Lopez-Portillo, 2004).

Additionally, the results indicate the variation in resultant learning from the summer internship abroad experience and the central role of students’ starting conditions in development. The analysis of data also highlighted the importance of well-planned program structures and interventions to achieve positive intercultural outcomes in shorter programs (Dwyer, 2004; Jackson, 2008; Nguyen, 2017). Lastly, the findings of this study underscore the challenges of examining intercultural development. Reconciling outcomes between the qualitative results and survey data led to interesting findings. Interview responses and field notes suggested learning in the areas of emotional resilience and personal autonomy – the two dimensions with the least change reported on the CCAI surveys.

**RESEARCH QUESTION I**

*To what extent do students’ cross-cultural skills change over the course of a summer internship abroad program as measured by the Cross-Cultural Adaptability Inventory (CCAI) and interviews? What factors relate to any changes?*

The CCAI posttest data showed the interns as a group improved in each of the four cross-cultural skills of emotional resilience, flexibility and openness, perceptual acuity, and personal autonomy. In other words, students seemed to become more comfortable with ambiguity, open to trying new experiences, aware of cultural differences, and developed greater levels of self-confidence after completing a short-term internship abroad program. The two areas with the least noticeable changes were in the areas of emotional resilience and personal autonomy (0.30% and 1.13%, respectively). There are two possible explanations for these findings. First, the most
significant changes may have happened in areas where the biggest gains were possible. If students started off with already high levels of emotional resilience and personal autonomy at the beginning of the program, the short-term internship may not have had as much of a noticeable effect in these cross-cultural scales. In general, students who participate in international exchanges tend to possess higher levels of intercultural development compared to non-participant students (Heinzmann et al, 2015). In addition, the internship was an extremely selective and competitive program, and the PIRE students likely did not represent the average student population at ECU. Niendorf & Alberts (2017) also note the effects of specific student characteristics, such as degree majors, which may impact learning outcomes. Overall, development still occurred across each of the four cross-cultural skills for the cohort, but areas where students were relatively strong may have showed the least impact.

Second, the lack of change in emotional resilience may be due to the nature and design of the program. As mentioned previously, the interns were required to participate in a month-long culture course introducing them to trip and culture-specific knowledge. The 12 hours of pre-departure classes did not, however, include opportunities to reflect or discuss what psychological challenges they might encounter while abroad. In a study of eight short-term education abroad programs, Nguyen (2017) similarly found emotional resilience had the least significant change out of six intercultural competencies. The author argues the heavy focus on cultural and linguistic knowledge, instead of activities that build students’ emotional and mental strength, likely influenced the low emotional resilience scores.

Review of the CCAI description of emotional resilience suggests that the ability to rebound from challenges and cope with unfamiliar situations would be impacted by eight weeks of conducting research in a country with different values and ways of living. As being able to manage
emotional stress is an essential aspect of intercultural development (Kelley and Meyers, 1995a; Ting-Toomey, 1999), it is possible that the pre-departure classes were not adequate in preparing students in this area, particularly for first-time travelers.

In examining the possible factors for changes in cross-cultural skills, students’ starting conditions seemed to play a significant role in learning. Paige (1993) and Paige et al. (2003) identified “cultural intensity factors” that influence stress levels while immersed in another country. These include individual characteristics (e.g. age, gender, language, and prior intercultural experiences), contextual characteristics (e.g. the degree of cultural similarities and dissimilarities between the host and home countries, attitudes of host nationals toward internationals) and programmatic factors (e.g. isolation from home country peers while abroad). One cultural intensity factor that was often mentioned in interviews was the large degree of dissimilarity between American and Taiwanese culture. For instance, one student identified how different communication styles led to confusing or uncomfortable interactions with the host nationals. Another student expressed how the homogeneity of the host culture compared to the US and visibility as an African American made her feel as if she were being “viewed under a microscope” while abroad. These factors contributed towards the students’ stress levels and their ability to adjust to the new environment.

Prior travel and intercultural experiences were another factor that seemed to play a central role in development. For example, one student who was born in another country, spoke multiple languages, and spent time working in other cultures, scored higher in three of the four cross-cultural skill dimensions and had the third highest change overall by the program's end. Another intern with the most CCAI gains overall grew up in a multicultural environment, had proficiency in the host culture's language, and prior experience studying in a country with a similar culture to
the host nation. Both students displayed more willingness interacting with and learning from individuals in Taiwan, as well as being open to building relationships with them. The willingness to interact with foreign cultures and proficiency in using a non-native language are attributes of interculturally competent students (Cui, 2016; Sercu, 2005). These findings were less surprising as students who start the program with higher levels of cross-cultural competence tend to have higher levels after the international exchange (Heinzmann et al., 2015).

On the other hand, interns who had no prior exposure to the host culture reported more negative interactions in Taiwan and had fewer gains. For instance, two of the lower CCAI scores came from students with little to no previous experience with the host culture. One student grew up in a very homogeneous community, while another student had never traveled outside of the US and had limited interactions with people from the host culture. Both reported feeling frustration resulting from cultural differences and the inability to effectively communicate. The psychological intensity experienced by the students led to withdrawing from their experience. This aligns with the defense stages of the Development Model of Intercultural Sensitivity (Bennett, 1993), in which either physical or psychological distance from the cultural differences and the culture itself is created. Students in lower developmental stages may be especially overwhelmed by the challenges of adjusting to a new environment, particularly without sufficient support (Demetry and Vaz, 2017)

Despite the intensity of immersive living, these challenges can also act as valuable opportunities to develop resilience and progress in one’s intercultural development. Nam (2011) found that US participants in two study abroad groups – one in the Netherlands and one in Southeast Asia – both reported high levels of cultural development. However, it was the Southeast Asia cohort that reported the most significant intercultural growth, as the culture was significantly
different from their own. Students may have faced more critical moments that led to reflection and were pushed to grow in ways the Netherlands group was not.

Other personal factors that may have impacted the results were gender and age. For instance, all three males of the group reported the highest gains after the program. Only one female had similar positive changes. The remaining students reported much lower changes or even negative scores. In addition, two of the three male interns with the highest changes were, on average, older by one to two years than the rest of the students. One female, with the lowest gains was the youngest of the group. Though limited research exists on gender or age as predictors of cross-cultural development, a study by Medina-Lopez-Portillo (2004) of two programs in Mexico found that, “being a male was associated with increased actual and self-perceived intercultural sensitivity scores” (p. 186) compared to female participants in the seven-week program. Variables in age were also correlated to students’ intercultural sensitivity in the semester-long program results.

Overall, the findings showed cross-cultural learning in a summer program abroad and the variation in students’ development. Given the brevity of the program and limited time in the host culture, it less surprising that some students reported fewer positive intercultural changes (Bloom & Miranda, 2015; Medina-Lopez-Portillo, 2004; Vande Berg, 2009). The degree to which interns had pre-existing cross-cultural skills and intercultural experiences seemed to be major factors in learning. This is consistent with scholars who found that students’ affective starting conditions and levels of intercultural competence before the program were the best predictors of intercultural growth after the exchange (Heinzmann, Künzle, Schallhart & Müller, 2015).

This underscores the importance of using a pre and post-trip survey design, as students each started the program at very different levels of development. It was apparent that regardless of
pre-program attributes and scores, every student experienced some levels of stress and culture shock while abroad, especially for first-time travelers. The need for adequate levels of student support incorporated into program structures, therefore, is discussed in the suggestions section of this chapter.

**RESEARCH QUESTION II**

*How is the intercultural learning evident from the quantitative findings similar to or different from the qualitative findings? What are plausible explanations?*

Examination of the quantitative and qualitative data suggest growth in different areas. According to the qualitative analysis, the most growth occurred in emotional resilience and personal autonomy for the PIRE interns. Students often recalled confusing and frustrating situations and how they coped with the challenges of being among people different from them. They expressed how making their own choices and traveling independently helped them to be more self-reliant by the end of the program. This is consistent with Maharaja’s (2018) qualitative study that reports students mentioned most often instances of emotional resilience and personal autonomy in their interview responses. However, compared to the quantitative surveys, emotional resilience and personal autonomy were the two cross-cultural dimensions that showed the least positive changes for the PIRE interns.

One explanation for these differences is that the CCAI instrument was not able to capture changes in these particular dimensions because of the sample size. By nature, education abroad programs tend to have smaller sample sizes that do not yield statistically significant results. Studies using the CCAI show that with smaller sample sizes, there are few if any significant changes compared to studies with larger samples. For example, Mapp et al. (2007) concluded few...
significant changes in cross-cultural adaptability in a sample of 25 participants. However, a later study by Mapp (2012) combining five different programs for a relatively larger sample size of 87 participants found significant changes in cross-cultural adaptability as measured by pre and post-program CCAI surveys. While there were two summer PIRE groups researched in this study, a sample size of eight students could not reflect any significant quantitative findings. The qualitative interviews captured nuances in learning that the survey did not, complementing the numerical results.

Examination of individual pre and post-program scores (see Chapter 4, Table 4-2), revealed findings that were difficult to reconcile between the types of data. For instance, Student 1 scored the highest in the initial scores across all four skill dimensions compared to the group. One consideration is if students begin the program with high scores, they have fewer gains to report because of the ‘ceiling effect.’ Because Student 1 scored 104 out of the maximum score on Emotional Resilience, they had less room to improve on the posttest. However, the student’s interview responses and behaviors of distancing from the host nationals, still did not reflect the intercultural competence that the survey results suggested.

Jackson’s (2008) study of students in the UK and Medina’s (2004) study of American students in Mexico showed participants tended to significantly overestimate their levels of intercultural competence both before and after the international experience. In most instances, the students perceived levels of intercultural sensitivity were “well beyond their actual level of development” (Jackson, 2008, p.178). One explanation for the discrepancy between data is students’ positive bias in self-perception may have impeded their willingness to improve their cross-cultural skills once they were actually in the host culture (Jackson, 2008). Thus, while self-
perceptions were reported as improvements in the quantitative measure, evidence of intercultural
growth was not supported by the qualitative data.

Additionally, Heine et al. (1999) state that self-perception will differ across cultures. Individuals from North American and dominant cultures tend to have higher levels of positive self-perception, in comparison to persons from less dominant cultures, such as those in East Asian countries, where self-regard is valued less and in different ways. This may explain why some interns in the program of Western background reported the highest gains compared to their non-Western counterparts.

Student 4 and Student 5 findings also revealed gaps between the data. Student 4 who reported the most negative CCAI score – presumably seen as a regression in growth – revealed overcoming challenges and becoming proactive in her internship, taking on a leadership role. After the program, she considered working abroad because of the meaningful connections she had built with her mentors and peers. Similarly, Student 5 had a negative score, yet was able to analyze cultural differences about education and environmental practices in the host nation through a rather sophisticated lens. The ability to make finer distinctions in a particular area reflected cognitive complexity, which is associated with increasing levels of intercultural sensitivity (Bennett, 2004; Loevinger, 1979).

One explanation for these findings is that intercultural development follows a non-linear path (Bourjolly et al, 2005). The surveys may simply be capturing students’ intercultural growth in one phase of learning. As individuals develop greater sensitivity toward differences and encounter more cultural challenges, they can become more aware of what they do not know and the gaps in their intercultural abilities and knowledge. Short-term decreases may be interpreted as a regression in learning, when in fact they are part of the longer-term trajectory of growth.
(Bourjolly et al., 2005). Thus, minimal positive changes on the surveys did not necessarily equate to an absence of growth, nor did high score changes indicate significant intercultural growth. This underscores the challenge of interpreting changes in learning and the value of utilizing multiple instruments to better understand cross-cultural development.

Lastly, the quantitative and qualitative findings differed in that the interview responses suggested the beneficial influence on participants’ decisions to pursue graduate school and in building important cross-cultural skills for future work. For instance, comments indicated some growth in self-efficacy from working in a foreign lab setting, improved communication with linguistically different individuals, and becoming more flexible in their thinking. The international experience also encouraged Student 7 the motivation to apply for an overseas job upon returning, and Student 4 to pursue graduate school in Taiwan.

While we do not know the long-term results of students’ decisions, these findings corroborate research on international internships and service-learning that show the positive impact on participants’ post-graduation plans and career goals (Wanasek, 2005). Matherly, Phillips & Chapman’s (2015) study reported a wide range of positive outcomes from a summer research program on undergraduates’ self-confidence, “pursuing additional international opportunities, adapting to different domestic research lab cultures, describing themselves as adaptable to different cultures in a professional or academic environment, increased appreciation for the interdisciplinary nature of scientific research, and having more realistic expectations of the day-to-day life of a graduate student” (p. 15). Overall, participants of summer internship programs perceive the experience to have positive impacts on future educational and career aspirations (Dwyer & Peters, 2004; Matherly, et al, 2015).
RESEARCH QUESTION III

How are students’ perceptions of cultural differences between the US and Taiwan affected by participating in a summer internship abroad program?

In general, interns’ perceptions of cultural difference became “more complex and sophisticated” (Bennett, 2004) compared to before the program. Bennett’s (1986, 1993) Developmental Model of Intercultural Sensitivity (DMIS) framework was used to analyze students’ interview responses and behaviors. Qualitative interviews reflected most participants started and ended the program in the DMIS stages of Minimization or Acceptance. Students displayed greater cultural awareness, openness to interacting with locals, and viewing culture from a wider perspective. These findings are consistent with studies on intercultural sensitivity that show participants were beyond the first two ethnocentric stages of Denial or Defense prior to the program, as these international experiences would likely not appeal to students in the lower stages of development (Anderson, Lawton, Rexeisen & Hubbard, 2006).

Overall, some students focused on contrasts in behavioral and external differences, such as people’s appearance, using two hands as a sign of respect, or noticing locals being more, “reserved,” “humble,” and “welcoming,” compared to individuals in the US. Other students expressed a more in-depth perspective and understanding of the Taiwanese culture, such as the significance of certain social gatherings, religious practices, and differences in education systems. While some descriptions reflected deeper cultural awareness and acceptance, other comments conveyed a sort of indifference or distance from the host culture.

For instance, Student 1 recalled in the post-program interview, “I didn’t notice much differences between the cultures. Actually people are similar around the world…it was nothing shocking.” This response reveals an emphasis on cultural similarities rather than differences and
aligns with the Minimization phase where, “elements of one’s own cultural worldview are experienced as universal” (Bennett, 2004, p. 4). One could also argue there is some aspect of the Denial stage in which cultural variations are not experienced at all or with indifference (Bennett, 1993). Student 5 compared university students, noting “in the US, a huge part of college is partying and drinking. Most of the people we talked to don’t do any of that…they’re there to study, and not to have a social life.” Despite the level of reflection, the comment may also reflect a degree of ‘cultural superiority’ characterized in the Defense stage where differences are viewed as a threat to “one’s own sense of reality, and thus to one’s identity” (Bennett, 1993, p. 35).

Bennett (2004) notes individuals can collect information about a particular culture, yet may not truly experience it because of the inability or disinterest to make more nuanced distinctions. Students may begin to encounter cultural differences as more ‘real’ but still organize them in simple, stereotypical categories. Given the shorter duration of the summer program, it may not have allowed ample time for students to participate in and experience the culture at a deeper level. They might have developed premature or simplistic interpretations of the host culture simply because they had less time to examine and reflect upon more complex cultural issues and practices and were just beginning to see “the proverbial tip of the cultural iceberg” (Medina-Lopez-Portillo, 2004, p. 195). This is consistent with studies that show students of short-term programs may make little progress in their intercultural sensitivity and become more nationalistic (Maharaja, 2018; Medina-Lopez-Portillo, 2014). Maharaja (2018) found that students who returned from non-English speaking countries tended to became “more nationalistic” compared to students who returned from English-speaking countries who were more “critical in their analysis” of the US (p. 32).
This emphasizes the impact that cultural intensity factors such as dissimilarities between the home and host cultures can have on learning. The relatively large contrast between American and Taiwanese culture may have contributed towards students’ ethnocentric perspectives. For example, while interns paid attention to some non-verbal cues, such as body language, they may not have been aware of the social norms and communication styles used in Taiwan and Asian cultures, in general. Hall (1976) and Hofstede and Hofstede’s (2010) seminal theories on culture emphasize communication differences between Western and Eastern cultures. Cultures that tend to rely more on explicit messages (also known as low-context cultures) are frequently found in Western countries that focus on direct, goal-oriented, and verbal communication styles.

This contrasts cultures that use implicit communication (or high-context cultures), which are frequently found in Asian societies where communication is conveyed in a more indirect, circular, and relationship-oriented style. When an individual uses their preferred communication style, it can often lead to confusion or misunderstandings. In this case, students were unaware that their communication style was a cultural pattern and attributed the local’s style (e.g. more non-verbal, implicit and indirect) as an unwillingness or lack of social skill, rather than a culturally different style. It is less surprising then that participants often felt frustrated when communicating with locals, even when using English. It is worth noting, not everyone adheres to the same social norms even within the same culture nor can we assume equal motivation or willingness to engage from either the US students or host nationals.

For the students who tended to express greater appreciation of the host culture after their return, their responses reflected the DMIS stage of Acceptance. These interns expressed a willingness and curiosity to engage with and understand the cultural differences they encountered. For instance, in the pre-program interview Student 6 expressed her confusion around religion in
Taiwan. As someone from a strict religious upbringing, she did not understand why people in Taiwan could follow multiple religions and with such flexible practices. Her thoughts about religion shifted after the program when she discussed the topic with students and new friends in Taiwan.

After the program, she began to view religion “not as a set of rules to follow, but as a set of values to live by.” She appreciated how tolerant they were and conveyed greater empathy toward their religious beliefs and practices. Another student liked how integral social events, such as night markets, were in the host culture. He respected, “how happy people were doing something that's not sophisticated or fancy, but in a sense, raw.” Students in the Acceptance phase displayed a greater acknowledgment and acceptance for cultural differences following the program.

It is important to note that while PIRE program participants attended an introductory culture course before departure, it was not explicitly asked of them to notice cultural similarities or dissimilarities while abroad. Cultural learning was only one aspect of the multifaceted internship program that students were tasked with, including an intensive research work component. For participants to have constructed meaning from the cultural differences they encountered and share examples in the interviews demonstrated a certain level of reflection and intercultural learning amongst the majority of students.

**SUGGESTIONS FOR PRACTICE**

**Program Design**

Results from this research are consistent with other studies that show how education abroad programs are designed is more significant than how long programs are in facilitating intercultural learning (Nam, 2011; Paige et al, 2009). This study showed the summer internship experience
provided an environment that encouraged new cultural experiences and engagement with the host community, yet it lacked adequate support and reflective opportunities that may have contributed further to students’ learning. As illustrated by Kolb’s (1984) Experiential Learning Cycle (Figure 2-3), learning occurs when a person ‘touches all the bases’ of the four stages: experiencing, reflecting, thinking, and acting.

During the interviews, PIRE interns often said they had not given much thought to what they learned or what the experience meant to them. If students do not think about their intercultural experiences, they potentially miss out on important lessons and applying that knowledge in future experiences. Kolb (1984) states “learning is the process whereby knowledge is created through the transformation of experience” (p. 38). The experiential learning theory (ELT) provides a context to assess how education abroad programs can be viewed as transformative learning opportunities as program structures are designed to guide students through the various learning stages (Mainemelis, Boyatzis & Kolb, 2002). Thus, transformative education abroad exchanges necessitate appropriate program intervention and facilitation (Nam, 2011). Following are three primary suggestions related to program design and practice.

Guided Reflections

Because of the central role starting conditions seem to play in development, raising students’ awareness about prior intercultural experiences, expectations, and attitudes may be essential to their understanding of self and identifying areas for improvement (Heinzmann et al, 2015). Scholars have suggested that intervention, such as reflective assignments or journals that encourage students to process and think about the meaning of their experiences, enhances learning (Chang et al, 2021; Engle & Engle, 2004; Vande Berg, 2009). Likewise, becoming culturally self-
aware or cognizant of how cultural contexts have informed an individual is essential for increased sensitivity of other cultures (Bennett, 2004; Byram, 1997).

One approach to incorporate introspection in programs is through pre-departure essays. Students would be provided prompts for reflecting on their own cultural backgrounds, values, and perceptions of other cultures. Discussions amongst other participants may help uncover deeply engrained beliefs and begin to shift cultural perspectives (Schenker, 2019). Similarly, reflective journaling is another avenue for students to raise levels of awareness throughout the program and to share their perspectives.

Chang et al. (2021) suggest the use of a standardized set of journal instructions designed to increase intercultural competence. The researchers outline four areas the journal reflections should document: 1) students’ first impressions and anticipations of their experience, 2) positive and negative moments while engaging with locals and how to improve in future interactions, 3) progress and lessons learned during the program and 4) self-reflection and self-evaluation after the program. In this sense, journaling specific prompts before, during and after the experience abroad supports the learning phases of the experiential learning cycle (e.g. experiencing, reflecting, learning from the experience, and experimenting and applying lessons in future situations). Without the stage of reflection, students may miss the opportunity to register their experiences that can lead to the integration of new ideas and learning:

Reflection and critical reflection are processes that create opportunities to stop and think, question, and discuss what you have experienced, read, written, or thought; so that perhaps, when you “restart” or “go back” to your thinking or doing experiences, you may be more aware of the role you play and the influence you have in your world (Perry et al., 2012, p. 683).

In particular, intensive programs of shorter durations may not allow adequate time for participants to reflect, nor can we assume students would spend free time reflecting of their own
accord. Thus, reflective prompts at any stage of the program may help students to think more deeply about the intercultural experience.

Similarly, dialogue and debriefing exercises where students share their experiences and discuss the ways they deal with challenges may contribute toward students’ development. Younes & Asay (2003) found that regardless of the type of program or duration, study abroad participants most wanted “a place to vent frustrations, process personal learning, and seek validation for their experiences” (p. 19). Sharing experiences with peers is a way for students to co-construct learning opportunities that may not be possible on their own or with locals (Borghetti, Beaven & Pugliese, 2015).

Moreover, being in another culture among people who have different ways of thinking and behaving can be disorienting and lonely. Reciprocal peer learning provides a resource for students to share their experiences and reduce the feeling of being alone in a new cultural environment. By sharing their observations and providing feedback, they can see that students may be experiencing similar intercultural challenges and work together to improve future interactions (Chang et al, 2021). This approach also allows for students to give and receive mentoring when it is less feasible for instructors or programs to provide customized support throughout the experience abroad.

**Cultural Mentoring**

A second suggestion involves incorporating cultural mentoring into program design. Going abroad and being among people who share different values, beliefs, and behaviors can be disorienting and lonely, particularly for first-time travelers. Guidance for students as they experience these psychological stresses and challenges is an important part of intercultural development (Niehaus et al., 2018). In the Georgetown Consortium Study of 61 education abroad
programs, students who frequently met with a cultural mentor demonstrated significant improvements in cross-cultural outcomes compared to students who infrequently or never met with a mentor. In fact, meeting with a cultural mentor was concluded to be the “single most important intervention” in enhancing students’ learning (Vande Berg, 2009, p. 11).

A cultural mentor could be a faculty member or trained program leader and involves, “engaging learners in ongoing discourse about their experiences, helping them better understand the intercultural nature of those encounters, and providing them with feedback relevant to their level of intercultural development” (Vande Berg, Paige & Lou, 2012, p. 53). More specifically, cultural mentoring should provide support in specific areas: setting students’ expectations for the experience abroad, teaching the students cultural knowledge of the host nation, helping students explore and understand their own culture and how it compares and contrasts to the host country’s culture, and facilitating connections between cultural experiences before and during their experience abroad (Niehaus et al., 2018).

Participants can meet with a cultural mentor to help process confusing incidents, ask questions, or simply check in throughout the program. In this sense, cultural mentoring and active reflection act as avenues for participants to register cultural differences and feel supported throughout their international experiences. The Internship Placement Program (IPP) Global at the University of Virginia requires students to participate in a weekly discussion-based reflection course, in which they meet with a faculty mentor or peers to dialogue and receive feedback during the internship. The program directors have found that providing support in this way creates more fulfilling experiences for the interns (UVA, 2021).

According to Vande Berg, Paige & Lou (2012), some students will be able to effectively adapt to a new cultural context, but many students will not. “Most students learn effectively abroad
only when an educator intervenes, strategically, and intentionally” (p. 19). Programs designed with intentional interventions, such as reflective assignments and cultural mentoring that support participants’ ability to process cultural complexities and progress in their learning may promote maximal learning (Maharaja, 2009; Vande Berg, 2009).

**Virtual Exchange Options**

For participants with few intercultural experiences, virtual exchanges can act as a preliminary to intensive immersion and reduce the initial stages of culture shock (Hagley, 2014). One option is mixing virtual and physical pre- or post-departure activities to provide opportunities for students to interact with host nationals prior to and after physical visits. Before going abroad, students can engage with locals in the host culture via an online platform. Certain topics about cultural similarities or differences may be discussed with an assigned partner from the host country or in group dialogs. In particular, students who have less experience can be exposed to the host culture in a less intensive or intimidating way. While there are few studies on the effects of hybrid programs, there may be potential benefits. Given the current restrictions on travel, the virtual component could take up a larger percentage of the in-country portion of a program. This would reduce expenses and time needed for travel, yet still allow for continued intercultural interactions and immersion. This option may also be more feasible for students who have curricular, financial, or personal restrictions that hinder leaving for extended periods of time.

To continue engaging students with different cultures universities and organizations are beginning to offer virtual exchange programs and online internships (Saxon, 2020). For example, the Council on International Educational Exchange collaborates with over 340 US institutions and 35,000 international exchange students each year. In the summer of 2021, the organization began
offering academic credit for both 8-week and 12-week virtual internships (CIEE, 2021). Additionally, the Collaborative Online International Learning (or COIL) Initiative has been providing online courses for students and faculty across the globe to facilitate and encourage cross-cultural interactions (SUNY COIL Center).

An important consideration is to what extent virtual learning facilitates intercultural outcomes. O’Dowd and Lewis (2016) posit online intercultural exchanges (OIE) have multiple benefits in fostering cross-cultural awareness and abilities that allow for meaningful collaboration with individuals from different parts of the world. A large-scale study of OIE impact on approximately 8,000 students in the US and 12 different countries, indicated positive changes in students’ understanding of their partner’s culture, interest in learning about other countries, and cross-cultural communication skills. However, no changes were noted in perspective-taking or many of the cross-cultural collaboration scales of the surveys (Stevens Initiative, 2019). In addition, there were potential issues implementing virtual exchanges such as, limited technical support, lack of time or coordination, and organizational issues related to language proficiency or institutional differences (Helm, 2015; O’Dowd & Lewis, 2016). The authors conclude more research needs to be conducted on how to effectively evaluate and ensure the quality of online programs.

Data analysis from the PIRE cohort indicated students’ perceived challenges became opportunities for growth and learning. Spending time in another culture allowed students to get outside their comfort zones, engage in cultural outings, try new things, and thereby increase their openness to facing unfamiliar situations. The more students took risks and immersed themselves in the culture, the more learning occurred. Thus, challenges played a critical role in helping students develop self-confidence and independence. In this sense, virtual exchanges may not be a direct replacement for the actual experience of adapting to another culture. However, more online
programs can act as a way to foster regular contact with local people and provide intercultural benefits for students interested in building cross-cultural competencies. The continued evaluation of the effectiveness of online exchanges may lead to useful insights to improve these increasingly important platforms (Stevens Initiative, 2019).

**FUTURE RESEARCH**

Future studies on different types of programs such as international internships, service-learning, and research experiences, may provide greater understanding into the intercultural learning that occurs with various short-term programs. While academic in nature, these programs provide a unique context where students have the opportunity to immerse themselves in the culture and interact with host nationals on a frequent basis through work or shared projects. Based on the narratives from the PIRE interns, the unexpected conversations and unique incidents that happened both in and beyond the structured internship proved most meaningful to students. As Heinzmann et al. (2015) found in a longitudinal study of 405 students enrolled in various kinds of exchange programs, the type of education abroad program correlated with students’ intercultural attitudes. Regular contact with peers or work colleagues facilitated through the program structure had a positive effect on participants’ cultural attitudes. Examining different types of international exchanges and changes in learning outcomes can contribute toward better understanding the impacts of particular program structures.

Second, identifying the effects of specific student characteristics on intercultural development may prove insightful in designing short-term programs that optimize learning. For instance, Niendorf and Alberts (2017) reported students majoring in Business demonstrated significant improvement in personal autonomy from pre- and post-program CCAI scores, whereas,
Letters and Science students did not. The impact of starting conditions and variation in student characteristics, such linguistic background or prior travel experiences, need to be considered in statistical tests and the interpretation of results. Sanford’s (1966) Challenge/Support hypothesis further explains how students that are confronted with too challenging of environments without enough support will retreat physically or psychologically. In comparison, students who receive too much support without enough of a challenge will become bored. To encourage development, Sanford states educators should “present [learners] with strong challenges, appraise accurately [their] ability to cope with these challenges, and offer support when they become overwhelming” (p. 46). Understanding the balance between challenge and support, particularly in education abroad contexts, may contribute towards designing programs that address students’ needs and the contextual complexity of exchanges.

Third, the impact of specific program interventions, such as cultural mentoring or structured reflections on cross-cultural learning is a subject for future research. For instance, Gemignani (2009) found students of a service-learning program did not find structured reflections to be particularly important. However, how participants interpreted their experiences was much more meaningful to them than what they actually learned about the culture. In other words, students “perceived cultural learning in terms of perspective, not specific cultural facts or cultural knowledge” (p. 170). Similar to the PIRE interns, the study’s participants found they were most shaped by unique events that happened to them and establishing connections with people in the host culture. These results support the notion that, “the primary goal of learning abroad is not only to learn about, but to have an experience of, another culture” (Vande Berg, 2009, p. 18). Findings from these kinds of studies may provide important pedagogical insights into short-term program design.
Additional research might also focus on virtual exchanges in the internationalization of higher education. Given the increased national interest and commitment to international education, what is the potential growth of virtual exchanges? Although studies have shown its beneficial for students’ cultural awareness and acclimatization, it can be a time-consuming and less feasible option for teachers to facilitate and coordinate programs (Hagley, 2014). How students interact both with and through technology is another important consideration. In what ways does it facilitate cross-cultural learning and communication with individuals from different parts of the world (Helm, 2015)? This requires a need to examine the effectiveness of virtual exchanges and how to ensure program quality (Stevens Initiative, 2019). Insights from these studies could help inform virtual learning program design and ways to enhance students’ intercultural experiences online.

Lastly, additional analysis is needed on the long-term effects of experiential programs, particularly programs of shorter durations. Follow-up studies might illuminate how students integrated what they learned into their personal and professional lives and how they readjusted to the home culture after the program. Longitudinal research may help in understanding the effects of time on cultural development and the learning processes involved in short-term international exchanges.

**CONCLUSION**

The internationalization of higher education and recent recommitment to international education by the government reflect the increasing value of education abroad in the US. In particular, short-term experiential programs are a way to foster diverse perspectives and build cross-cultural skill sets needed in the modern workplace. Most research to date has explored the
impact of traditional semester or year-long study abroad programs, despite over half of all participants selecting programs of fewer than eight weeks (IIE, 2019). More recent studies have examined the intercultural learning outcomes and conclude short-term programs are “worthwhile educational endeavors that have significant self-perceived impacts on students’ intellectual and personal lives” (Chieffo & Griffiths, 2004, p. 172), especially when well-designed (Dwyer, 2004; Lenkaitis, 2019; Nguyen, 2017).

However, there has been less focus on what undergraduates learn in experiential programs, such as internships or research abroad, and how students’ cross-cultural perspectives shift over the course of the program. This case study provided a lens into the experiences and cross-cultural development of university students participating in a summer internship program in another country. Utilizing a mixed methods approach with numerical data from pre and post-program Cross-Cultural Adaptability Inventory surveys and narrative responses from pre and post-interviews, findings from this study show student improvements in the cross-cultural abilities of emotional resilience, flexibility and openness, perceptual acuity, and personal autonomy. Using the Developmental Model of Intercultural Sensitivity (DMIS) theoretical framework, the qualitative results indicated many participants became more aware and accepting of the cultural diversity they encountered while in the host country, recognizing deeper cultural meanings, such as the impacts of religion and education. Lastly, the short-term internship program had a positive impact on students’ academic and career aspirations.

Experiential Learning Theory (ELT) was the theoretical framework used to analyze learning in the context of education abroad and helped provide explanations for some outcomes. It is recommended that short-term experiential programs continue to include regular contact with host residents through shared projects and team activities, and more structured opportunities for
reflection and cultural mentoring to optimize learning. Participants with little to no prior travel or intercultural experience tended to display ethnocentric perspectives following the program, which seem to be related to the intense intercultural challenges of adapting to a new environment without much support. While not all students improved in every cross-cultural skill, the differentiation in outcomes highlighted the significant role of students’ starting conditions and programmatic structures in intercultural development.

Given the current pause on international education, it is especially vital to demonstrate how programs abroad help achieve desired student outcomes, particularly in shorter programs. There is a growing need to identify the significant impacts of education abroad so these intercultural opportunities can continue to be supported. As the past US Secretary of State for Educational and Cultural Affairs stated “only by engaging multiple perspectives within our societies can we all reap the numerous benefits of international education - increased global competence, self-awareness and resiliency, and the ability to compete in the 21st-century economy” (IIE, 2014b).

In an increasingly interconnected world, international exchanges are valuable opportunities for undergraduates to develop essential cross-cultural competencies. Results of this study demonstrate the beneficial outcomes of a short-term internship program abroad on students’ personal and professional development. The continued examination of education abroad impacts and the facilitation of programs designed to foster and enhance intercultural learning are of particular value.
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APPENDIX A

LETTER OF CONSENT FORM

Informed Consent Information
For Research Participant

Study Title: Exploring Undergraduates’ Cross-Cultural Adaptability and Intercultural Learning: A Case Study of an Internship Abroad Program

Principle Investigator: Jennifer Fong, Doctoral Candidate in Educational Policy and Leadership

Co-Principle Investigator: Kathryn Schiller, Ph.D., Department Chair and Assistant Professor in Educational Policy and Leadership

Research Study Purpose
You are being invited to participate in a research study of intercultural development. As the world becomes increasingly globalized, students must gain greater knowledge and skills working in diverse cultural contexts. This study seeks to explore the impact interning abroad has on students’ development and cross-cultural skills through the use of surveys, observations and interviews. All US undergraduates in the summer 2019 US-Taiwan PIRE Program have been invited to participate.

When choosing an international experience, over 50 percent of university students will enroll in short-term programs (IIE, 2011). More students are opting for less-traditional experiences abroad, such as internships, volunteerism, service learning, and educational excursions, warranting the need for program assessment and effectiveness.

Study Procedures
You will be asked to complete a demographic form that includes your age, gender, grade level, prior travel experience, ethnic heritage, goals for participating in the PIRE program, and languages spoken. There will be an online survey administered before departing to Taiwan.

A semi-structured interview will be conducted upon your return to the US after program completion. Interviews will be led by the lead researcher and last approximately 20-30 mins per student. Open-ended questions will be asked about your experiences related to interactions in diverse contexts. The interview will be recorded and transcribed following the session, but you will not be identified on the transcripts. Every participant will be given pseudonyms in the research report.

Potential Risks of the Study
There are no anticipated possible risks and/or discomforts of your involvement in this research study. You may withdraw from this study at any time without penalty. Your name will not be used
in the interview transcripts or in the demographic data. In addition, your responses will not be seen by course faculty or by faculty with any direct decision making regarding course progression.

Contacts
If a study related problem should occur, or if you have any questions any time about the project you may contact Jennifer Fong (jfong@albany.edu) or supporting faculty member Dr. Kathryn Schiller (kschiller@albany.edu).

Benefits
Your voluntary participation in this study may assist education abroad programs at institutions in the design of intercultural learning strategies. You will also be given time to decipher the survey results to increase self-awareness and knowledge of specific areas to improve competency in cross-cultural skills and adaptability.

Confidentiality
All measures will be taken to protect your confidentiality. The list of names and records of this study will be kept private and secured by passwords. Only the lead researcher and supporting faculty member will have access to your responses.

No information will be accessible to your future employers or professors. Your academic standing will not be affected by your participation (or non-participation) in the study or by any answer you provide in the surveys or interviews.

Consent
By signing below, you have read the above information, asked questions and have received answers, and consent to participate in the study.

____________________________________________
Participant’s Name (printed)

____________________________________________
Print’s Email Address

____________________________________________  ______________
Participant’s Signature  Date

Please initial below:

_____ I give permission to be audio-recorded for this study
APPENDIX B

REQUEST LETTER

Participation Request Email to Students

Dear PIRE student,

My name is Jennifer Fong and I am a doctoral candidate in the School of Education, Department of Educational Policy and Leadership at the [University]. I am conducting a study to explore how the summer PIRE program impacts the intercultural learning and awareness of participating interns. In particular, I am interested in what kinds of cross-cultural skills students develop over the course of the program. As a PIRE undergraduate at the [University] or partnering institution, you are qualified to participate in this study.

This project provides an opportunity for participants to assess their levels of cultural awareness and to reflect on their experiences before and after the summer program. The information can inform education abroad faculty and educators in program design that enhances learning and participants’ international experiences. Students will be asked to complete a questionnaire and interview that will take approximately 30 minutes. Because this is a pre and post-program study, we ask that you participate in the questionnaire and interview after the program ends. Interviews will be conducted in person at the [University] or online, if necessary, and transcripts can be requested by the participant.

All materials and surveys, consent forms, and interview transcripts will be kept secure and accessible only to the principal investigator (me). Participant identity will be anonymous in both quantitative and qualitative data analyses and reports. There is no obligation to participate in this study and are free to withdraw at any time.

If you are interested in participating in this study, please contact me at your earliest convenience. I will then follow up with additional information to access the online questionnaire and plan a time for the interview. Thank you.

Sincerely,

Jennifer Fong
Doctoral Candidate
Educational Policy and Leadership
Participant Information

Please select a response for each question below:

1) What is your gender?
   □ Female
   □ Male

2) How old are you?
   □ 18-20
   □ 21-23
   □ 24+

3) What is your current class standing?
   □ Freshman
   □ Sophomore
   □ Junior
   □ Senior

4) What is your ethnic background?
   □ African American
   □ Caucasian
   □ Hispanic
   □ Asian
   □ Other ____________________________

5) Do you have any previous international travel experience? If yes, please describe the location and length of time abroad.
   □ Yes _______________________________
   □ No
6) Do you have any prior study abroad experience? If yes, please describe the location and length of program abroad.

☐ Yes ________________________________
☐ No

7) What is your native language? If other, please indicate which language.

☐ English
☐ Other ________________________________

8) In addition to your native language, do you speak any other languages?

☐ Yes ________________________________
☐ No

9) In which Department are you currently enrolled at the university?

__________________________________________________________________________________

10) What is your major?

__________________________________________________________________________________
APPENDIX D

SEMI-STRUCTURED INTERVIEW PROTOCOL

Pre-Program Interview Questions

Note: Interview questions were semi-structured and acted as a framework during the real interviews, some questions were modified or emphasized depending on the context and unique experience of the participants

Q1. Participants’ background, including where they are from and any influence from intercultural experiences growing up.
   • Where are you from?
   • What was your upbringing like with regards to interacting with people culturally or linguistically different from you (relationships, family, unique experiences)?
   • Have you had any prior travels and experiences? Can you describe them?

Q2. Assessing students’ ability to regulate their emotions while dealing with difficult feelings and challenges in a cross-cultural experience.
   • How do you normally cope with challenging and difficult emotions?
   • Can you describe how you deal with stressful situations?
   • How do you feel when encountering new circumstances or people?

Q3. Assessing students’ ability to enjoy different ways of thinking and behaving and tolerant of cultural differences
   • When you are in a new environment, do you tend to keep an open mind?
   • Can you describe a situation where you practice being tolerant of people who are different from you?
   • How you feel about trying new things (e.g. experiences, foods, meeting new people different from you)?

Q4. Assessing students’ ability to be empathetic and attentive toward verbal and non-verbal
   • When interacting with people from different cultures, do you pay attention to body language and non-verbal behaviors?
   • How often do you try to understand people’s thoughts and feelings when talking to them?
   • What do you notice when communicating with people who are culturally different from you?

Q5. Assessing students’ ability to be self-directed and respectful of themselves and others
   • How confident are you in making decisions on your own? How independent are you?
   • Would you say that you make choices from your own set of values or from others?
   • What are your future educational plans (e.g. graduate school, career choice, another study or work abroad program)?
Q6. Assessing students’ perceptions of the host and home culture and cultural differences

- What is your perception of US culture?
- What is your perception of Taiwanese culture?
- How do you view Taiwanese culture to be similar or different from American culture?
- What impact have prior experiences had on you in terms of interacting with different cultures?

Post-Program Interview Questions

Q1. Assessing students’ ability to regulate their emotions while dealing with difficult feelings and challenges in a cross-cultural experience.

- What were the most challenging aspects of working with individuals from another culture?
- What were the most rewarding aspects?
- Can you describe an incident or situation that was emotionally stressful while abroad and how you dealt with it?
- Can give an example of a situation that left you feeling confused or overwhelmed?
- How did you deal or cope with various setbacks or challenges? (e.g. journaling, talking with peers or professors, reframing the situation, etc.)

Q2. Assessing students’ ability to enjoy different ways of thinking and behaving and tolerant of cultural differences

- How has working in a culturally diverse teams influenced your thinking or behaviors?
- Could you share an example in which you found yourself being open to trying something new? (e.g. new foods, engaging with a peer, conversing with a local, etc.)
- Were there times when you had to remain flexible in your thinking or behaviors while abroad? Can you think of a specific situation?

Q3. Assessing students’ ability to be empathetic and attentive toward verbal and non-verbal

- Was there a specific time when you had to try to understand the other person’s feelings despite not agreeing with them?
- How challenging or easy was it for you to accept the cultural differences in Taiwan? Can you provide specific examples of these differences?
- Do you see yourself as being more aware of others feelings in different cultures as a result of interning abroad? Why or why not? If so, in what ways?

Q4. Assessing students’ ability to be self-directed and respectful of themselves and others

- Can you describe a situation in which you had to choose to stick to your own values when others did not share them?
- Could you see yourself living in another culture by yourself?
- Do you see yourself as having a stronger sense of self and independence as a result of interning abroad?
• How has the internship abroad affected any future plans (e.g. graduate school, career choice, another study or work abroad program)?

Q5. Any influence on participants’ perceptions of cultural differences between the US and Taiwan.
• Can you describe any similarities or differences you observed between American and Taiwanese culture?
• How has participating in the internship influenced views about your own culture (e.g. American culture)?
• How has participating in the internship influenced your willingness to learn about different cultures and seek new experiences?

Closing
• In what areas did the summer internship abroad impact you the most (e.g. your self-awareness, worldview, your curiosity to learn more about different cultures or your own, changes in lifestyles, etc.)?
• Are there any other reflections or experiences you would like to share from the international internship program?
• Are there any thoughts you would like to share that were not covered in the interview?