DEVELOPMENT OF CULTURAL AGILITY IN HIGH ACHIEVING EMERGING ADULTS: THE EVALUATION OF A SHORT-TERM STUDY ABROAD EXPERIENCE

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Lauren Pouchak

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Advisor: Dr. Lindsay Portnoy

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Abstract

The purpose of this mixed methods study is to determine if there is a change in first year students’ cultural agility as a result of attending a short-term study abroad program as explored through the lens of Deardorff’s Intercultural Competence theoretical framework. The study focused on a quantitative analysis of the Cultural Agility Self-Assessment supported by a qualitative analysis of open-ended questions. This research evaluated the impact of short-term study abroad programs on student’s cultural agility, which includes the cross-cultural competencies of tolerance of ambiguity, perspective taking, cultural humility, resilience, relationship building, cultural curiosity and desire to learn. The results of this study showed that students who did not attend a short-term study abroad program had a statistically significant decrease in their cross-cultural competency of cultural humility. As the only significant finding of this study, this result implies that students who do not participate in short-term study abroad may have more challenges with accessing opportunities to seek advice as well as being open to feedback from those different from themselves or may be at a disadvantage of practicing intercultural interactions. The small sample size of the study (n=74) hindered the ability to further investigate the type of experience students had compared to their cultural agility cross-competency scores; however, having a better understanding of how students were able to situate what they were learning, and the interactions they were having with host nationals could have provided more information about what type of interventions could be effective in helping students gain the most out of their experience.

Keywords: short-term study abroad, cultural agility, cross-cultural competencies
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Chapter I: Introduction to the Study

Many of our nation’s challenges are global in nature, and some research suggests that study abroad programs are a powerful tool that can help students acquire skillsets and competencies to assist them in competing and leading on both local and global levels (Anderson, Lawton, Rexeisen, & Hubbard, 2006; Daniel, Xie, Kedia, & Lodge, 2014; Olson and Lalley, 2012). Students must be able to lead in a 21st Century that is schooled in “cultural and social realities beyond what they may have grown up with in the United States” (Durbin, 2006, p. 5). The desire to ensure the acquisition of global competencies in our nation’s graduates is not only desired by institutions of higher education, but employers as well.

The Report of the Commission on the Abraham Lincoln Study Abroad Fellowship Program created by Congress in 2004 was developed to provide a framework for international study abroad programs to help achieve the following goals:

- create a more globally informed American citizenry;
- increase participation in quality study abroad programs;
- encourage diversity in student participation in study abroad;
- diversify locations of study abroad, particularly in developing countries;
- create an innovative partnership with higher education to open more doors for study abroad;
- internationalize U.S. higher education by making study abroad a cornerstone of undergraduate education. (Lincoln Commission, 2005)

The Lincoln Commission’s report, Global Competence and National Needs: One Million Students Studying Abroad called for a bold vision for study abroad for the United States and was the basis for what would become the Senator Paul Simon Study Abroad Fellowship Act. This
legislation aimed to ensure the global competencies of United States college graduates. As part of the report, the Commission was able to conclude that while 80% of college students would like to study abroad, only 10% actually will. Additionally, 23 million jobs in the U.S. are tied to international trade (Rasmussen, 2017), and 86% of the 2014 U.S. Business Needs for Employees with International Expertise survey respondents believe that business would increase if more staff had international experience (Daniel, Xie, Kedia, & Lodge, 2014). Employer’s attitudes towards study abroad show they place significant value on this type of experience, especially when students are able to communicate the relevance of their experience to their potential employers (Troobof, Vande Berg & Rayman, 2008; Gates, 2014).

In 2015-2016, just over 325,000 students participated in study abroad programs out of almost 20 million enrollments in degree granting institutions (Open Doors, 2017). Yet, that number amounts to less than two percent of our total undergraduate population in the United States. As the rates of traditional models of study abroad programs are decreasing, the flexible nature and the increase in popularity of short-term study abroad programs have the potential to help the Commission reach its goal of a million students abroad each year in a decade.

Motivations to internationalize the academy vary by stakeholder. As stated by Northern Illinois University, “An international education is becoming a necessity, not a luxury, and study abroad is one of the best ways to get such and international education” (NUI Study Abroad Office, 2002). Many colleges and universities view cultural exchange as both a process and a goal (Lumby & Foskett, 2016). Institutions may seek to internationalize their student body to add to the larger holistic development of the student, or to create programs that can help recruit a high achieving student body. Government and industry hope students will gain the skills and talents needed to compete and lead in a global marketplace, creating a pipeline of future
professionals that have the ability to be successful in collaborating and leading in an increasingly global workplace. Students often seek to gain a greater understanding of the global community they are part of, or sometimes just want to see the world. Each of these motivations can coexist.

The internationalization of the curriculum in academia often exists as study abroad, and more recently, short-term study abroad programs (Open Doors, 2017). Studying the impact of short-term study abroad programs can help determine if the goals and desired outcomes of these programs align with institutional objectives. Fostering students’ cultural agility may help their ability to navigate effectively in different cultural contexts, while giving college graduates who participate in such programs the ability to interact with people from different cultures in different settings, leading to an increase in the ability to work in teams, and improvement in cultural sensitivity (Olson and Lalley, 2012).

As non-traditional models of study abroad grow in popularity (Chieffo & Griffiths, 2009) colleges and universities are looking to determine what kind of impact these programs have on both personal growth, and the cross-cultural and global competence of the students they are educating (Olson & Lalley, 2012; Kehl & Morris 2008; & Dwyer, 2004). As our world becomes increasingly globalized, the numbers of students participating in study abroad programs have increased exponentially but is still not close to the one million students abroad Lincoln Commission called for in its report to Congress in 2005. The demand for culturally agile professionals coming out of college is not only a desire of Congress, but of industry as well (Caligiuri, 2012).

The purpose of this mixed methods study, focused on a Quantitative analysis of the Cultural Agility Self-Assessment (CASA) supported by a qualitative analysis of open-ended questions, is to determine if there is a change in first year students’ cultural agility as a result of
attending a short-term study abroad program as explored through the lens of Deardorff’s Intercultural Competence theoretical framework. Cultural agility is described by Caligiuri (2012) as “the ability to quickly, comfortably, and effectively work in different cultures and with people from different cultures (p.5).” This ability to be successful working with people from cultures other than your own is gained by “combining individual skills and abilities, motivation and experience” (Caligiuri, 2012, p. 5). The skills and abilities that make up cultural agility are the cross-cultural competencies of; tolerance of ambiguity, perspective taking, cultural humility, resilience, relationship building, cultural curiosity and desire to learn (Caligiuri, 2012).

Measuring the changes cultural agility, as well as the specific cross-cultural competencies of students who participate in such experiences, can help administrators understand the impact of students’ experiences and create compelling, impactful programs that help students develop important cross-cultural competencies supporting leadership skills in order to compete in a globalized economy.

This chapter begins with an overview of the context and background of the problem of practice and will then explore the problem statement, the research questions as well as a discussion of Deardorff’s Intercultural Competence theoretical framework (2006), the lens from which to view the problem of practice and research questions. The chapter also includes a section on the research overview including the potential significance, study assumptions and limitations. Following these components, the chapter then concludes with a brief description of frequently used terminology, and a summation.

**Problem Statement**

Stakeholders have different motives for increasing the number of undergraduates who go abroad including increasing the ability of college graduates to lead but to also collaborate in the
global workplace. As the pressures of globalization force institutions of higher education to internationalize, efforts to conduct research regarding the impact of short-term study abroad are needed to help higher education administrators craft curricula that help improve students’ acclimation to a global society.

As short-term study abroad programs have increased in number and participation (Open Doors, 2017), institutions as a whole have no real way to determine if the goals of their international programming are being met, as there has been little to no formal assessment of how students develop as a result of their participation. This research is interested in evaluating the impact of short-term study abroad programs on student’s cultural agility, which includes the cross-cultural competencies of curiosity, humility, perspective, relationship building, resiliency and tolerance (Caligiuri, 2012). These cross-cultural competencies will be explored in relation to the students’ experience abroad. Additionally, the researcher aims to learn more about what cultural agility means, particularly in terms of student’s cross-cultural development as a result of participation in these programs.

As colleges and universities look to increase the cultural competencies of their students, short-term faculty led programs can help inspire students to have additional global experiences and participate in additional international activities in the future (Olsen and Lalley, 2012). Short-term study abroad programs have been growing at a faster rate than traditional semester and yearlong programs (Open Doors, 2017). This can be seen a response to the growing number of students in the STEM and Business fields who are not often presented with opportunities to participate in the traditional study abroad model of a semester or year abroad (Legett, 2011).

The purpose of this study is to gain a greater understanding of the impact that internationalization can have on our student body by evaluating the impact of a faculty led short-
term study abroad experience of eight weeks or less for academic credit, on high achieving first year undergraduate students at a large private, doctoral granting university, located in the northeast United States, referred to herein as the “University”. This high achieving cohort will be referred to herein as the ‘Program’

One of the hallmarks of an education at the University is an emphasis on global experiences, making the short-term faculty led study abroad programs a priority. Additionally, the University has offered the incoming class that will participate with scholarships to reduce the cost of attendance on the short-term study abroad programs under consideration. Even with this emphasis, the impact of the programs on students has as yet to be studied.

The following section describes the current state of the problem of practice and the shifts that need to occur from three perspectives: practice, research and theory.

Practice

Often waxing poetic after returning from a study abroad program about the life changing experience they have had, it is sometimes difficult for students to explain the ways in which they have grown or changed. Educators also have a difficult time measuring how students have changed after their study abroad experience. Much of this is due to the lack of pre and posttest design in program assessment (Anderson, Lawton, Rexeisen, Hubbard, 2006). As formal assessments of study abroad programs are not mandated by accreditation requirements, the data from this study will also help answer the calls for a more formalized system of evaluation of short-term study abroad outcomes (Tucker, Gullickson and McCambridge, 2011). In addition, measuring the changes in cultural agility of short-term study abroad programs can help provide administrators and policy makers information on how to identify the developmental outcomes
students acquire by participating, thereby strengthening the argument for additional programs and increases in participation.

While a variety of studies have been conducted on why students choose to study abroad and why they choose certain types of programs (Salisbury, Umbach, Paulsen, & Pascarella, 2008; Olsen & Lalley, 2012), the peer-reviewed literature on the impact that short-term programs have on the cross-cultural competencies of undergraduate students is limited and varied. The outcomes of this study can potentially provide study abroad professionals the tools to advocate for non-traditional study abroad models on their own campuses, offering students the opportunity to gain the necessary skills needed to collaborate and lead on local and global levels.

As the Lincoln Commission and others call for a democratization of study abroad programs, short-term study programs should also be marketed to reach underrepresented groups of students using the information from previous studies to target disparities that remain in participation (Chieffo & Griffiths, 2004; Chin, 2005; Olsen & Lalley, 2012). In addition to the potential to increase cultural competencies of the students who participate, short-term study abroad programs also have the potential to be a gateway for underrepresented students to participate in study abroad in ways that differ from traditional semester or year abroad programs (Dessoff, 2016).

**Research**

A review of the limited literature shows mixed impact on students who return from short-term study abroad experiences. Chieffo and Griffiths (2004) have identified that “global mindedness, intercultural awareness, personal growth and development, and awareness of global interdependence” (p. 167) as factors that have increased for students after completing a short-term study abroad program. The benefits of going abroad have also been found to help students
with personal and professional growth, intercultural sensitivity, influence future choice of major, improving cultural awareness and sensitivity and improve emotional resilience (Dwyer, 2004; Ingraham & Peterson, 2004; Chieffo and Griffiths, 2004; Olson & Lalley, 2012; Mapp, 2012). Olson and Lalley (2012) demonstrated that short-term study abroad programs can encourage students to become involved in additional international activities. Anderson et al. (2006) found that students attending a four-week short-term study abroad increased their scores in cross-cultural sensitivity. However, many of these studies are limited to their own internal assessment criteria, if any existed.

This limited review of outcomes from research makes measuring the impact on cultural competencies of short-term study abroad programs important in order to provide administrators and policy makers information on how to identify the developmental outcomes students acquire by participating. The impact of short-term study abroad programs for first year students should be measured to provide administrators and policy makers information to be able to identify the competencies and skills students will acquire by participating in such programs.

Theory

Deardorff’s Intercultural Competence is the theoretical framework used to analyze the specific social phenomenon of cultural (Boudon, 1991). The theory argues that there are key elements that researchers agree on that make up the ongoing process of intercultural competence, including knowledge, skills, and attitudes (Deardorff, 2004). The outcome of Delphi panel technique of experts determined the definition of intercultural competence as the “ability to communicate effectively and appropriately in intercultural situations based on one’s intercultural knowledge, skills, and attitudes” (Deardorff, 2004, p 184). Studying the impact of the various
input and environmental factors within this model can help determine how and if students have grown or changed as a result of their experience.

Deardorff’s attempt at determining consensus on over twenty definitions and frameworks of cultural competency has resulted in a framework that a variety of stakeholders can use to help think about and assess the impact of international programs. The process orientation of intercultural competence includes knowledge and comprehension, desired internal outcomes, and desired external outcomes that are influenced by attitudes and interactions as part of the learning process (Deardorff, 2006). Additionally, Deardorff acknowledges that the learning outcomes are generally focused on the learning that happens at the individual level (2016). The intercultural competence theoretical framework can be used as lens to understand how students have changed due to the environmental factors that occur during their experiences abroad.

The purpose of this study is to determine if there is a change in first year students’ cultural agility as a result of a short-term study abroad program as explored through the lens of Deardorff’s Intercultural Competence theoretical framework.

**Research Question**

The primary research question framing this study is: Do short-term study abroad programs conducted by the University have an impact on undergraduate students’ cultural agility? Additional sub-questions include:

1. Is there a significant change in students’ cultural agility after a participation in a faculty led short-term study abroad program compared to students who do not participate?
2. Is there a significant change in students’ cross-cultural competencies after participation in a faculty led short-term study abroad program versus those who do not participate?

3. What additional variables play a role in cultural agility for students who participate in short-term study abroad programs?

4. What are students’ perceptions of cross-cultural competencies and their role in the ability to work effectively with others?

**Theoretical Framework**

The theoretical framework guiding this study is Deardorff’s Intercultural Competence (2006). While there is currently no singular theoretical framework that has widely tested the impact of short-term study abroad programs, studies have been conducted to determine why students choose to study abroad and why they choose certain types of programs (Deardorff, 2006, Salisbury, Umbach, Paulsen, & Pascarella, 2009; Olsen & Lalley, 2012). Deardorff’s (2006) attempt at determining consensus on a definition and concept of intercultural competence has resulted in a framework that a variety of stakeholders can use to assess the impact of international programs.

The struggle to determine how students have developed after an international experience often centers around the difficulty in defining what the complex concept of “intercultural competence” means (Deardorff, 2006, Terenzini & Upcraft, 1996). Deardorff has identified many key questions that are often asked by institutions who struggle to measure the outcomes of their study abroad programs including how to measure the effectiveness of programs, how to determine if students who participate are interculturally competent, and what it means to be culturally competent (2006).
Formally identified in 2006, the Intercultural Competence theoretical framework pulls from Roger’s earlier work in General Program Logic (2000). According to Rogers, different types of inputs, activities and outputs lead to different outcomes, and in turn can influence the long-term impact of a program (Deardorff, 2006). The Intercultural Competence framework came out of Rogers’ seminal work on Program Theory (2000) and was developed initially by Deardorff as one of the two models that can help identify and assess intercultural competence. The model as applied to internationalization of programs uses process orientation to determine outcomes of internationalization. The key concepts of this theory begin with an input of attitudes that include respect, openness, curiosity and discovery (Deardorff, 2006). The individual then uses those attitudes to move from the individual level of learning through knowledge comprehension to individual internal outcomes that may include what Deardorff describes as an “informed frame of reference shift” (p. 256, 2006). All of these components are then brought with an individual as they go through the interaction level that in turn influences external outcomes (Deardorff, 2006).

The short-term study abroad experience fits within this model, which can be viewed as a rationale for the causal relationships between the inputs of attitudes and knowledge comprehension as they relate to internal and external outcomes after an international experience, as shown in the Figure 1:
Many studies have compared the impact of long-term versus short-term study abroad (Fitzsimmons, Flanagan & Wang, 2013; Kehl & Morris, 2007; Dwyer, 2004), but the changes that occur in students as a result of a short-term abroad experience have not been fully explored. In seeking to understand how short-term study abroad changes students, the intercultural competence theory provides a framework to measure the impact of inputs and interactions on internal and external outcomes of a short-term study abroad program for undergraduate students.

The main critique regarding this framework includes the complex nature of intercultural competence, and the lack of consensus regarding how it should be measured. Deardorff found a lack of consensus on several issues including:
the use of quantitative methods to assess competence
the use of standardized competency instruments
the value of a theoretical frame in which to place intercultural competence
the use of pre- and posttests and knowledge tests to assess intercultural competence
the role and importance of language in intercultural competence
whether measuring intercultural competence is specific to context, situation, and relation
whether this construct can and should be measured holistically and/or in separate components (Deardorff, 2006, p. 258)

While many of the critiques are valid, it should not stop researchers and administrators from using the methods identified to measure impact or changes in outcomes as a result of global experiences for their students.

Rationale for Using the Intercultural Competence Framework

The short-term study abroad experience fits within the intercultural competence framework, as students bring with them a set of values and knowledge when they embark on international programs. The inputs that students bring to the process also affect how their interactions aboard may change their points of view or internal frames of reference after an interaction or experience (Deardorff, 2006). This framework also demonstrates that the learning process is ongoing and that students can enter the process at any point (Deardorff, 2006).

For this study, The CASA (Cultural Agility Self-Assessment) is an instrument appropriate for use as it focuses on the individual-level predictors for cultural agility, aligning with the process orientation cycle of the framework. The CASA also recognizes that individuals bring a certain set of behaviors and learned norms that influence how their interactions abroad may change their attitudes regarding their tolerance of ambiguity, perspective taking, cultural
humility, resilience, relationship building and cultural curiosity and desire to learn (Caligiuri, 2012).

The Intercultural competence theoretical framework provides a lens in which to view the impact of internationalization efforts in higher education. Adding to the literature on the impact of short-term study abroad, this framework can help a variety of administrators revisit their institutional definitions of intercultural competence to be sure they are relevant and align with the set of outcomes they wish for their students to have as a result of those experiences.

**Research Overview**

The purpose of this mixed methods study is to determine if high-achieving first-year undergraduate students make significant gains in cultural agility after attending a short-term study abroad program. This study utilized the CASA to determine the change in a cohort of high achieving students’ cross-cultural competency development by incorporating a quasi-experimental design with pre and post experience testing (Caligiuri, 2014). The CASA instrument was developed using a variety of psychometric studies in attempt to construct a valid, self-reported measure of cultural agility. This survey is currently being implemented at the research site to assess undergraduate students’ cultural agility prior to participating in a short-term study abroad program. This survey has also been adopted for the study of global professionals’ cultural agility (Caligiuri & Tarique, 2016; Caligiuri, Baytalskaya, and Lazarova, 2016; Caligiuri & Thoroughgood, 2015) and is considered valid and reliable by researchers. By surveying participants at different points in time, using pre and posttest experience surveys, changes in student characteristics will be measured and variables will be analyzed to look for possible explanations for those changes (Franenkel, Wallen, & Hyun, 2009). This study also utilized qualitative data in the form of open-ended questions to supplement their perceptions of
cross-cultural competencies and their role in the ability to work and communicate effectively with others.

When implementing an intervention in a natural setting such as a classroom, or study abroad experience, it is difficult to randomly assign students to particular groups. Because random allocation of students is not possible, quasi-experimental design is best suited for this study (Creswell, 2012). The main difference in experimental and quasi-experimental designs is the ability for the researcher to select a comparison group that is similar as possible to the experimental group (Muijs, 2010). The pre and posttest design will allow for the researcher to better understand and describe the impact of short-term study abroad on a group of undergraduate students.

Specifically, while looking at changes in cultural agility, there are different types of relationships between variables that can be explored using quasi-experimental design. Some of these variables will include a student’s year of study, the country of study, and the academic major of the student. These variables and more can also have an impact on the changes in cultural agility of the students who participate in short-term study abroad programs. By both describing the changes and relationships in variables post short-term study abroad experience, relationships between variables in real-life contexts can be explained (Muijs, 2010).

The CASA survey instrument was used to measure student characteristics pre and post short-term study abroad experience. Two groups of students have been surveyed for this study, a group of students who participated in a short-term study abroad program, defined as the ‘treatment group’ and students who did not, or the ‘control group’. For these reasons, a mixed method, quasi-experimental design was best suited to help describe how students’ measures of cultural agility may or may not change as a result of their short-term study abroad experience.
The target population of the study draws upon a sample of participants who are high achieving first-year students from the University. Students must have had a minimum 3.0 GPA to participate in these programs and were chosen by the faculty who led the trips to participate. The University granted access to the students for the study, after IRB approval.

All first-year students in the Program completed the CASA in the fall of 2017 as part of a one-credit, introduction to college course. The director of the Program granted the support to conduct the study with a post-test survey including demographic and summer program related questions. Each student upon completion of their CASA survey in the fall of 2017 received a print-out of their cultural agility scores and an assessment and description of their scores. For this study, the researcher invited all students of the cohort to complete the CASA again to re-assess students’ scores independent of whether they had participated in a short-term study abroad program from May 2018 through August 2018 or not.

The mean scores of the CASA instrument were used to determine if there were significant changes in cultural agility of the treatment versus control group. The programs students participated in were 30 maximum days length and take place in countries all over the world, led by the faculty of the University. These programs were chosen because of researcher’s personal experience organizing and traveling abroad with participating students and experiencing how short-term study abroad programs can help shape the undergraduate student experience. In order to conduct a quasi-experiment, students in the treatment group were also invited to take the post experience survey.

325 of the 670 students who took the initial CASA participated in international programs. The researcher included additional questions regarding demographic information for the students
to fill out on the post-test survey, that were not included in the CASA assessment in the fall of 2017.

The rational for this study lies in the call for a greater emphasis on undergraduate study abroad experiences in higher education, as the United States lags behind in sending students abroad (IIE, 2017). Government, businesses and educational leaders have called for a more globalized citizenry (Lincoln Commission, 2005; NAFSA, 2011; Durbin, 2006). The National Association of International Educators (NAFSA) defines comprehensive internationalization as, “a commitment, confirmed through action, to infuse international and comparative perspectives throughout teaching, research and service missions of higher education” (Hudzik, 2011, p. 6).

Global education is endorsed by the Association of American Colleges and Universities (AACU) as a way to prepare students for the global world as well as to help them see a shared future marked by “justice, security, equality, human rights, and economic sustainability” (Stomquist, 2007, p. 81). In addition, many colleges and universities around the United States include globalization as part of their mission statements (Stromquist, 2007; Chin, 2005).

The impact of short-term study abroad programs for first year students should be measured to provide administrators a way as to be able to identify the cross-cultural competencies and skills student will acquire by participating in such programs. This study provides a potential global instrument for all institutes of higher education to assess their short-term study abroad programs, and the potential impact on cross-cultural competencies.

**Potential Significance**

While the goals of the Lincoln Commission’s report are lofty, the literature describing the impact on the cultural competencies of our undergraduate students who participate in short-term study abroad programs vary (Salisbury, Umbach, Paulsen, & Pascarella, 2008; Olsen & Lalley,
Additionally, the lack of peer-reviewed literature on the impact of short-term programs on undergraduate students’ cultural competencies underscores the need for formal assessments of such programs (Salisbury, Umbach, Paulsen, & Pascarella, 2008; Olsen & Lalley, 2012).

As short-term study-abroad programs grow in the face of an increase in desire of flexible academic programs and a call to internationalize our U.S. college graduates, a deeper dive into the impact of short-term study abroad programs can help higher education administrators craft curricula that help increase the ability for our college graduates to lead and collaborate in the global workplace. Measuring changes in students’ cultural agility can help administrators understand the specific impacts such programs can have on the cultural competencies of U.S. undergraduate students and to help create a pipeline of future professionals that have the ability to be successful in collaborating and leading in an increasingly global workplace.

Study Assumptions

For this research study, assumptions will be defined as “(a) A statement that is presumed to be true, often only temporarily or for a specific purpose, such as building a theory; (b) The conditions under which statistical techniques yield valid results.” (Vogt, p. 16, 2010).

Additionally, Wargo describes assumptions as generally referring to the characteristics of the data, such as distributions, correlational trends, and variable type” (2015). Some of these assumptions are stricter that others depending on the statistical models being used in the quantitative research design (Vogt, 2015).

This investigation into the impact of study abroad programs is designed around these and the following assumption guidelines:

- The study investigation will be centered around Deardorff’s Intercultural Competence theoretical framework (2006).
The Cultural Agility Self Assessment instrument is valid and reliable (Caligiuri, 2012).

The participants will truthfully self-assess their cross-cultural competencies.

The inclusion criteria of the sample assure the participants have all experienced similar short-term study abroad programs.

Data from multiple groups of will have normal distribution and the same variants.

Overall, this study assumes that data collection, instrument development and data analysis will be completed within the above professional parameters.

Limitations

One of the disadvantages in using a quantitative design of this nature is that it may not able to explore the problem and phenomenon in depth as a qualitative study might (Muijs, 2010). By using a pre-determined instrument, there may be variables that are not thought of or included that also may have an impact on changes in cultural agility that would not be foreseeable. For example, the reasons a student might choose to enroll in a program will be lost by only looking at survey questions, whereas a qualitative study may expose underlying motivations that could play into a student’s perspective on the place, topic or people they would be interacting with on their chosen program. The addition of a qualitative question as part of the analysis will expose more in-depth information and support information gleaned from the quantitative responses.

The quasi-experimental design has its limitations as well. The difficult task of matching a comparison group with the experimental group can lead to the possibility of bias (Muijs, 2010). Self-selection bias, in which someone may decide they would like to participate or not because of their interest in a study or topic, is a concern for many studies (Lavrakas, 2008). For
this particular study, self-selection bias has the potential to decrease the likely difference between the two groups. Students in the cohort are all high achieving and may already have high levels of cultural agility as a result of their desire to be part of this cohort, therefore, strengthening the argument if a level of significance is shown between the two groups. Unknown factors may also affect the results in this case and selection factors may go uncontrolled in the comparison group (Creswell, 2012). In addition to design limitations, the risk of students not completing the surveys will also affect the population to be sampled in the study. Non-response to the survey and small sample size is also a risk with this type of design.

Key Terms and Concepts

**Short-term study abroad.** These programs considered one- to eight-weeks in length (less than a term), usually take place during January or May terms. These programs are often led by faculty members of the student’s home institution. They can also take place as a study tour as part of a semester course, a 6-week summer program and can take place in a variety of cities and countries with multiple sites (NAFSA, 2002).

**Cultural agility.** “the ability to quickly, comfortably, and effectively work in different cultures and with people from different cultures.” This ability to be successful working with people from cultures other than your own is gained by “combining individual skills and abilities, motivation and experience” (Caligiuri, p. 5, 2012). The cultural competencies measured as part of the Cultural Agility Self Assessment (CASA) instrument includes the measures of curiosity, humility, perspective, relationship building, resiliency and tolerance.

**Tolerance of Ambiguity.** Individuals who possess a tolerance for ambiguity are able to suppress anxiety or stress that accompanies perceived uncertainty (i.e. times when
instructions are not well defined, or situations are not clear). They are comfortable in settings when full clarity is not present or possible.

**Perspective Taking.** Individuals who take the perspective of others are able to see situations from multiple viewpoints. They use these viewpoints to understand the meaning of behaviors from others’ perspectives. They also tend to suspend judgment while they seek to understand the lens from which a situation can be interpreted.

**Cultural Humility.** Culturally agile professionals need cultural humility because it enables them to be open to feedback and learning from those who are different from themselves. They see the contextual limits of their knowledge and seek the advice from others. As a result, they are more successful in their cross-cultural roles.

**Resilience.** When working cross-culturally, resilience enables culturally agile professionals to cope with problems, laugh off minor missteps and keep challenges in perspective without feeling overwhelmed.

**Relationship Building.** Individuals who are able to form relationships express a genuine interest in connecting with others on a personal level. They have an ability to form trusting, professional relationships, are naturally sociable and seek opportunities to have meaningful interactions. They enjoy meeting people and getting to know them.

**Cultural Curiosity and Desire to Learn.** Individuals with cultural curiosity have an interest in learning about other cultures. They pursue this interest to form a greater understanding of other cultures. They are more likely to ask questions, independently search for information and read deeply on topics that pertain to other cultures. (Caligiuri, 2012).
**Short-term study abroad.** Faculty-led credit bearing programs, offered during the summer at the University. They average 30 days in length and focus on critical issues facing students and their peers at both the local and global levels. Students participating in these programs complete two courses upon completion.

**Summary**

This study is organized and designed to present background information on cross-cultural competencies using the CASA instrument through the lens of Deardorff’s Intercultural Competence theoretical framework (2006). The mean scores of the Cultural Agility Self Assessment (CASA) instrument are used to determine if there are significant changes in cultural agility of students who have attended a month-long study abroad program after their first year of college (Caligiuri, 2012).

This chapter begins with an overview of the context and background of the problem of practice and then explores the problem statement, the research questions as well as a discussion of Deardorff’s Intercultural Competence theoretical framework, the lens from which to view the problem of practice and research questions. The chapter also includes a section on the research overview including the potential significance, study assumptions and limitations. Chapter two explores globalization within higher education, as well as the CASA, which guides the theoretical frameworks of the study. In addition, Chapter two provides a robust review of the literature to explore the globalization of higher education in the United States as well as intercultural competence, including the specific cross-cultural competencies of cultural agility. A definition of study abroad and the various types of programs institutions offer is provided, followed by factors influencing student choice, the impact of study abroad and different types of program assessments.
Chapter II: Literature Review

Chapter two provides a robust review of the literature to explore the globalization of higher education in the United States as well as intercultural competence, including the specific cross-cultural competencies of cultural agility. A definition of study abroad and the various types of programs institutions offer is provided, followed by factors influencing student choice, the impact of study abroad and different types of program assessments.

Globalization in Higher Education

The Lincoln Commission, created by Congress in 2004 to develop a framework for international study abroad programs, called for an increase of global experiences for the nations’ college students. The Commission’s report, Global Competence and National Needs: One Million Students Studying Abroad called for a bold vision for study abroad for the United States. The Lincoln Commission (2005) states, “promoting and democratizing undergraduate study abroad is the next step in the evolution of American higher education” (p. v). The Commission’s goal was to send one million students to study abroad annually by 2017.

In addition to this call, the Commission has also called for an increase in a globalized American citizenry, to increase the numbers of students completing study abroad programs, creating more opportunity for students to study abroad, and most importantly make study abroad a “cornerstone of undergraduate education” (2005). Short-term study abroad programs have the potential to help the Commission reach its goal of a million students abroad each year in a decade.

The terms globalization and internationalization are tightly connected but are not the same. Altbach and Knight (2007) define globalization as “the economic, political and societal forces pushing the 21st century higher education towards greater international involvement” (p.
Internationalization on the other hand includes the “policies and practices undertaken by academic systems and institutions – and even individuals – to cope with the global academic environment” (p. 290).

Institutes of higher education are affected by globalization in many ways. Maringe and Foskett (2010) describe internationalization as a strategy for institutions of higher education to globalize, often materialized in policies to increase the numbers of recruited international students, growing opportunities for students to study and research abroad, and increasing students’ mobility in the job market that is increasingly knowledge and information based. Maringe was able to identify and rank the five most popularly used strategies for internationalization in higher education as recruitment of international students, student and staff exchange programs, international teaching partnerships, international collaboration in research and entrepreneurship, and the internationalization of curriculum that can often redefine learning objectives, teaching methods and assessment (2010). The call for a greater emphasis on undergraduate study abroad experiences in higher education is also increasing. Government leaders, businesses and educational leaders have all called for a more globalized citizenry (Lincoln Commission, 2005; NAFSA, 2011; Durbin, 2006).

The National Association of International Educators (NAFSA) defines comprehensive internationalization as, “a commitment, confirmed through action, to infuse international and comparative perspectives throughout teaching, research and service missions of higher education” (Hudzik, 2011, p. 6). NASFA is the largest non-profit in the world dedicated to international education, with over 10,000 members at 3,500 institutions worldwide in more than 135 countries (NAFA, 2018). One of their missions is to weave internationalization into the
fabric of higher education. Hosting president and provosts’ summits, they aim to create partnerships to tackle issues of global learning and internationalization (NAFA, 2018).

Study abroad is also endorsed by the Association of American Colleges and Universities (AACU) as a way to prepare students for the global world as well as to help them see a shared future marked by “justice, security, equality, human rights, and economic sustainability (Stomquist, 2007, p. 81). Many colleges and universities around the United States mention globalization as part of their mission statements (Stromquist, 2007; Chin, 2005).

While the aims of higher education may be to determine what students are learning when they study abroad, studies have shown that employers also value the study abroad experience (Trooboff, Vande Berg & Rayman, 2008; Hermans, 2007; Matherly & Nolting, 2007; Franklin, 2010). While most employers place a high value on a students’ academic major when hiring, characteristics that derive from intercultural competencies are valued (Trooboff et al., 2008).

Many stakeholders have different motives for increasing the number of undergraduates who go abroad. As the pressures of globalization force institutions of higher education to internationalize, it is clear that efforts to continue to conduct research regarding the impact of study abroad can help institutes of higher education think about how best to prepare students. Developing curricula that addresses students’ ability to work and thrive in cultures other than their own can help students develop the cross-cultural competencies reflected in the wants and needs of the global workplace.

**Intercultural Competence**

As shown by the variety of study abroad assessments that exist, intercultural competence has been identified as a central need that should be addressed in postsecondary learning however, its definition has no consensus and varies by discipline (Bok, 2006; Cole, 1994; Deardorff,
2006). Intercultural competence is often referred to as cross-cultural competence, global competence, or multicultural competence (Deardorff, 2006; Fantini, 2009). In addition to a variety of definitions, there is also a range of intercultural competency models including intercultural sensitivity (Bennett, 1993), intercultural maturity (King and Baxter Magolda (2005), and the cross-cultural continuum (Cross, 1998).

Deardorff first attempted to study and document a consensus around the term using the Delphi technique to create a model that both lends itself to assessment and can be further developed (2011). There are four key points of this grounded theory-based model, which overall outcome is defined as “effective and appropriate behavior and communication in intercultural situations” (Deardorff, 2011, pg. 66). The first key point is that there is an ongoing process that should give individuals the ability to reflect, the second that critical thinking skills are involved, the third is that attitudes serve as the base of this model and the last being that ability to see others’ perspectives (Deardorff, 2011). The development of cross-cultural competencies can often enable those who are immersed in a different culture the ability to work effectively not only in teams with but others (Caligiuri, Colakoglu, Cerdin & Kim, 2010).

**Cultural agility.**

Cultural agility has been described as “the ability to quickly, comfortably, and effectively work in different cultures and with people from different cultures.” This ability to be successful working with people from cultures other than your own is gained by “combining individual skills and abilities, motivation and experience” (Caligiuri, p. 5, 2012). The cultural competencies measured as part of the Cultural Agility Self Assessment (CASA) instrument includes the measures of curiosity, humility, perspective, relationship building, resiliency and tolerance. The development of cross-cultural competencies is composed of “knowledge, skills, abilities, and
other individual characteristics (KSAOs)” ranging, each on how they can each develop and change (Caligiuri, Ludby, 2015, p. 126). The specific cross-cultural competencies that exist as part of the CASA can be viewed as fitting into Deardorff’s intercultural competency framework as described in chapter 1 (2006).

**Tolerance of Ambiguity.** The concept of tolerance of ambiguity (TA) was originally defined by Frenkel-Brunswik as “an emotional and perceptual personality variable”, developed through case materials from interviews, and has gone through many changes (1948, p. 140). Early psychometric studies attempted to create a valid, self-reported measurement, and were often association with prejudice and authoritarianism (Furnham & Marks, 2013). Frenkel-Brunswik however, attempted to identify behavioral features of TA including various aspects of “emotional and cognitive functioning of the individual, characterizing cognitive style, belief and attitude systems, interpersonal and social functioning and problem-solving behavior” (Furnham & Marks, 2011, p. 717). Most recently, scholars have shifted to acknowledging a more modern definition provided by Ellsberg which explains how subjects will treat risky choices differently from uncertain choices, or ambiguous choices (1961).

**Perspective Taking.** Rooted in the Relational Frame Theory, perspective taking as a cross-cultural competency has been reviewed as part of cognitive developmental literature and can be seen as a “complex and critical set of cognitive abilities” (Y. Barnes-Holmes, McHugh, D. Barnes-Holmes & Hayes, 2004, p. 23). In terms of student development, three domains of human development including cognitive, interpersonal and intrapersonal make up global perspective taking (Engberg & Fox, 2011). As this competency is developed, students are able to have “more complex ways of meaning-making” and the ability to accept cultural differences (Engberg & Fox, 2011, p. 87).
**Cultural Humility.** A review of the literature shows a lack of clarity around the term cultural humility (Bennett, 2009; Mendenhall, 2001; Gregerson, Morrison & Black, 1998). The competency of cultural humility is often lumped together with other indicators of intercultural competence including “suspension of judgement, cognitive flexibility… and tolerance of ambiguity” (Bennett, 2009, p. 129). Bennett defines it as a state of wonder (2009). Opdal refers to the competency as “the state of mind that signals we have reached the limits of our present understanding and things may be different from how they look” (2001, p. 128). Houghton has suggested that Byram’s intercultural communicative competence (ICC) assessment model should be further assessed (2014).

**Resilience.** In relation to students’ experiences abroad, the term resilience can be defined as "the extent to which a person can regulate his or her emotions, maintain emotional equilibrium in a new or changing environment, and deal with the setbacks and difficult feelings that are a normal part of the cross-cultural experience," (Kelley & Meyers, 1995, p. 14). Regardless of environment, the ability to bounce back from minor and major setbacks helps students cope with a variety of setbacks (Caligiuri, 2012).

**Relationship Building.** Important to expatriates and others working abroad, the ability to build successful relationships, and the ability to work internationally has been found as an indicator of success (Caligiuri, 2000; Shaffer, Harrison, Gregersen, Black & Ferzandi, 2006).

**Cultural Curiosity and Desire to Learn.** The three main perspectives driving cultural curiosity research according to Houghton (2014) originally included drive theories, the incongruity perspective, and the competence approach. After a review of the literature concerning cultural curiosity, Lowenstein offered a different definition that interprets curiosity as “a form of cognitively induced deprivation that arises from the perception of a gap in knowledge
or understanding” (1994, p. 74). Lowenstein suggested that students need to be stimulated to want to know more, made aware of their knowledge gaps, and that ability understand that they possess unconscious stereotypes and make predictions based upon them.

**Study Abroad**

Study abroad has been identified as one tool to help institutes of higher education internationalize (Maringe and Foskett, 2010). Kitsantas defines study abroad as all educational programs taking place outside a student’s home country or geographical boundaries (2004), however there are many types of study abroad programs that students can participate in. Different types of study abroad programs from a week to yearlong, are chosen by students for a variety of reasons. Each of these types of programs has benefits and challenges. What one student may find attractive on a long-term study abroad program another may find a barrier.

The traditional study abroad model includes a semester long experience in which college students either directly enroll through their own undergraduate institution or enroll in a third-party provider program typically during their junior year. The IIE, however, has shown that students participating in traditional study abroad programs have decreased from 14% in 1993/1994 to 2.4% in 2015/2016 (Open Doors, 2017). In the same time period, it was shown that students participating in short-term study abroad programs have risen to 63.1%, more than half the total of students who studied abroad in that time period, making short-term study abroad the most popular method of studying abroad by students in the United States currently (Open Doors, 2017). Three alternative models to traditional study abroad have been identified by Sachau et al. to include the study tour, service learning, and summer semester abroad.

The study tour, as identified by Salisbury et al. (2009), can often be viewed as tourism. Typically, there is less time for in depth exploration of topics and sites on these types of
programs because they often visit many cities or countries on seven to twenty-eight-day programs. Goals of the study tour include an increase interest in course topics, the country and people that the students interact with, but the in-depth exploration on these programs is often lacking (Sachau et al., 2010). One of the main goals of these programs is also to help student feel confident in independent travel abroad after the program is finished. Many colleges and universities offer these programs during off times including during a January term, or during a scheduled spring break.

Service-learning trips include international volunteer work and typically last two to six weeks. Experiential learning is at the heart of programs that combine both coursework and community service (Sachau et al., 2010). The goals of service-learning trips include helping students understand the process of how to engage in societal problems while engaging with the local culture. In addition, the trip also has the goal to increase students’ interest in only service. Of the three programs that Sachau et al. (2010) describe, the service-learning trip is the most challenging for both students and faculty.

Summer semester abroad, one of the most popular short-term study abroad options, typically consists of a time period of six to twelve weeks where students live on campus and take courses. Students are able to participate in independent travel as most academic programming takes places during the weekday. Sachau et al. (2010) have described the goals for this type of program to include “helping student gain in depth information about the course topic and increasing student interests in local country, sites and people” (p. 651). Another important goal of this type of program is the ability to help increase students’ confidence to live and travel abroad on their own. Kehl and Morris describe these summer programs as “Island Programs”, (2007, p. 68) or self-contained programs where students take courses with classmates from their
own institution abroad. In these programs, faculty from the home institution are hired and develop the courses and itinerary of the summer program.

Kehl and Morris would consider the programs under review in this study as “Island Programs”. This short-term study abroad program provides students with a structured short-term study abroad program similar to an Island Program, in that students are travelling with a university faculty member for a minimum of thirty days, taking up to two classes of coursework in a combination of cultural, language and in-depth information about the particular academic topic they are covering. In addition, the programs are often seen as stepping-stones for students to feel comfortable enrolling in a more traditional study abroad program, or even working abroad.

The next section of the paper reviews the choices that students make about study abroad and what factors influence those choices. Short term study abroad programs often open up the world to students who may not typically attend traditional study abroad programs by providing a model that can potentially have a significant impact in the ways a traditional study abroad model has on undergraduate students.

Factors Influencing Student Choice.

There are many factors that influence a student’s decision to study abroad including cultural capital gained before and during the first year of college and socioeconomic status (Salisbury, Umbach, Paulsen, & Pascarella, 2009). There are also many reasons why students do not choose to embark on a traditional semester abroad including the lack of financial, human, social and cultural capital (Salisbury et al., 2009). Short-term study abroad programs can help combat those deficiencies by offering students who may not choose the traditional model a
chance to have a global experience that has the potential to have a similar impact on a student as a traditional semester abroad (Dwyer, 2004; Kehl & Morris, 2007; Olson & Lalley, 2012).

The type of program that a student may choose for a study abroad experience can differ for many reasons. Students in different academic fields have different motivations and reasons for selecting certain types of study abroad programs. Business and science, technology, engineering and mathematics (STEM) students increasingly select short-term study abroad programs to gain international study experiences (Tucker, Gullekson & McCambridge, 2011; Fitzsimmons, Flanagan, & Wang, 2013; Desoff, 2006). In addition, Salisbury, et al. (2008) used an analysis of the Wabash National Study of Liberal Arts Education (WNSLAE) to find a connection between students’ socioeconomic status (SES) and the knowledge they gain before and during their first year of college. These factors and more can have a significant impact on what types of programs students choose to participate in, if they choose to participate in a global experience at all.

Goel, De Jong, and Schnusenberg (2010) used the Theory of Planned Behavior (TPB) and trait theory to explain students’ intention to study abroad. They argue that the ad-hoc nature of the current models of assessment for why student decide to study abroad has led to a fragmented set of literature. The TPB was used to show that when behavioral beliefs are accounted for, academic support and costs are not a significant factor in choosing to study abroad (Goel, De Jong, and Schnusenberg, 2010, p. 260). They also found mixed support in their study for the influence on personality traits including, “conscientiousness, extraversion, and openness to experience” on study abroad participation (Goel et al., p. 261). Their main contribution to the literature is the framework in which they are able to use the TPB to explain how and why students form intentions to participate in study abroad programs. This type of research is useful
in both developing and marketing programs depending on students’ intentions and personal traits.

Fitzsimmons, Flanagan and Wang (2013) also used the TPB to predict students’ intention to study abroad in long and short-term programs. They were able to determine that students perceived more social pressure to participate in short-term study abroad, and that there were higher barriers to long-term study abroad programs. Their study was done to help improve marketing of short and long-term study abroad by addressing student concerns that they may have for a specific type of program. Their results showed that there are “significant differences in students’ pre-application assessment of their intentions to attend short-term versus long-term study abroad programs” (p. 132). In addition, these differences they stated, “can be partially attributed to differences in student perceptions of attitudes, subjective norms, and behavioral control” (p. 132). Fitzsimmons et al. (2013) found no difference in the attitudes of students towards short and long-term study abroad programs in terms of personal development and learning. This important finding can have a potential impact on how study abroad professionals can market different programs to students depending on those perceptions of the different programs.

In addition to examining factors that influence why students study abroad, Salisbury, et al. (2009) looked to analyze the implications of their findings for faculty, administrators and policy makers who seek to increase the numbers of students studying abroad (2009). Salisbury et al. used a data analysis from the Wabash Study of Liberal Arts Education (WNSLAE) to demonstrate a “complex interplay between SES, accumulated pre-college capital, and capital acquired during the freshman year” (p. 119). They found a positive correlation with SES on the influence on study abroad. Lower income students, they also found, are “less likely to plan to
study abroad than higher income students” (p. 133). In addition, they found students who receive financial aid are 11% less likely to study abroad, pointing to the financial barriers that students can also face (Cole, 1991; Lincoln Commission, 2005; Desoff, 2006).

An important piece of information gleaned from the Salisbury and associates (2009) study includes the finding that students who have accumulated high social and cultural capital before and during the first year of college saw an increase of intent to study abroad by 21%. The gender gap in study abroad programs was also identified by Salisbury et al. to be 8% less for males (2009). This suggests that the intent to study abroad must be cultivated for some students early on in their academic career, before students even begin their college career.

Allen (2010) was able to gain a better sense of how students’ motives and goals shape how they view their short-term study abroad experience. While her case studies in activity theory focused on language acquisition, she was able to show that different motives for language acquisition result in different learning outcomes for students depending on their goals before they started their international program. Being able to help frame students’ expectations for such programs can help administrators to develop programs that are in line with student goals as well as institutional goals.

He and Chen (2010) sought to understand how students’ perceptions influence the selection of study abroad programs and were able to provide promotional strategies for institutions promoting summer programs. By studying three main components of study abroad choice including students’ behaviors during the trips, students’ perceptions of the trip, and demographic profiles, they found it would be beneficial for institutions to promote short-term study abroad programs that consist of two to four weeks long. They were also able to show that
there was a weak significance in gender differences for motivation and activity preferences for these types of programs.

It is clear from a review of the literature, that students have different motivations for the reasons they decide to study abroad. Often times those motivations can influence learning outcomes and the meaning making that happens while abroad. Short-term study abroad programs can potentially have an impact on underrepresented students by providing an opportunity for a structured, supported program that both costs less than a traditional study abroad model, and one that can be potentially covered by financial aid. The simple solution of reducing the costs of study abroad programs is not the only way to help students start investigating global opportunities. As the Lincoln Commission and others call for a democratization of study abroad programs, short-term study programs should be marketed to reach underrepresented groups of students using the information from previous studies to target disparities that remain in participation.

**Impact of Study Abroad Programs.**

The educational goals of a short-term study abroad program often include helping the student gain a deeper understanding of the culture of the country they are in, as well as gain a deeper understanding of the topic they are studying (Kehl & Morris, 2007; Clarke, Flaherty, Wright, & McMillen, 2009; Anderson, Lawton, Rexeisen & Hubbard, 2005; Mapp, 2012; Chieffo & Griffiths, 2004; Olson & Lalley, 2012). The impact that study abroad programs can have on students has been measured in many ways. The benefits of going abroad have been found to help students with personal and professional growth, influence future choice of major, improve cultural awareness and sensitivity and improve emotional resilience (Dywer, 2004; Ingraham & Peterson, 2004; Chieffo and Griffiths, 2004; Olson & Lalley, 2012; Mapp, 2012).
The majority of literature points to the benefits of study abroad, with just a small amount of emphasis on short-term programs.

Studies have shown varied impact on students who return from study abroad experiences. Chieffo and Griffiths have shown that “global mindedness, intercultural awareness, personal growth and development, and awareness of global interdependence” have all been identified as factors that have increased for students after completing a short-term study abroad programs (2004, p. 167). Olson and Lalley have also shown that short-term study abroad programs can encourage students to become involved in additional international activities (2012).

The meanings that students make on short-term study abroad programs can often influence students to think about their academic careers in a different way, give them new ideas and understanding about social issues and privilege (Jones, Rowan-Kenyon, Ireland, Neihause & Skendall, 2012; Allen, 2010). Jones et. al (2012) used a constructivist theoretical framework to investigate students on short-term immersion programs and the meaning they make from their experiences. While their focus was both domestic and internationally based, they were able to show that by pushing students out of their comfort zone, students gained a better understanding of both privilege and understanding about social issues and cultures. They were also able to frame their global experiences in a way that helped them reframe what they found important in the world (2012). This type of transformative learning is one of the impacts that short-term study abroad can have on undergraduate students.

Dwyer’s (2004) study of the impact of study abroad program duration confirms that the long-held notion that more is better; or the longer student are abroad the more they achieve “academic, cultural development and personal growth” (p. 151). She reported on a study conducted by the International Education of Students (IES), on the longitudinal correlations
between program features including “language study, housing choice, duration of study, enrollment in foreign university courses, participation in an internship or field of study, among others – and a variety of student outcomes” (p. 152). This study was pulled from 50 years of data from over 45,000 students.

Ingraham and Peterson (2004) completed a three-phase study at Michigan State University (MSU) in which they outlined the goals for study abroad at their university. In doing such, they were able to measure how MSU’s study abroad programs meet those goals. Through student self-assessment, faculty observation, secondary analysis, and surveys by other campus units, they were able to find that MSU study abroad programs have an impact on students’ personal growth, intercultural awareness, and depending on the discipline, an impact on the professional development of students.

Much of the literature on study abroad assessments focus on the impact of global awareness of students who participate in these programs. Different researchers have different definitions of what global awareness means. Chieffo and Griffiths (2004) completed a large-scale assessment of student attitudes after a short-term study abroad program at the University of Delaware (US) to determine if these experiences had an impact on students’ global awareness as measured by, “intercultural awareness, personal growth and development, awareness of global interdependence; and functional knowledge of world geography and language” (2004, p. 176). The study was not aimed to measure actual impact, but perceived impact.

Olson and Lalley’s (2012) evaluation of a short-term, first-year study abroad program for business and engineering students is one of the only pieces of literature that addresses both short-term and first year study abroad programs. They assessed student-learning outcomes of their Plus3 program at the University of Pittsburg where students take a two-week international trip
after semester long courses finish in the spring. Olson and Lalley evaluated students after the program, and again two to three years later to determine the impact of this program on students’ propensity to study abroad again, if they were to undertake additional language in the future, and if their sense of teamwork and cultural sensitivity had improved. Their results showed that about half of the students who participated in the Plus3 program planned to participate in another experience abroad, whether to study or work. A third of the respondents continued their language study, though it was more likely that business students would go abroad again in comparison to the engineering students. A majority of the respondents believed that both their teamwork and cultural sensitivity in terms of interacting with people from other cultures improved.

**Program Assessment.**

Assessments of study abroad programs have found outcomes that show different outcomes of personal and professional growth, influence future choice of major, improve cultural awareness and sensitivity and improve emotional resilience (Chieffo and Griffiths, 2004; Dywer, 2004; Ingraham & Peterson, 2004; Mapp, 2012; Olson & Lalley, 2012). While studies have been conducted on why students choose to study abroad and why they choose certain types of programs, there is a lack of information in peer-reviewed literature on the impact of short-term programs, especially for first-year students (Salisbury, et al., 2008; Olsen & Lalley, 2012).

In late 2002, using the IES Model Assessment Program (The IES MAP®) the IES was able to evaluate study abroad programs in terms of “student learning environment, intercultural development, resources required for academic and student support, and program administration and development” (p. 153). The study included data on full year programs, semester programs and summer programs from six to seven weeks. The study found that students who participated
in full year programs were 20% more likely to study abroad more than once and were more likely to choose their college based on the ability to study abroad. Most importantly, full year study abroad students were more likely to change majors, increase their interest in academics, and more apt to enroll in graduate school. Only six percent of the participants in this study partook in a summer long study abroad experience. As short-term study abroad programs were not as popular in 2002 as they are now, a reassessment of the impacts should be measured for short-term programs, as the popularity of these programs has risen.

Chieffo and Griffiths (2004) found differences in the demographics of the group they studied, compared to a control group who did not travel abroad. The group that travelled abroad was found to be “disproportionally female, contained fewer freshman, and included more students with natural science and pre-professional majors than those majoring in the humanities and social sciences” (p. 169). Chieffo and Griffiths found that personal growth and development was significant for a majority of students. They also found that 27% of the respondents who participated in short-term study abroad included responses that related to personal growth in terms of “adaptability, flexibility, patience, responsibility, respect for others and appreciation for the arts” (p. 173). This study did not use a standardized or pre-post design and had a sample size under 30. More robust research is needed to determine what kind of quantifiable change these programs have for a larger population of undergraduate students.

*Cross-Cultural.* Mapp’s (2012) study on the effect of short-term study abroad programs on cultural adaptability used a pre-post design, often what is lacking from many assessments of these program. She used a quantitative study to measure the effect of short-term study abroad programs on undergraduate students’ cross-cultural adaptability. Using the Cross-Cultural Adaptability Inventory (CCAI) Mapp (2012) determined that short-term study abroad can
produce a significant change in cultural adaptability for trips as short as nine days. The greatest amount of change was occurred on the subscale of Emotional Resilience, which the CCAI authors describe as “the extent to which a person can regulate his or her emotional equilibrium in a new and changing environment, and deal with setbacks and difficult feelings that are a normal part of the cross-cultural experience” (Kelley & Meyers, 1995, p. 14).

Intercultural sensitivity is also used to measure the impact of study abroad programs. Anderson, Lawton, Rexeisen and Hubbard (2005) used the Intercultural Development Inventory (IDI) manual to assess the ‘extent to which a short-term faculty-led study abroad program can affect the cross-cultural sensitivity of student learners” (p. 457). Taking out academic objectives from the study, they were able to show that preliminary information points to a positive impact of short-term programs in the form of four-week trips on intercultural sensitivity. Though their sample size was small, the study helped them to find that students “lessened their tendency to see other cultures as better than their own and improved their ability to accept and adapt to cultural differences” (p. 464). Their small sample size limits the ability to draw any larger conclusions from the data and shows that additional studies of short-term programs should be done to help students achieve a greater sense of intercultural sensitivity.

Global Awareness and Global Mindedness. World-mindedness and Global-mindedness are two main terms used to assess study abroad programs (Douglass & Jones-Rikkers, 2001; Kehl & Morris, 2007; Clarke, Flaherty, Wright and McMillen, 2009). Clarke, Flaherty, Wright and McMillen (2009) investigated potential “intercultural proficiencies expected from a semester abroad program” for US students (p. 175). They investigated four main research questions to measure multidimensional characteristics of intercultural proficiency. Clarke et al. (2009) used both the Global Mindedness scale (Hett, 1993) as well as Olson and Kroeger’s (2001)
Intercultural Sensitivity Index (ISI) to measure the impact of study abroad programs in terms of global mindedness, intercultural communication, openness to diversity, and intercultural sensitivity. The study showed that students who have studied abroad for a semester show a greater sense of global mindedness than those who do not study abroad. In addition, those students also showed a significant difference in cultural pluralism, efficacy, and interconnectedness (Clarke et al., 2009).

Study abroad programs often are designed to expose students to unfamiliar cultures. Douglas and Jones-Rikkers (2001) surveyed students on a study abroad program (SAP) to measure the world-mindedness and the extent to which individuals see the value in different perspectives of global issues. The authors used the Scale to Measure World-minded Attitudes developed by Sampson and Smith (1957). By measuring the cultural difference between the student’s point of origin and the host site abroad, they were able to determine that the greater the difference, the greater the world-mindedness gained. Short-term study abroad programs have the potential to take students to places they would not feel comfortable going themselves. As the number of short-term study abroad programs, there has also been an increase in the potential countries and areas of the world that would not have a traditional study abroad model in place, especially in the developing world, adding to the greater cultural difference experience for the student.

Kehl and Morris’ (2007) study of the differences in global-mindedness between short-term and long-term study abroad participants was done to add to the study abroad literature by studying the global-mindedness of students who participated in three different private university programs. Their study used a quantitative focus with a large sample size to examine program duration along with global-mindedness in what they termed “island programs”, or short-term
study abroad programs (p. 72). Also using Hett’s Global-Mindedness Scale (1993), they were able to measure the differences in global mindedness from those who study abroad eight weeks or less and a semester. Interestingly, noted was the propensity for students’ who parents’ income was above $100,000 to have lower levels of global-mindedness. Kehl and Morris’ study showed a significant difference exists in the global mindedness of students who study for less than eight weeks as compared to a whole semester abroad.

Short-term study abroad programs have been shown to have different impacts on the students who undertake them. The literature shows a variety of small evaluations that could benefit from a more robust methodology and breadth of programs to study. Short-term study abroad programs, even with lengths under a month’s time can have an impact in student resiliency, and cross-cultural adaptability, characteristics needed in an increasingly global economy. Measuring the impact of both of these areas of personal development for students is important for study-abroad professionals as they prepare students to compete in a more globalized economy and world. It is necessary to measure how student gain global proficiency and adaptability, to advocate for an increase in study abroad programs.

Summary

As pressures of globalization force institutions of higher education to internationalize, it is clear that efforts to continue to conduct research regarding the impact of study abroad are needed. Developing curricula that addresses students’ ability to work and thrive in cultures other than their own is can students develop the cross-cultural competencies reflected in the wants and needs of the global workplace. While the variety of assessments of study abroad programs point to the lack of consensus around a definition of intercultural competence (Bok, 2006; Cole, 1994; Deardorff, 2006), Deardorff’s framework for intercultural competence can provide researchers a
tool to determine if study abroad should be a goal and fundamental part of an undergraduate education.
Chapter III: Methodology

The previous chapters presented information on different stakeholders’ motivations to internationalize the curriculum in academia and help create a workforce that is ready and able to lead in a globalized marketplace. Cultural agility was explained as the “ability to quickly, comfortably, and effectively work in different cultures and with people from different cultures (Caligiuri, 2012, p.5).” Understanding changes in students’ cross-cultural competencies is important in order to understand the impact that short-term study abroad programs may have on undergraduate students. Additionally, a robust review of the literature showed that the variety of assessments of study abroad programs point to the lack of consensus around a definition of intercultural competence, and what measurements are used to determine the impact short-term study abroad programs may have on students.

The purpose of this mixed methods study is to determine if high-achieving first-year undergraduate students show significant changes in cultural agility (the ability to quickly, comfortably, and effectively work in different cultures and with people from different cultures) after attending a short-term study abroad program provided by the University. The following section will present and discuss the research methodology, research design, population and sample design, sample strategy, data collection and analysis plan, and steps to maintain trustworthiness and validity of the study. In addition, the role of the researcher, human subjects and ethics procedures, and limitations of the study are addressed.

Overview of Methodology

A mixed-method, quasi-experimental design, incorporating pre and post experience testing, was selected as the methodology to conduct this study. This study utilized the Cultural Agility Self-Assessment (CASA) to measure changes in a cohort of high achieving first-year
students’ cross-cultural competency before and after participating in a short-term study abroad experience (Caligiuri, 2012). This ability to be successful working with people from cultures other than your own is gained by combining individual skills and abilities, motivation and experience. Measuring the cultural agility of students who participate in such programs can help administrators understand the impact of students’ experiences and create compelling, impactful programs that can help students develop important cross-cultural competencies thus helping them lead and compete in a globalized economy. Changes in cross-cultural competencies of the CASA have been measured and variables analyzed to look for possible explanations for those changes (Fraenkel, Wallen, & Hyun, 2011). In addition to the quantitative assessment, a qualitative analysis of open-ended survey questions was analyzed to understand student perceptions to provide context to the quantitative analysis.

The primary research question framing this doctoral thesis is: Do short-term study abroad programs conducted by the University have an impact on undergraduate students’ cultural agility? Additional sub-questions include:

1. Is there a significant change in students’ cultural agility after a participation in a faculty led short-term study abroad program compared to students who do not participate?
2. Is there a significant change in students’ cross-cultural competencies after participation in a faculty let short-term study abroad program versus those who do not participate?
3. What other factors play a role in students’ cultural agility?
4. What are students’ perceptions of cross-cultural competencies and their role in the ability to work effectively with others?
When implementing an intervention in a natural setting such as a study abroad experience, it is difficult to randomly assign students to particular groups. Because random allocation of students is not possible, quasi-experimental design is best suited for this study (Creswell, 2012). The main difference in experimental and quasi-experimental designs is the ability for the researcher to select a comparison group that is similar as possible to the experimental group (Muijs, 2010). The pre and posttest design allows the researcher to better understand and describe the impact of short-term study abroad on a group of undergraduate students.

The CASA survey was used as the instrument to measure student characteristics pre and post short-term study abroad experience (Caligiuri, 2012). Two groups of high achieving first-year students were surveyed for this study, a group of students who participate in the short-term study abroad program and students who did not, the treatment and control groups, respectively. The groups have been allocated by additional demographic categories to help investigate how short-term study abroad may impact students’ cultural agility (Caligiuri, 2012). For these reasons, a quasi-experimental design incorporating pre and post experience testing, is best suited to help describe how students’ measures of cultural agility may or may not change as a result of their short-term study abroad experience. In addition, the students have been asked open ended questions to provide context to the quantitative data.

Specifically, while looking at changes in cultural agility, there are different types of relationships between variables that can be explored using quasi-experimental design. Some of these variables include the country of study, the academic major of the student, the level of faculty support while abroad, and the ability to reflect on the experience. These variables and more can also have an impact on the changes in cultural agility of the students who participate in
short-term study abroad programs (Williams, 2005; Pedersen, 2010, Kauffman, 1992). By both describing the changes and relationships in variables post short-term study abroad experience, relationships between variables in real-life contexts can be explained (Muijs, 2010). Many studies have compared the impact of long-term versus short-term study abroad (Fitzsimmons, Flanagan & Wang, 2013; Kehl & Morris, 2007; Dwyer, 2004), but the changes that occur in students as a result of a short-term abroad experience early on in their academic careers have not been fully explored.

**Overall Research Design**

The purpose of this mixed method quasi-experimental study is to determine if high-achieving first-year undergraduate students make significant gains in cultural agility after attending a short-term study abroad program. The CASA survey was be used to measure changes in students’ cross-cultural competency (Caligiuri, 2012). This study was conducted in four phases (Figure 2).

*Figure 2. Research Process Phases*
The first phase of the research process consisted of identifying, recruiting, and enrolling participants. This phase was initiated after IRB approval was obtained at the research site. Participants were required to electronically sign an IRB approved informed consent form as part of the post-survey assessment.

The second phase of the research process included collecting data with the CASA instrument and preparing it for data analysis. The third phase consisted of analyzing data and organizing it into tables for interpretation. This final phase consisted of developing study conclusion based on the key findings that resulted from the data analysis process. Findings were interpreted using insights from theory and implications for practice and future research.

Population & Sample Design

The research site for this study is a large private, urban institution of approximately 15,000 undergraduate enrollments located in the northeast United States, referred to herein as the “University”. The University has a unique short-term study abroad model that other institutions could look to as a model for developing programs to help encourage more students to study abroad. The target population is first-year high achieving students attending a faculty led short term study abroad program in the summer of 2018. Compared to the general population of first year students at the University, this population shows an average SAT score of 82 points higher, and an average high school weighted GPA .35 points higher.

This population was used because the students of this Program cohort have been offered a scholarship to cover the cost of their fee for participation, reducing a financial burden, thereby increasing the potential participation of students who otherwise may not be able to afford to go abroad. The short-term study abroad programs under investigation are 30 days in length, take place in countries all over the world, and are led by the university’s faculty, deeming them
‘faculty-led’ programs. These programs were chosen because of researcher’s personal experience organizing and traveling abroad with participating students and experiencing how short-term study abroad programs can help shape the undergraduate student experience. Participants of the short-term study abroad programs had a minimum 3.0 GPA and were chosen by faculty who led the trips.

All first-year students in a high achieving cohort at the University referred to herein as the “Program” completed the CASA in the fall of 2017 as part of a one-credit, introduction to college course. The researcher gained a letter of support from the Program director to continue the study with a post-experience test to learn more about the impact of these short-term programs. Each student, upon completion of their CASA survey in the fall of 2017, received a print-out of their cultural agility scores and an assessment and description of their scores. In order for the researcher to conduct a quasi-experiment, a comparison group of students who are not participating in programs was also tested. Therefore, two distinct groups were tested for this study, the sample that received the intervention, or the “treatment group” and the short-term study abroad experience, and those who did not, or the “control group”.

**Sampling Strategy**

The study consists of students who are first year high achieving students at the University. This study utilized a non-probability sampling strategy, specifically convenience and purposive sampling, to recruit and enroll participants (Fraenkel, Wallen, & Hyun, 2011). Students who are known to have participated in the Program were purposefully selected and recruited to participated in the study based on their availability to the researcher.

Regarding sampling size for research, the Central Office for Research Ethics Committees (2007), states “the number should be sufficient to achieve worthwhile results but should not be
so high as to involve unnecessary recruitment and burdens for participants.” Sampling size includes three factors, significance level, power, and effect size (McCrum-Gardner, 2010). Power analyses can help researchers determine what sampling size is necessary to conduct a study and the likelihood of identifying a difference (Jones, Carley & Harrison, 2003; Fraenkel, et. all, 2011). A power analysis for a Repeated Measures ANOVA with two groups and two measurements was conducted in G*Power to determine a sufficient sample size using and alpha of 0.05, a power of 0.95, and a medium effect size ($f=0.25$) (Faul et al., 2013). Based on the aforementioned assumptions, the desired sample size was 54.

In the summer of, 2018, 325 of the 632 students who took the initial CASA participated in short-term study abroad programs. The researcher included additional information regarding demographic information for the students to fill out for the post-test that was not included in the CASA assessment in the fall of 2017. As the post-test survey was not be part of a class assignment, the researcher provided a student incentive of the chance to win one of 10 $20 Amazon gift cards to offer students for their participation. To help increase the response rate, the researcher also worked closely with the Program advisors, who work closely with students of the cohort, to encourage students to complete the survey.

To complete the post-test CASA and demographic questions, students were sent an email with a link to complete the survey in was recorded via a Qualtrics. The survey was open for one-month, from mid-December 2018 to mid-January of 2019. A series of emails was sent by the Program to remind students of their ability to participate in the study.

**Participant Profile**

Of the original 632 students who initially took the CASA in the fall of 2017, each of whom was invited to take the post survey, 142 post CASA surveys were recorded. Fifteen
responses were removed due to incompletion of all survey questions. The control group is defined by the 37 students who completed the survey did not go abroad in the summer of 2018. To keep the sample sizes the same, a random number generator was used to create a random sample of 37 students who attended a short-term study abroad program, defined as the treatment group. The total N for the study’s final sample analyzed is 74.

Results from basic descriptive statistics revealed the total sample for participants consisted of 49 female (66.2%) and 25 males (33.8%) first year undergraduate students. 5.4% of respondents identified as having Spanish of Latinx ancestry, while 62.2% identified as white/Caucasian, 27% as Asian, 5.4% as multiracial/multiethnic, 2.7% as Black/African American and 2.7% of the students identified as international as shown in Table 1. This finding skews similarly to the national trends in study abroad, consisting of a majority of white females (IIE, 2017).

Table 1

<table>
<thead>
<tr>
<th>Ethnicity/Race</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black/African American</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>Asian</td>
<td>20</td>
<td>27.0</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>46</td>
<td>62.2</td>
</tr>
<tr>
<td>Multiracial/Multiethnic</td>
<td>4</td>
<td>5.4</td>
</tr>
<tr>
<td>International student</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As shown in Table 2, the respondents of the study comprise a variety of majors, with a majority identifying from engineering (28.4%), computer science (10.8%), followed by biology (6.8%), and behavioral neuroscience, chemistry, and economics, each at 5.4% respectively. The majority of students who responded (77%) did not take any college language courses, 14.9% took 1 course, 6.8% took 2 courses, and 1.4% of students took more than 4.
Table 2

Study Sample by Major

<table>
<thead>
<tr>
<th>Major</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture</td>
<td>3</td>
<td>4.1</td>
</tr>
<tr>
<td>Art</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Behavioral Neuroscience</td>
<td>4</td>
<td>5.4</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>3</td>
<td>4.1</td>
</tr>
<tr>
<td>Biology</td>
<td>5</td>
<td>6.8</td>
</tr>
<tr>
<td>Business Administration</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>Chemistry</td>
<td>4</td>
<td>5.4</td>
</tr>
<tr>
<td>Computer Science</td>
<td>8</td>
<td>10.8</td>
</tr>
<tr>
<td>Economics</td>
<td>4</td>
<td>5.4</td>
</tr>
<tr>
<td>Engineering</td>
<td>21</td>
<td>28.4</td>
</tr>
<tr>
<td>Entrepreneurship and Innovation</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Health Science</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>International Business</td>
<td>3</td>
<td>4.1</td>
</tr>
<tr>
<td>Journalism</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Marketing</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>Mathematics</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>Nursing</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Pharmaceutical Sciences</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>Political Science</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Theatre</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Data Collection

The quantitative measurements collected in this study focused on the attributes that measure students’ cultural agility (Caligiuri, 2012). In order to retain this information, a pre and post-test survey were administered using Caligiuri’s CASA instrument, as well as a series of questions concerning demographic and programmatic information. Permission to use the scale was sought and approved by Paula Caligiuri, founder of TASCA Global. The entire cohort of the Program, whether or not they are participating in a faculty led short-term study abroad
program, were invited to participate in a post-experience survey. An online survey was the platform for both the pre and post experience survey. The researcher gained access to students via the Program who sent an invitation and link to the post-test survey in December of 2018.

The CASA was developed to understand how global executives are able to “quickly, comfortably, and effectively work in countries and with people from different countries” and was not developed exclusively for college students (Caligiuri, p. 5, 2017). Any age group, cultural group, or nationality may complete the instrument, however. For the purposes of this study it was used to measure the change in cultural agility of a cohort of high-achieving first year undergraduate students before and after a short-term study abroad experience. The values inherent in Deardorff’s Intercultural competence framework consisting of openness, cultural self-awareness, and effective intercultural communication, are purported to be honed in a short-term study abroad and make this an ideal framework for conducting the current study (2006). The six cross-cultural competencies of cultural agility are as follows:

**Tolerance of Ambiguity.** Individuals who possess a tolerance for ambiguity are able to suppress anxiety or stress that accompanies perceived uncertainty (i.e. times when instructions are not well defined, or situations are not clear). They are comfortable in settings when full clarity is not present or possible.

**Perspective Taking.** Individuals who take the perspective of others are able to see situations from multiple viewpoints. They use these viewpoints to understand the meaning of behaviors from others’ perspectives. They also tend to suspend judgment while they seek to understand the lens from which a situation can be interpreted.

**Cultural Humility.** Culturally agile professionals need cultural humility because it enables them to be open to feedback and learning from those who are different from
themselves. They see the contextual limits of their knowledge and seek the advice from others. As a result, they are more successful in their cross-cultural roles.

**Resilience.** When working cross-culturally, resilience enables culturally agile professionals to cope with problems, laugh off minor missteps and keep challenges in perspective without feeling overwhelmed.

**Relationship Building.** Individuals who are able to form relationships express a genuine interest in connecting with others on a personal level. They have an ability to form trusting, professional relationships, are naturally sociable and seek opportunities to have meaningful interactions. They enjoy meeting people and getting to know them.

**Cultural Curiosity and Desire to Learn.** Individuals with cultural curiosity have an interest in learning about other cultures. They pursue this interest to form a greater understanding of other cultures. They are more likely to ask questions, independently search for information and read deeply on topics that pertain to other cultures. (Caligiuri, 2012).

For the purpose of this study, the copywrite CASA instrument was used to measure each of these subscales using a 6-point Likert scale consisting of a total of 50 questions. The researcher included demographic and program engagement information as part of the information request from students on the post-test survey. The Likert scale for this instrument has a range of 1 to 6, with 1 as being completely disagree, and 6 as completely agree.

Students received an email link to take the post-experience survey. It was distributed by the Program who had access to student’s email addresses. The survey was open for one month. Students received three reminder emails sent out at regular intervals to remind them to complete it. Students completed both the demographic and CASA questions in Qualtrics.
Data Analysis

The primary research question framing this doctoral thesis is: Do short-term study abroad programs conducted by the University have an impact on undergraduate students’ cultural agility? Additional sub-questions include:

1. Is there a significant change in students’ cultural agility after a participation in a faculty led short-term study abroad program compared to students who do not participate?

2. Is there a significant change in students’ cross-cultural competencies after participation in a faculty led short-term study abroad program versus those who do not participate?

3. What additional variables play a role in cultural agility for students who participate in short-term study abroad programs?

4. What in general are students’ perceptions of cross-cultural competencies and their role in the ability to work effectively with others?

Hypotheses

1. Students who participate in a short-term study abroad program provided by the University will show a significant difference in cultural agility scores compared to students who do not attend a short-term study abroad program.

2. Students who participate in a faculty led short-term study abroad program provided by the University will show a significant change in cross-cultural competencies after participating.

3. Other factors play a role in students’ cultural agility.
4. Students’ perceptions of cross-cultural competencies may lead to the ability to work effectively with others.

Null Hypotheses

1. There is no significant difference in cultural agility between first year students who participate and those who do not participate on a short-term study abroad program.

2. Students who participated in a faculty led short-term study abroad program provided by the university will not show any significant changes in cross-cultural competencies.

3. Other factors do not play a role in students’ cultural agility and cross-cultural competencies.

4. Students’ perceptions of cross-cultural competencies may not lead to the ability to work effectively with others.

Independent Variables: Participation in short-term study abroad, non-participation in short-term study abroad, gender, and ethnicity

Dependent Variables: Cultural agility, cross-cultural competencies including tolerance of ambiguity, perspective taking, cultural humility, resilience, relationship building, and cultural curiosity. Below, figure 3 outlines the research question, variables and data analysis plan.
<table>
<thead>
<tr>
<th>Research Question:</th>
<th>Variables:</th>
<th>Data analysis plan:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there a significant change in students’ cultural agility after a participation in a faculty led short-term study abroad program compared to students who do not participate?</td>
<td>Independent variables: • participation in short-term study abroad program • non-participation in study abroad Dependent variable: • cultural agility</td>
<td>Repeated Measures ANOVA (RM-ANOVA) • between subject analysis • to control for type 1 error</td>
</tr>
<tr>
<td>Is there a significant change in students’ cross-cultural competencies after participation in a faculty let short-term study abroad program versus those who do not participate?</td>
<td>Independent variables: • participation in short-term study abroad program • non-participation in study abroad Dependent variables: • tolerance of ambiguity, perspective taking, cultural humility, resilience, relationship building, cultural curiosity</td>
<td>Repeated Measures ANOVA (RM-ANOVA) • between subject analysis • to control for type 1 error</td>
</tr>
<tr>
<td>What additional variables play a role in cultural agility for students who participate in short-term study abroad programs?</td>
<td>Independent variables: • Gender, ethnicity, orientation, reflection, housing type, faculty type, host national interaction Dependent variable: • cultural agility</td>
<td>Repeated Measures ANOVA (RM-ANOVA) • within-subject analysis • to control for type 1 error</td>
</tr>
<tr>
<td>What are students’ perceptions of cross-cultural competencies and their role in the ability to work effectively with others?</td>
<td>Qualitative analysis</td>
<td>Open ended question analyzed using NVivo 12</td>
</tr>
</tbody>
</table>

**Figure 3. Data Analysis by Research Question**

The design of this study compares the mean scores of students’ cultural agility to determine if there is a significant difference in scores between those who attend a short-term study abroad program and those who do not. The means scores of the control group, the students who did not travel, will be compared to the treatment group, the group that does participate in a faculty led short term study abroad program. The quasi-experimental group of students completed a short-term study abroad program of a minimum of thirty days, while the comparison group consists of students who did not to determine if there were significant changes in cultural agility after completing their respective academic experiences (Caligiuri, 2012). The data was collected after each group has completed the post-test and were matched by email. Identifiers
were then removed including names and identification numbers of the students to insure anonymity of subjects. The data was then imported into IBM SPSS for analysis.

As Muijs (2010) explains, univariate analysis can help us determine if there are any errors in the data by looking at information that might be out of the range or possible values. This type of descriptive analysis can also help us by looking at frequency of responses for certain groups. In a sense it gives an overview of how people respond to our research questions. Descriptive statistics also allow researchers to describe and summarize information that is captured by raw data (Fraenkel, Wallen, & Hyun, 2011). A review of individual variables can provide important information and help us look for mistakes that may have taken place during the data input process (Muijs, 2010).

The first step in analyzing data is to provide a frequency distribution of the information gathered by the pre and post-test surveys to determine if there are any missing values, or if any values lie outside what would be expected. For demographic information, descriptive statistics are helpful to portray what types of students are enrolled in either a short-term study abroad program or those who did not. Frequency information can also tell the researcher what major the students are in, what kind of accommodations they had abroad, and what level of language proficiency they might have, to name just a few.

A frequency distribution was run for each variable to conduct a univariate analysis of the data for both the pre and posttest for each group. Measures of central tendency and spread were run including the mean and median for cultural agility scores of each respective group, as the score is a continuous variable, to determine if the data is skewed for the target population (Caligiuri, 2012). The central tendency measures will help the researcher understand where on the CASA scale students fall for each cross-cultural competency.
An analysis of variance (ANOVA) is used to compare difference in mean scores, while the repeated measures ANOVA is used to test the effects of a continuous dependent variable measured multiple times (Statistics Solutions, 2013). To examine the first, second and third research questions, a repeated-measures analysis of variance (RM-ANOVA) was conducted to assess if students’ cultural agility mean scores and cross-cultural competency mean scores differed by group (treatment vs. control). The $F$-test of significance was used in this study to assess the effects of study abroad on cultural agility. The assumptions of an RM-ANOVA include normality and sphericity (Laerd Statistics, 2019). Skewness and kurtosis values are used to test normality, while Mauchly’s Test of Sphericity tests sphericity (Laerd Statistics, 2019). Once these assumptions were met, a Repeated Measures ANOVA test in SPSS was completed to compare the means between two groups and multiple dependent variables. To determine significance, the F value should be close to 1.0 for a true hypothesis. The larger the F ratio, the variation amongst group means is larger than regular probability. The p value of the test should be at or below 0.05 for a statistically significant difference in the cross-cultural competency scores (Muijs, 2010).

Open ended comments to draw conclusions about how students think cultural agility helps them work with people from other cultures were described from the qualitative answers of both the treatment and control groups. In addition to the quantitative analysis, open-ended questions were asked to understand more about how students view cultural competencies in terms of working with people from other cultures.

Using QSR International's NVivo 12 qualitative data analysis software (1999), source code data was used as an additional tool in discovering themes about cultural agility and cross-cultural competencies as it relates to Deardorff’s Intercultural Competence theory (2006). Text
results from the open ended questions of the post experience survey were analyzed by mapping students’ comments to the key concepts of this theory of process orientation that begins with the components of input of attitudes, to knowledge comprehension, and then individual internal outcomes that may include what Deardorff describes as an “informed frame of reference shift” (p. 256, 2006). All of these components are then brought with an individual as they go through the interaction level that in turn influences external outcomes (Deardorff, 2006).

The coding categories used for the analysis are taken directly from Deardorff (2006) including attitudes (respect, openness, curiosity and discovery), knowledge and comprehension (cultural self-awareness, deep cultural knowledge, sociolinguistic awareness, and the skills of listening, observing, and evaluating to analyze, interpret and relate), internal outcomes (informed frame of reference shift including adaptability, flexibility, ethnorelative view and empathy), and external outcomes (effective and appropriate communication and behavior in an intercultural situation).

**Validity and Reliability**

The scale development for the CASA cultural competencies was based on “various psychometric properties of the dimensions within the core cultural agility assessment. The items were generated deductively from the research literature and the field’s collective understanding of the predictors of successful global professionals and international assignments” (TASCA Global, pg. 12, 2017). The reliability and validity of the instrument was developed through various peer reviewed studies, as well as item generation, factor analysis, intercorrelation studies, and reliability tests.

The psychometric analysis indicates that the scale could be used for a variety of applications and research settings. For these reasons this instrument will be used to test both the
participants of a short-term study abroad program, as well as comparison groups of students who do not. Fraenkel et. al have described many threats to the validity, reliability and generalizability in experimental studies (2011). The first consideration when developing a study is to determine the threats to internal validity and reliability of the instrument to be implemented. The Cultural Agility Self-Assessment (Caligiuri, 2012) has undergone both reliability and validity testing.

Caligiuri used psychometric measures to develop the instrument and to establish its trustworthiness, reliability and validity. Additional threats to validity beyond the instrument’s validity include location, subject characteristics, mortality, instrumentation, and implementation (Fraenkel et al, 2011). The reliability construct is based on 537 professionals who have global responsibilities and 207 who have not worked globally to scale its reliability.

<table>
<thead>
<tr>
<th></th>
<th>Professionals with global responsibilities (N=537)</th>
<th>Professionals who have no worked globally (N=207)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Tolerance of Ambiguity</td>
<td>3.70</td>
<td>.63</td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>4.61</td>
<td>.52</td>
</tr>
<tr>
<td>Cultural Humility</td>
<td>4.35</td>
<td>.74</td>
</tr>
<tr>
<td>Resilience</td>
<td>4.11</td>
<td>.74</td>
</tr>
<tr>
<td>Relationship Building</td>
<td>4.03</td>
<td>.95</td>
</tr>
<tr>
<td>Curiosity</td>
<td>4.91</td>
<td>.61</td>
</tr>
</tbody>
</table>

Figure 4. Reliability and coefficient alpha of the CASA cross cultural competencies. Caligiuri (2017, p.14)

The location threat happens when the scores of the different groups are not controlled for by standardizing locations (Fraenkel et al., 2011). For the purposes of this study, students could potentially take the pre and posttests from anywhere around the world, and their experience could take place anywhere throughout the world. To help with this, students will be have taken the pretest before their short-term study abroad departures so that all students will take the pretest on campus. Students who do not participate in the faculty-led programs in the
spring/summer of 2018 may have a global experience on their own. These are threats to validity that cannot be controlled for because of the nature of this quasi-experimental study.

Mortality can have a moderate effect on validity because of participant drop out (Fraenkel et al., 2011). The absence of subjects who may not complete the post-test after participation in either a short-term study abroad or those who do not is considered a mortality threat to validity. Students who complete the pre-test will need to complete the post-test for the study to be valid. There is a risk that students may drop out of the study abroad program, or that they may just not complete the posttest. In order to deal with this threat, the UHP will incentivize students to participate, and the data will be combed to make sure the pretest any missing information is deleted from the data.

Within the instrumentation, threats to “validity instrument decay, data collector characteristics, and data collector bias are also of concern” (Fraenkel et al., 2011, pg. 302). As the same instrument will be used for both the pre and posttest, instrument decay will not be of major concern for this particular study. The instrument is an online survey that students will take on their own time, so the characteristics of the data collector, as well as the bias of that collector will not come into play for this study.

The quality of the measurement instrument it its reliability, and refers to the “extent to which test scores are free of measurement error” and gives consistent results. (Muijs, 2010, pg. 61). The overall internal consistency reliability using Cronbach’s alpha for the six competencies for the instrument combined has been determined to be .76, and the mean is 4.95 thereby indicating a high level of consistency for the Cultural Agility Self-Assessment (Caligiuri, 2012).
Generalizability

Generalizability of a study should also be a concern for researchers (Muijs, 2010). Since the study site will be limited to just one type of university, the programs under review may not mirror other university’s short-term study abroad programs. The pre and posttest design, however, will help other colleges and universities to implement this study for their own populations and study abroad programs.

Role of the Researcher

My first global experience took place when I was fifteen and visited the outskirts of Paris to see a French exchange student I had befriended in high school. My next trip abroad was not until I had graduated from graduate school almost seven years later. Those two weeks in France as a high school student were impactful in ways I could not understand then, but I now see. In addition, I was bit with a travel bug that has not gone away. While I was unable to study abroad as an undergraduate, I now spend time professionally advising students to go global early, and often as a Senior Associate Director of the Honors Program at Northeastern University. What Carlton Parsons (2008) describes as the cultural historical domain is evident in my academic and career story. Coming from a middle-class family of educators, my undergraduate experience was focused on completing my degree on time and working to pay for my education. I was a human biology major and an athlete at a large state university, with little time to think about experiences beyond my tight curriculum, and my lacrosse schedule. My faculty advisor in biology was not extremely helpful and did little to push me to think about all of the different options that were available to me in terms of global experiences. In addition to not knowing about different global option, I was also unable to have a study abroad because of the perceived cost of such programs.
Because of my previous role at the University and my own personal experience travelling abroad, I do have certain predispositions regarding study abroad experiences (Machi & McEvoy, 2012). I started my career working with undergraduate students in 2004 when I joined the University as an Assistant Director. Working in the has afforded me the opportunity to help develop short-term study abroad programs geared towards first-year student in cooperation with the Study Abroad Office. In addition, I have been able to personally, and informally see how these programs can have an impact on the undergraduates who attend. Six years ago, I facilitated the development of a short-term study abroad to Rome, Italy geared towards first year students. The Program allows students to study abroad with a University faculty person for a month-long experience. I have attended each of these programs each May beginning in 2010 with twenty-five to twenty-two students and a full time University professor. I am no longer employed by the University.

Positionalities

The Program under investigation uses an advising model for students that is developmental in nature and asks students to think of their academic careers in more than just what classes they are going to take. During these advising appointments students are often encouraged to think about global opportunities and how they might fit into their academic careers. As Briscoe states, “Demographic positioning (ethnicity, wealth, age, gender, etc.) is the dimension to which positionality most often alludes when referencing the other” (2005, p. 32). When thinking about the group I plan to study, I have preconceived notions of who students are that study abroad (Machi & McEvoy, 2006). As I have worked with undergraduates at this private university for ten years, I have seen a mostly white, upper-class trend in our enrollments. This is in stark contrast to my own undergraduate experience where the hallmark of our
university was diversity and students would protest against tuition hikes every other semester because of state budget cuts. The preconceptions I have about the students I’ve worked with at the University is something I need to be conscious of as I work through my problem of practice. I also need to isolate my bias (Machi & McEvoy, 2012) and realize that I must put aside what I assume to be the backgrounds and experiences that bring these students to where they are today and what may influence their decisions to undertake any study abroad program and what impact it may have on them.

In addition, as an advocate of study abroad, I have a favorable bias towards students participating in these programs. The impact that short-term study abroad programs can have on students will often be life changing (Dwyer, 2004). On our first program to Rome five year ago, I encountered this first hand. One student in particular, from a lower socioeconomic group than what might be considered a traditional study abroad candidate, told me after the program that he believes that not only was the experience the most life changing he had ever had, but that his ability to talk about his time abroad helped him secure a coop in an engineering firm. His ability to connect with the interviewer about his own time in Rome is something that cannot be quantified but is an outcome that is important and valuable. Salisbury et al. describe the choice to study abroad as being a “complex interplay between socioeconomic status, social and cultural capital accumulated before college, and social and cultural capital gained during the freshman year” (2008, p. 137). This student was encouraged by our advising program to undertake a short-term study abroad program, and the outcome was impactful. These types of experiences no doubt add to my favorable bias towards students going global.

My closeness to my potential subjects is something I considered as I undertook the proposed study. The relationships I develop with students on these month-long programs
obviously add to the favorable views I have for students to study abroad. Spending a full month in a foreign country with a group of students will naturally help an administrator develop close relationships with students on a trip such as these. In this way I am able to communicate with them about their experience in ways I would not if we were having an advising meeting in my office. Having a talk over coursework and the impacts of studying abroad naturally take on a different perspective over a gelato than in an academic building.

The exercise of writing this positionality statement is the first step to help identify and isolating my personal bias, opinions and feelings about my proposed problem of study (Machi & McEvoy, 2012). In addition, I believe that a robust literature review can open my eyes to other perspectives on this issue. It is obvious many of my biases regarding the expansion of short-term study abroad programs stem from my own experience, and what I have seen within the Program at the University. As a higher education administrator who works very closely with undergraduate students, I hope to create a space for students to think about the global opportunities that exist that I was not afforded at my undergraduate institution. As someone who once advised students on a daily basis, I must consider my own personal history and background when studying students who undertake a short-term study abroad experience.

**Human Subjects & Ethics**

Fraenkel, Wallen, and Hyun (2011) identify the three main ethical principles that researchers should follow when undertaking a research study as “protecting participants from harm, ensuring confidentiality of research data, and the question of the deception of subjects” (p. 63). There was no inherent risk of harm in asking students to complete surveys pre and post study abroad program. The pre-tests had already been completed. The researcher obtained permission from the students to access and perform secondary data analysis on their pre-test
scores. Participants were also given information on how to gain access to the results of the study once completed. As the post-test survey was not part of a class assignment, the researcher provided the Program a student incentive of the chance to win one of 10 $20 Amazon gift cards to offer students for their participation.

In order to ensure the confidentiality of the participants of the study any identifiers were removed from the data collected pre and post short-term study abroad experience. Participants were informed of the nature of the study, and as with any human subjects instructed that they could withdraw from the study at any time. There was no explicit relationship with participants and the researcher as the study was completed in survey format. Participants were informed that their information is confidential and will not be viewed by anyone but the researcher. There was no planned deception of subjects taking place for this study. Because of the nature of the study and the participation of human subjects, IRB approval was sought to be sure that the proper institutional protocols were followed. While the researcher has inherent bias of the research problem because of personal experiences travelling with and recruiting students for these programs, the objective nature of this data driven study helps address issues of bias.

**Limitations/Delimitation**

One of the disadvantages in using a quantitative design of this nature is that it may not be able to explore the problem and phenomenon in depth as a qualitative study might (Muijs, 2010). By using a predetermined instrument, there may be variables that are not thought of or included that also may have an impact on changes in cultural agility that would not be foreseeable (Caligiuri, 2012). For example, the reasons a student might choose to enroll in a program will be lost by only looking at survey questions, whereas a qualitative study may expose underlying motivations that could play into a student’s perspective on the place, topic or people
they would be interacting with on their chosen program. The addition of qualitative analysis of open-ended questions in this study should help mitigate possible issues.

The quantitative component of the mixed method design has its limitations as well. The difficult task of matching a comparison group with the experimental group can lead to the possibility of bias (Muijs, 2010). Unknown factors may also affect the results in this case. In addition, selection factors may go uncontrolled in the comparison group (Creswell, 2012). In addition to design limitations, the risk of students not completing the surveys affected the sample population of the study.

Summary

The purpose of this mixed-method, quasi-experimental study is to determine if high-achieving first-year undergraduate students make significant gains in cultural agility after attending a short-term study abroad program. This study utilized the Cultural Agility Self-Assessment (CASA) to determine the change in a cohort of high achieving first-year undergraduates’ cross-cultural competency development by incorporating a quasi-experimental design with pre and post experience testing (Caligiuri, 2014). By surveying participants at different points in time, using pre and posttest experience surveys, changes in student characteristics were measured and variables were analyzed to look at possible explanations for those changes (Fraenkel, Wallen, & Hyun, 2009). Open ended comments were also used to draw conclusions about how students think cultural agility helps them work with people from other cultures and to understand more about how students view cultural competencies in terms of working with people from other cultures.

When implementing an intervention in a natural setting such as a classroom, or study abroad experience, it is difficult to randomly assign students to particular groups. Because
random allocation of students is not possible, quasi-experimental design is best suited for this study (Creswell, 2012). The main difference in experimental and quasi-experimental designs is the ability for the researcher to select a comparison group that is similar as possible to the experimental group (Muijs, 2010). The pre and posttest design allowed for the researcher to better understand and describe the impact of short-term study abroad on a group of undergraduate students. In addition, the added qualitative information from the open-ended questions helped to fill in the gaps of the quantitative information that has been gathered to understand more about students’ cultural agility.

The impact of short-term study abroad programs for first year students should be measured to provide administrators a way as to be able to identify the cross-cultural competencies and skills student will acquire by participating in such programs. This study provides a potential global instrument for all institutes of higher education to assess their short-term study abroad programs, and the potential impact on cross-cultural competencies.
Chapter IV: Results

The purpose of this study was to determine how high-achieving first-year undergraduate students demonstrate a change in cultural agility, defined as “the ability to quickly, comfortably, and effectively work in different cultures and with people from different cultures” after a short-term study abroad program (Caligiuri, 2012, p.5). Study-abroad programs often tout their ability to enhance the cultural competence of students (Anderson et al., 2014). In order to study the impact of a short-term study abroad program on the cultural competence of students a mixed-methods study was conducted to understand how students changed as a result of their experience, and how they think about what mindset and skills are necessary to successfully work and communicate with people from different cultures.

This investigation of the impact of short-term study abroad on high achieving first-year undergraduate students utilized data collected from responses on the Cultural Agility Self Assessment (CASA) inventory (Caligiuri, 2014). The CASA instrument focuses on the individual-level predictors for cultural agility, aligning with the process orientation cycle of the framework of Deardorff’s Intercultural Competence theoretical framework (2006). The CASA also recognizes that individuals bring a certain set of behaviors and learned norms that influence how their interactions abroad may change their attitudes regarding their tolerance of ambiguity, perspective taking, cultural humility, resilience, relationship building and cultural curiosity and desire to learn (Caligiuri, 2012). Caligiuri used psychometric measures to develop the instrument and to establish its trustworthiness, reliability and validity. Changes in cultural agility scores were used to understand how students changed as a result of their global experience, and if there was a significant difference in the changes between students who went abroad and those who did not.
Reliability determines the quality of the measurement instrument and refers to the “extent to which test scores are free of measurement error” (Muijs, 2010, pg. 61). It also refers to an instrument that gives consistent results (Fraenkel et al., 2011). The overall internal consistency reliability using Cronbach’s alpha for the six competencies for the instrument combined has been determined to be .76, with a mean of 4.95 thereby indicating a high level of consistency for the Cultural Agility Self-Assessment (Caligiuri, 2012).

This chapter presents the results of the analysis used to answer the following research questions to gain a better understanding of how students change after a short-term study-abroad program:

1. Is there a significant change in students’ cultural agility after a participation in a faculty led short-term study abroad program compared to students who do not participate?

2. Is there a significant change in students’ cross-cultural competencies after participation in a faculty let short-term study abroad program versus those who do not participate?

3. What other factors play a role in students’ cultural agility?

4. What are students’ perceptions of cross-cultural competencies and their role in the ability to work effectively with others?

The values inherent in Deardorff’s model of openness, cultural self-awareness, and effective intercultural communication are purported to be honed in a short-term study abroad and make this an ideal framework for conducting the current study. The Deardorff model was developed as an attempt at determining consensus on a definition and concept of intercultural competence. This process has resulted in a framework that a variety of stakeholders can use to
assess the impact of international programs. Deardorff’s model is a natural fit for short-term study abroad situations because students bring with them a set of values and knowledge when they embark on international programs, and the attitudes, or inputs, that students bring to the process affect how their interactions aboard may change their points of view, or internal frames of reference, after an interaction or experience (Deardorff, 2006). This framework also demonstrates that the learning process is ongoing and that students can enter the process at any point in the cycle (Deardorff, 2006).

**Descriptive Statistics**

To conduct the study, a control group of high-achieving first year undergraduate students who did not travel abroad was compared to an experimental group of high achieving first-year undergraduate students who attended a faculty-led short-term study abroad program to determine the relative impact of short-term study abroad on the cultural competence of students. This mixed methods quasi experimental design allowed the researcher to analyze the changes in cultural agility by exploring the relationships between different demographic and programmatic variables. By analyzing open ended questions, themes also emerged from answers that supported the quantitative findings. Using both quantitative and qualitative data, the researcher was able to describe the changes and relationships in variables post short-term study abroad experience, and those relationships between variables in real-life contexts (Muijs, 2010).

The research site for this study is a large private, urban institution of approximately 15,000 undergraduate enrollments located in the northeast United States. The University offers a short-term study abroad model that allows faculty to lead and co-lead academic programs abroad for approximately 30 days. The target population of the study is a cohort of first-year high achieving students, half of whom attended a faculty led short term study abroad program in the
summer of 2018. Compared to the general population of first year students at the University, this cohort population shows an average SAT score of 82 points higher, and an average high school weighted GPA .35 points higher.

This population was used because the students of this Program cohort were offered a scholarship to cover the cost of their fee for participation, reducing a financial burden. It was the researchers hope that this offering to students would increase the potential participation of students from a more socio-economically diverse pool, often underrepresented in study-abroad programs (Salisbury, Umbach, Paulsen, & Pascarella, 2009). The short-term study abroad programs under investigation were 30 days in length, took place in countries all over the world, and were led by the university’s faculty, deeming them ‘faculty-led’ programs. Participants of the short-term study abroad programs had a minimum 3.0 GPA and were chosen by faculty who led the trips.

Student responses to the CASA were collected during the fall of the students’ first year of college, and again three to four months after the experience. This was done to determine changes in attitudes of students who did and did not engage in a study abroad program over the course of a summer. Students were also asked in the follow up survey to respond to open-ended questions to supplement their perceptions of cross-cultural competencies and their role in the ability to work and communicate effectively with others.

Of the original 632 students who initially took the CASA in the fall of 2017, each of whom was invited to take the post survey, 142 post CASA surveys were recorded. Fifteen responses were removed due to incompletion of all survey questions. The control group was defined by the 37 students who completed the survey and did not go abroad in the summer of 2018. To keep the sample sizes the same, a random number generator was used to create a
random sample of 37 students who attended a short-term study abroad program, defined as the
treatment group. The total study sample size analyzed was 74. Table 3 provides the
demographic information collected for both the treatment and control groups including gender,
etnicity and race, present or intended major, and how many foreign language classes students
have taken in college. Similar to other findings, this study’s sample skewed towards non-
Hispanic, white female participants, as well as students in largely Science, Technology,
Engineering and Math (STEM) fields (Tucker, Gullekson & McCambridge, 2011; Fitzsimmons,
Flanagan, & Wang, 2013; Desoff, 2006). In contrast to Chieffo and Griffith’s (2004) findings,
this study focused on first year students, whereas many short-term study abroad programs
include a majority of upper-class students.

Table 3

<table>
<thead>
<tr>
<th>Question</th>
<th>Treatment</th>
<th>Control</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>To which gender do you most identify?</td>
<td>Male</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>29</td>
<td>20</td>
</tr>
<tr>
<td>Are you of Spanish or Latinx origin?</td>
<td>Yes</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>What would best describe you?</td>
<td>Black/African American</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>White/Caucasian</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Multiracial/Multiethnic</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>International student</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>What is your present or intended? major?</td>
<td>Architecture</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Art</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Behavioral Neuroscience</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Biochemistry</td>
<td>1</td>
<td>2</td>
</tr>
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<td></td>
<td>Biology</td>
<td>1</td>
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</tr>
<tr>
<td></td>
<td>Business Administration</td>
<td>2</td>
<td>0</td>
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<tr>
<td></td>
<td>Chemistry</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Computer Science</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>
Students’ cultural agility of both the treatment and control groups was determined by combining the scores of the six-cross cultural competencies included in the CASA survey. Each of the cross-cultural competency subscales were measured using a six-point Likert scale consisting of a total of 50 questions. The Likert scale for this instrument has a range of 1 to 6, with 1 indicating completely disagree, and 6 as completely agree. The six subscales were combined each for the pre and post test to determine an overall score for cultural agility.

**Analysis**

To evaluate the completed survey data, different analyses were required to accurately report on the research findings per question as shown in figure 5. A power analysis for a
Repeated Measures ANOVA with two groups and two measurements was conducted in G*Power to determine a sufficient sample size for the study of N = 54 using and alpha of 0.05, a power of 0.95, and a medium effect size ($f=0.25$) (Faul et al., 2013). The findings of these analyses are presented by research question below.

To address the first two research questions “Is there a significant change in students’ cultural agility after a participation in a faculty led short-term study abroad program compared to students who do not participate?”, and “Is there a significant change in students’ cross-cultural competencies after participation in a faculty let short-term study abroad program versus those who do not participate?” a RM-ANOVA was conducted on cultural agility including the six cross cultural competencies that make up cultural agility including tolerance of ambiguity, perspective taking, cultural humility, resilience, relationship building, cultural curiosity and desire to learn using the Cultural Agility Self Assessment (CASA) on students who did and did not go abroad in the summer of 2018 (Caligiuri, 2012). The mean cultural agility score was computed by adding the totals of the six cross cultural competencies that make up cultural agility including tolerance of ambiguity, perspective taking, cultural humility, resilience, relationship building, cultural curiosity and desire to learn (Caligiuri, 2012).

To answer the third research question, “What other factors play a role in students’ cultural agility?”, a RM ANOVA was conducted on the treatment groups specifically for the factors of gender, ethnicity, gender, ethnicity, program orientation, ability for reflection, housing type, and faculty type. The overall cultural agility post scores of the treatment group was used to understand how these other factors impact cultural agility. This question was also used to understand what factors may influence a student’s study abroad experience, beyond the typical questions that are asked that focus on satisfaction or experience. The results of this analysis
showed limited statistical power because of the modest sample size in the present study of the treatment group (N = 37). This small samples size, due to the use of a random number generator, created equal groups between the control and treatment group and may have played a role in limiting the significance of some of the statistical comparisons conducted of this question.

To answer the fourth research question “What are students’ perceptions of cross-cultural competencies and their role in the ability to work effectively with others?” a qualitative analysis was conducted in NVivo 12 of two open ended questions provided to all study participants. These questions focused on the mindset and skills needed to have successful intercultural communication and interaction. The questions asked to determine these themes included “What kind of mindset do you think is necessary to be able to successfully communicate and interact with people from other cultures?”, and “What kind of skills do you think are important to be able to successfully communicate and interact with people from other cultures?”. These questions were asked on the post survey for both the treatment and control groups. These open-ended questions sought to add context to the quantitative results and allowed the researcher to dig deeper into the thoughts that students had regarding their abilities to interact with people from other cultures that could not be gained from the quantitative results.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variables</th>
<th>Data Analysis</th>
</tr>
</thead>
</table>
| 1 Is there a significant change in students’ cultural agility after a participation in a faculty led short-term study abroad program compared to students who do not participate? | Independent variables:  
  • participation in short-term study abroad program  
  • non-participation in study abroad  
 Dependent variable:  
  • cultural agility | Repeated Measures ANOVA (RM-ANOVA)  
  • between subject analysis  
  • to control for type 1 error |
| 2 Is there a significant change in students’ cross-cultural competencies after participation in a faculty let short-term study abroad program versus those who do not participate? | Independent variables:  
  • participation in short-term study abroad program  
  • non-participation in study abroad  
 Dependent variables:  
  • tolerance of ambiguity, perspective taking, cultural humility, resilience, relationship building, cultural curiosity | Repeated Measures ANOVA (RM-ANOVA)  
  • between subject analysis  
  • to control for type 1 error |
What additional variables play a role in cultural agility for students who participate in short-term study abroad programs?

<table>
<thead>
<tr>
<th>Independent variables:</th>
<th>Repeated Measures ANOVA (RM-ANOVA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Gender, ethnicity, orientation, reflection, housing type, faculty type, host national interaction</td>
<td>• within-subject analysis</td>
</tr>
<tr>
<td>• cultural agility</td>
<td>• to control for type 1 error</td>
</tr>
</tbody>
</table>

What are students’ perceptions of cross-cultural competencies and their role in the ability to work effectively with others?

<table>
<thead>
<tr>
<th>Qualitative analysis</th>
</tr>
</thead>
</table>

Open ended question analyzed using NVivo 12

Figure 5. Research Question Analysis

Research Question 1: Is there a significant change in students’ cultural agility after a participation in a faculty led short-term study abroad program compared to students who do not participate?

The first research question aimed to discover if there were significant differences in the cultural agility between the treatment and control groups. This research question required the use of an RM-ANOVA where cultural agility was the within variable and the type of summer experience was the between variable. It was expected that those students who participated in study abroad would have an increase in their cultural agility, while those that simply spent the year on campus would not experience as much guidance in cultural agility, therefore they would not see an increase in their cultural agility scores.

The mean cultural agility score was computed by adding the totals of the six cross-cultural competencies that make up cultural agility including tolerance of ambiguity, perspective taking, cultural humility, resilience, relationship building, cultural curiosity and desire to learn (Caligiuri, 2012). A one-way repeated measures ANOVA was conducted to compare the effect of (IV) short-term study abroad participation on (DV) Cultural Agility before and after the experience.
Table 4 shows the treatment group had a higher pre cultural agility mean score ($M = 24.9$, $SD = 2.33$) than the control group ($M = 24.7$, $SD = 3.13$). The treatment group also had a higher post cultural agility mean score ($M = 25.6$, $SD = 2.20$) than the control group ($M = 24.2$, $SD = 2.60$). The post cultural agility mean score of the control group ($M = 24.2$, $SD = 2.60$) decreased from their pre mean cultural agility scores ($M = 24.7$, $SD = 3.13$).

Table 4

<table>
<thead>
<tr>
<th>Measure</th>
<th>Treatment</th>
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<th></th>
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<tr>
<td></td>
<td>Mean</td>
<td>Std. Error</td>
<td>Lower Bound</td>
<td>Upper Bound</td>
</tr>
<tr>
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<td>Pre</td>
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<td>0.45</td>
<td>24.0</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>25.6</td>
<td>0.40</td>
<td>24.8</td>
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<td>Pre</td>
<td>24.7</td>
<td>0.45</td>
<td>23.8</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>24.2</td>
<td>0.40</td>
<td>23.4</td>
</tr>
</tbody>
</table>

As shown in figure 6, there was no significant effect of short-term study abroad participation on cultural agility between the control and treatment groups, $F(1,72) = 2.044, p = .157$. While the changes in students’ cultural agility was not shown to be statistically significant, it is interesting to note that the treatment group showed an increase in cultural agility while the control group showed a decrease in cultural agility.

![Figure 6. Pre and Post Cultural Agility Scores for Treatment and Control Groups](image-url)
The result of the analysis did not support the hypothesis that students who went abroad would see statistically significant changes in their cultural agility. The result could point to selection bias in that students who chose to go abroad would have higher scores in their abilities to work and communicate with people from different cultures. Self-selection bias, in which someone may decide they would like to participate or not because of their interest in a study or topic, may have decreased the likely difference between the two groups. Students in the cohort are all high achieving and may already have high levels of cultural agility as a result of their desire to be part of this cohort, thereby lessening the effects of the experience abroad on their abilities to interact and communicate with those from different cultures.

In addition to the quantitative analysis, qualitative data collected through the open ended questions “What kind of mindset do you think is necessary to be able to successfully communicate and interact with people from other cultures?”, and “What kind of skills do you think are important to be able to successfully communicate and interact with people from other cultures?”. These two questions were used to gain additional knowledge to understand how student think about cultural agility. These questions also were used to supplement the self-reported survey to provide additional detail about how students think about cultural agility and how it may be able to help them work and communicate with people from other cultures, going beyond the CASA’s quantitative survey.

The results indicated that students in both the treatment and control groups tended to agree that openness and adaptability, flexibility, and empathy are needed to effectively communicate with others. For example, students in the treatment group commenting on openness and adaptability said: “You need to be open - both to doing things differently than you normally do and trying to assimilate even a little and also open to new and exciting experiences and
stepping out of your comfort zone,” and “I think having a willingness to listen and understand someone else's perspective is crucial. I also think that it is very important to be able to reach common ground where the same "language" can be spoken.” Students in the control group also commented on openness and empathy in similar frequencies: “I think being flexible and open is important. There are many cultural norms that a person might not be used to, but being understanding and willing to learn about the new things is important.” and, “Being able to listen and adapt to new discoveries in conversations is one of the most important things when meeting new people, especially ones from different backgrounds from you.”

The comments students made regarding effective intercultural communication also align with typical outcomes that administrators anticipate as a result in participation in short-term study abroad programs including gaining a deeper understanding of the culture of the country they are in, improved cultural awareness and sensitivity, and improve emotional resilience (Kehl & Morris, 2007; Clarke, Flaherty, Wright, & McMillen, 2009; Anderson, Lawton, Rexeisen & Hubbard, 2005; Mapp, 2012; Chieffo & Griffiths, 2004; Olson & Lalley, 2012; Dywer, 2004; Ingraham & Peterson, 2004). Student open-ended responses also support the quantitative results that there was no significant difference in the changes in cultural agility of the groups who went abroad versus those who did not. This result supports the null hypothesis of the study that students who participate in short-term study abroad will not see significant changes in their cultural agility.

Research Question 2: Is there a significant change in students’ cross-cultural competencies after participation in a faculty led short-term study abroad program versus those who do not participate?
To address the second research question, a RM-ANOVA was used to determine if there were significant changes in the six cross-cultural competencies that make up cultural agility between the control and treatment groups where the cross cultural competencies that make up cultural agility were the within variables and the type of summer experience was the between variable.

A repeated measures ANOVA was conducted to compare the effect of (IV) short-term study abroad participation on (DV) the six cross cultural competencies that make up cultural agility including tolerance of ambiguity, perspective taking, cultural humility, resiliency, relationship building and cultural curiosity before and after their summer 2018 experience. As shown in Table 5, the treatment group had higher pre experience mean scores for four of the six cross-cultural competencies including tolerance of ambiguity (\(M = 3.61, SD = .418\)), cultural humility (\(M = 4.85, SD = .520\)), relationship building (\(M = 3.83, SD = 1.02\)), and cultural curiosity (\(M = 4.74, SD = .568\)). While not statistically significant, the control group had higher pre experience mean scores than the treatment group for perspective taking (\(M = 4.49, SD = .585\)) and resiliency (\(M = 3.63, SD = .761\)).

Table 5

<table>
<thead>
<tr>
<th>Measure</th>
<th>95% Confidence Interval</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
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<tbody>
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<td></td>
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</tr>
<tr>
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<td></td>
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</tr>
<tr>
<td></td>
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<tr>
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Table 5 (continued).

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<td>0.11</td>
<td>4.66</td>
<td>0.09</td>
<td>Control</td>
<td>Pre</td>
<td>4.85</td>
<td>0.09</td>
<td>5.04</td>
</tr>
</tbody>
</table>

Post experience, the treatment group’s mean scores were higher than the control group, in the same four items of the cross-cultural competency skills, including tolerance of ambiguity ($M = 3.49, SD = .530$), cultural humility ($M = 4.77, SD = .647$), relationship building ($M = 3.97, SD = 1.01$), and cultural curiosity ($M = 5.00, SD = .529$), as well as resiliency ($M = 3.71, SD = .758$). The treatment group’s mean scores for tolerance of ambiguity ($M = 3.38, SD = .597$) and cultural humility ($M = 4.19, SD = .82$) while higher than the control group, both decreased post experience. The control group had higher post mean scores in only one cross-cultural competency, perspective taking ($M = 4.7, SD = .573$).

The result of the analysis did not support the hypothesis that students who went abroad would see statistically significant changes in their cross-cultural competency scores. The only cross-cultural competency to show a statistically significant change was cultural humility, $F(1,37) = 7.51, p = .008$. While both the treatment and control group’s cultural humility scores
both decreased, the control group showed a statistically significant decrease. This could imply that study-abroad could be viewed as a protective factor for students and their ability to be open to learning from those who are different and understanding there are limits to their knowledge depending on the context of a situation.

Cultural humility, or the ability to be open to feedback and learning from those who may have different worldviews and acknowledging the limits of knowledge while seeking advice from others (Caligiuri, 2014) maps most closely to the knowledge and comprehension, and external outcomes phases of Deardorff’s framework. To add richness to the quantitative findings the research data includes student shared responses reported from open ended questions on the post-experience survey. The following quotes exemplify what mindset and skills are needed to be culturally agile. Students in the treatment group had more detailed answers about learning from others and being open to others viewpoints, listening for understanding awareness of cultural differences and open to understanding their world view may not be better than those of the countries they traveled to: “I think that a mindset, especially on a service learning trip like ours to Ghana, of partnering with people and learning their perspective rather than coming in with a savior complex or thinking that we know what's better, is very important.”, and “Being self-aware about your own cultural background is also very important to understand first what culture means for oneself.”. Students in the treatment group also discussed different ways of understanding others may have different world views than themselves, “We were there to receive them, not to express our own beliefs.” and they were “...eager to listen to others around you rather than waiting to interject with your own experiences.”

Students in the control group reported they understood others may have different views, but they did not necessarily make the leap to acknowledge a deeper understanding of appropriate
behavior in regards to cultural awareness: “Understanding that people with different backgrounds have different mindsets on things that I won't necessarily agree with.” and “Paying attention to social cues and being able to pick up behaviors quickly is helpful, but not necessary.” This could point to the lack of direction and orientation that students who go abroad receive from faculty to help orient them to the place and people they would be encountering. It could also imply that students who did not go abroad were not immersed in situations where they had to learn from people different from them.

The comments students made regarding cultural humility show a difference in how students view their interactions with others including “global mindedness, intercultural awareness, personal growth and development, and awareness of global interdependence” (Chieffo and Griffiths, 2004, p. 167). Student open-ended responses support the quantitative results that there was a significant difference in the groups who went abroad versus those who did not in terms of how they view their own cultural humility.

**Research Question 3: What additional variables play a role in cultural agility for students who participate in short-term study abroad programs?**

The third research question aimed to discover what other variables play a role in the changes in cultural agility as a result of participating in a short-term study abroad program, therefore only the treatment group was evaluated for this research question. This question was used to understand what factors may influence a student’s study abroad experience, beyond the typical questions that are asked that focus on satisfaction or experience. Factors including gender, URM status, faculty type, housing type, orientation, ability for reflection, and host national interaction were used to understand what impacts changes in students’ cultural agility. To determine if these factors played a role in the changes of students’ cultural agility a RM
ANOVA was run for each factor. Table 6 shows the distribution of program country, gender, URM status, housing type, faculty type, ability for reflection, and opportunities for interacting with host nationals.

Table 6

Treatment Group Demographics

<table>
<thead>
<tr>
<th>Where did you go abroad?</th>
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</tr>
</thead>
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<tr>
<td>Canada</td>
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<td></td>
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<tr>
<td>Chile</td>
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<td></td>
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<tr>
<td>China</td>
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<tr>
<td>Cuba</td>
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<td></td>
</tr>
<tr>
<td>France</td>
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<tr>
<td>Ghana</td>
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<tr>
<td>Greece</td>
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<tr>
<td>Iceland</td>
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<td>Israel</td>
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<td></td>
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<tr>
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<tr>
<td>Morocco</td>
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<tr>
<td>Russia</td>
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<td></td>
</tr>
<tr>
<td>South Africa</td>
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<td></td>
</tr>
<tr>
<td>South Korea</td>
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<td></td>
</tr>
<tr>
<td>Spain</td>
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<tr>
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<table>
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<tbody>
<tr>
<td></td>
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<table>
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<tr>
<td></td>
<td>Non URM</td>
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</table>

<table>
<thead>
<tr>
<th>What was your primary housing?</th>
<th>Dorm/Res Hall</th>
<th>9</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Homestay</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Hotel/Apartment</td>
<td>21</td>
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</table>
Table 6 (continued).

<table>
<thead>
<tr>
<th>What type of faculty taught your courses abroad?</th>
<th>Univ/US faculty</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Host country faculty</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

| To what degree were you encouraged to think about or reflect upon your study abroad / cultural experience? | Initial Guidance: Orientation was provided prior to departure for this program | 3 |
|                                                                                                                   | Some Guidance: Orientation was provided prior to departure and continued into program | 14 |
|                                                                                                                   | Extensive Guidance: Pre-departure orientation, mentoring, ongoing orientation or course in cross-cultural perspectives, reflective writing and research | 20 |

| How much opportunity did you have for interacting with people from the host culture and interacting with them in daily life, experiencing their way of life? | Isolated: Almost none or very limited opportunities | 3 |
|                                                                                                                   | Optional: Optional participation in occasional integration activities | 9 |
|                                                                                                                   | Required/Extensive: Required regular participation in cultural integration program, extensive direct cultural contact via service learning, internship | 25 |

A post hoc power analysis was conducted to determine the optimal number of participants (N = 54) in the treatment groups to determine if any significant effects were a result of the within subject factors. Because of the lack of normal distribution and limited number of students broken out into groups by factor, there was no usable outcome from the quantitative data. Table 7 shows the results of each of the RM ANOVA results for each factor.

Table 7

<table>
<thead>
<tr>
<th>Test of Within-Subject Effects by Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>URM status</td>
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<td>Housing type</td>
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<tr>
<td>Faculty type</td>
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<tr>
<td>Reflection</td>
</tr>
<tr>
<td>Interaction</td>
</tr>
</tbody>
</table>
The quantitative data regarding each factors’ influence on cultural agility do not show any significant difference when comparing male and female students. However, a rich amount of information distinguishing men and women based on qualitative open-ended responses adds context and potential areas for future research.

As shown in Table 8, both male (33.3%) and female (32.3%) students in the treatment group cited openness as a necessary skill or mindset, the biggest difference between the genders showed in effective communication and behavior in intercultural situations, and cultural self-awareness. Females showed a greater propensity to cite effective communication and behavior in cultural situations and cultural self-awareness, whereas men cited curiosity and discovery more frequently.

Table 8

*Open Ended Responses by Gender of Treatment Group*

<table>
<thead>
<tr>
<th>Deardorff’s cycle</th>
<th>Themes</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
<td>Curiosity &amp; discovery</td>
<td>18.30%</td>
<td>22.80%</td>
<td>19.20%</td>
</tr>
<tr>
<td></td>
<td>Kindness</td>
<td>1.40%</td>
<td>3.50%</td>
<td>2.60%</td>
</tr>
<tr>
<td></td>
<td>Openness</td>
<td>32.30%</td>
<td>33.30%</td>
<td>31.80%</td>
</tr>
<tr>
<td></td>
<td>Respect</td>
<td>2.82%</td>
<td>1.75%</td>
<td>3.25%</td>
</tr>
<tr>
<td>External Outcome</td>
<td>Effective comm &amp; behavior in intercultural situation</td>
<td>7.04%</td>
<td>1.75%</td>
<td>5.84%</td>
</tr>
<tr>
<td>Internal Outcome</td>
<td>Adaptability, flexibility, empathy</td>
<td>20.40%</td>
<td>24.60%</td>
<td>22.40%</td>
</tr>
<tr>
<td>Knowledge &amp; Comprehension</td>
<td>Cultural self-awareness</td>
<td>15.50%</td>
<td>10.50%</td>
<td>13.60%</td>
</tr>
<tr>
<td>None</td>
<td>No skill/mindset needed</td>
<td>2.11%</td>
<td>1.75%</td>
<td>1.30%</td>
</tr>
</tbody>
</table>

Research Question 4: What are students’ perceptions of cross-cultural competencies and their role in the ability to work effectively with others?

To answer the fourth research question “What are students’ perceptions of cross-cultural competencies and their role in the ability to work effectively with others?” a qualitative analysis was conducted in NVivo 12 of two open ended questions provided to all study participants about
the mindset and skills needed to have successful intercultural communication and interaction. To further illustrate the impact of short-term study abroad on cultural agility and supplement the quantitative data, a qualitative analysis was conducted in NVivo 12 based on two open ended questions, asked of all students, regardless of participation in a short-term faculty led study abroad program:

1. What kind of mindset do you think is necessary to be able to successfully communicate and interact with people from other cultures?

Both the control group and the treatment group cited “openness” as the most desirable mindset, and discussed ideas of being open to new ideas and knowledge acquisition, “I think an exploratory mindset is good. Having genuine interest in learning about another culture and interest in meeting people in these cultures is important.”, and “There are many cultural norms that a person might not be used to, but being understanding and willing to learn about the new things is important.”

2. What kind of skills do you think are important to be able to successfully communicate and interact with people from other cultures?

Both the control and treatment groups citing “listening” as the skill most needed to be culturally agile. Students citing openness generally pointed to the idea of being agreeable to different aspects of active engagement as the skills necessary to be culturally agile including “I think being actively engaged in the world's issues, as well as proactively educating oneself about different cultures are two extremely important skills to being able to interact with people of all sorts of backgrounds.”, and “Knowing their language is definitely useful. It’s also good to know how to ask good questions so you can learn about their perspective on different issues.” Most
notably, many students cited mindsets within the question asking about skills, blurring the lines between mindset and practical skills.

Table 9 provides an overview of the themes that emerged from the open ended questions for both the treatment and control groups. These open-ended questions sought to add context to the quantitative results and allowed the researcher to dig deeper into the thoughts that students had regarding their abilities to interact with people from other cultures that could not be gained from the quantitative results. Students in both the control and treatment groups cited similar skills and mindsets they believe are necessary to interact and work with people from different cultures, which is shown below in Table 9 by group and gender. Both groups cited openness as the more frequently than the other skills and mindsets, while curiosity and discovery was the second most cited theme for both groups.

### Table 9.

*Self-Reported Skills and Mindsets Needed to be Culturally Agile*

<table>
<thead>
<tr>
<th>Deardorff's cycle</th>
<th>Themes</th>
<th>Control</th>
<th></th>
<th>Treatment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Attitudes</td>
<td>Curiosity &amp; discovery</td>
<td>23.60%</td>
<td>8.11%</td>
<td>18.30%</td>
<td>22.80%</td>
</tr>
<tr>
<td></td>
<td>Kindness</td>
<td>5.56%</td>
<td>0.00%</td>
<td>1.41%</td>
<td>3.51%</td>
</tr>
<tr>
<td></td>
<td>Openness</td>
<td>27.80%</td>
<td>35.10%</td>
<td>32.40%</td>
<td>33.30%</td>
</tr>
<tr>
<td></td>
<td>Respect</td>
<td>4.17%</td>
<td>5.41%</td>
<td>2.82%</td>
<td>1.75%</td>
</tr>
<tr>
<td>Internal Outcome</td>
<td>Adaptable, flexibility, empathy</td>
<td>18.10%</td>
<td>35.10%</td>
<td>20.40%</td>
<td>24.60%</td>
</tr>
<tr>
<td>Knowledge &amp;</td>
<td>Cultural self-awareness</td>
<td>11.11%</td>
<td>16.20%</td>
<td>15.50%</td>
<td>10.50%</td>
</tr>
<tr>
<td>Comprehension</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Outcome</td>
<td>Effective communication &amp; behavior in intercultural situation</td>
<td>9.72%</td>
<td>0.00%</td>
<td>7.04%</td>
<td>1.75%</td>
</tr>
<tr>
<td>None</td>
<td></td>
<td>0.00%</td>
<td>2.11%</td>
<td>1.75%</td>
<td>1.30%</td>
</tr>
</tbody>
</table>

In addressing students’ perceptions of cross-cultural competencies, three major themes emerged. Both control and treatment groups cited openness, adaptability, flexibility and empathy, and curiosity and discovery, as important mindsets and skills to be able to successfully
communicate and interact with people from other cultures. Additionally, information gained by mapping the question results to the components of Deardorff’s theory supports the quantitative findings of the study, that there is not a significant difference in how students view the mindset and skills needed to effectively communicate and interact with people from a different culture between the control and treatment groups.

**Openness.**

Pulling from Deardorff’s theoretical framework, the attitudes that an individual brings with them to an interaction helps inform what knowledge is gained from that interaction (2006). Most students, regardless of their summer experience cited similar attitudes needed to effectively communicate and interact as described by Deardorff’s framework. When addressing both the mindset and skill questions, a majority of respondents cited openness as the most frequent attitude within both the control (31.34%) and treatment groups (32.65%): “I think the most important thing was to be open to people who are from a culture that’s different than yours and be willing to listen.” and, “You need to have an open mindset and one that is willing to listen to others.”.

These comments from both the treatment and control groups respectively, show complement the quantitative data that shows the difference in students’ cultural agility does not differ whether they attended a short-term study abroad program or not.

**Adaptability, Flexibility and Empathy.**

The second most frequently cited theme from both control (24.67%) and treatment (21.94%) groups include adaptability, flexibility and empathy, mapping to Deardorff’s internal outcome component of the Intercultural Competence framework (2006). Students from both
groups cited the ability to put themselves out of their comfort zones to help make connections and learn from others: “Willingness to pay attention to differences and realize that different doesn't imply better or worse.” Many of the respondents discussed the ability to adapt from what they are learning to inform their interactions whether they went abroad or not: “willing to accept new or surprising things, especially with regards to daily routines, food, and religious practices” and “accepting of things that they do or believe in that you might not necessarily have come face to face to in your culture.”

**Curiosity and Discovery.**

Additional attitudes cited in both the control (17.14%) and treatment (19.90%) groups include curiosity and discovery. The ability to tolerate ambiguity as part of the learning process while exploring other cultures, understanding that there is something to learn from every interaction, and having a genuine interest in those different from you are also part of Deardorff’s attitude input component of the Intercultural Competence framework (2006). These themes are referenced by the quotes of both the control and treatment groups: “I think an exploratory mindset is good. Having genuine interest in learning about another culture and interest in meeting people in these cultures is important. It can allow you to adapt more to the cultural environment you are now in.” and “I think being actively engaged in the world's issues, as well as proactively educating oneself about different cultures are two extremely important skills to be able to interact with people of all sorts of backgrounds.”. The control group had similar thoughts about curiosity and discovery: “Willing to take risk because in order to do well while learning a foreign language, you must be willing to put yourself on the spot to make mistakes and learn from those.” and “Going into an interaction believing you have something to learn; curiosity about different lifestyles.”
Summary

The most significant finding of this research study was the analysis focused on cultural humility and its relationship to study abroad programs. Student response outcomes indicated that those who did not attend a short-term study abroad program had a statistically significant decrease in their cross-cultural competency of cultural humility. This may indicate that students who do not participate in short-term study abroad may have more challenges with accessing opportunities to seek advice as well as being open to feedback from those different from themselves, i.e. they might be at a disadvantage of practicing intercultural interactions.

Additionally, three other key findings emerged from this study. First, changes in cultural agility between the control and treatment groups were not statistically significant, indicating that participation in a faculty-led short-term study abroad program had no effect on cultural agility. Second, it was found there was no significant effect of gender, URM status, housing type, faculty type, ability for reflection, and opportunities for interacting with host nationals of the treatment group in relation to their post-experience cultural agility changes. Lastly, the open ended survey comments support the quantitative findings that both students who participated in a short-term study abroad program and those who did not, shared that “openness”, “curiosity and discovery”, and “adaptability, flexibility and empathy” are important traits they believe necessary to effectively communicate and interact with people from other cultures.
Chapter V: Discussion

The purpose of this mixed-methods study was to determine if there is a change in first year students’ cultural agility as a result of attending a short-term study abroad program as explored through the lens of Deardorff’s (2006) Intercultural Competence theoretical framework. By using this framework as a lens to understand the changes in the ability to seamlessly work and interact with people of different cultures, this chapter contains discussion and future research recommendations for the following questions:

1. Is there a significant change in students’ cultural agility after a participation in a faculty led short-term study abroad program compared to students who do not participate?
2. Is there a significant change in students’ cross-cultural competencies after participation in a faculty let short-term study abroad program versus those who do not participate?
3. What additional variables play a role in cultural agility for students who participate in short-term study abroad programs?
4. What in general are students’ perceptions of cross-cultural competencies and their role in the ability to work effectively with others?

In addition, this chapter includes an interpretation of the findings, as related to the literature on study abroad and cultural agility, and concludes with the implications of findings, study limitations and concludes with future directions.

This study found that changes in cultural agility between students who went abroad compared to those who did not did not show any significant changes in their ability to interact or communicate with people from different cultures, indicating that participation in a faculty-led
short-term study abroad program had no effect on cultural agility. The small samples sizes made it difficult to draw any conclusions around factors including gender, URM status, housing type, faculty type, ability for reflection, and opportunities for interacting with host nationals. The open-ended survey comments support the quantitative findings that both students who participated in a short-term study abroad program and those who did not, shared that “openness”, “curiosity and discovery”, and “adaptability, flexibility and empathy” are important traits they believe necessary to effectively communicate and interact with people from other cultures.

While the majority of the findings of this study were not proven to be statistically significant, this study did provide evidence that students who do not participate in a short-term study abroad may be at a disadvantage of practicing intercultural interactions. The only statistically significant result showed that students who did not participate had significant decreases in their cultural humility, or the ability to be open to feedback and learning from those who may have different worldviews, and acknowledging the limits of knowledge while seeking advice from others (Caligiuri, 2012).

The findings also point to no major difference on the effects of gender, URM status, housing type, faculty type, ability for reflection, and opportunities for interacting with host nationals. This could be due to the small sample size in response to the need to create equal sized treatment and control groups. This could also be due to the fact that the treatment group skewed similarly to the national trends in study abroad, consisting of a majority of white females, and a small study sample size (IIE, 2017). Lastly, whether or not students had a global experience, they thought very similarly about the mindset and skills needed to be culturally agile. Most cited openness and having an interest in learning more about cultures and people different
from themselves, students who did and did not participate in short-term study abroad had similar responses in their open-ended survey questions. This qualitative data supports the null hypothesis of the overall research question that asks if students who attend a short-term study abroad program have significant changes in their ability to successfully communicate and work with people from different cultures.

According to research, different stakeholder groups focus on a variety of motivational issues when looking for an increase in undergraduate students’ access to study abroad programs. In many cases, government and industry expect that students will gain the skills and talents needed to compete and lead in a global marketplace, creating a pipeline of future professionals that have the ability to be successful in collaborating and leading in an increasingly global workplace. Additionally, because of the pressures of globalization, institutions may also seek to internationalize their student body, supporting a larger holistic development of students, through support for international programs that can help recruit a higher achieving student body. (Durbin, 2006; Daniel, Xie, Kedia, & Lodge, 2014; Lumby & Foskett, 2016). As a result, efforts to conduct research regarding the impact of short-term study abroad are needed to help higher education administrators craft curricula that help increase the ability for our college graduates to lead and collaborate in the global workplace.

Students often return from a study abroad program eager to discuss the life changing experiences they have had, but it is often difficult for students to explain the ways in which they have grown or changed. In the current study students often cited openness and the desire to learn more about the country and people they encountered. While that means students may be curious about others, and open to exploring differences, educators are often eager to find out more about what skills they gained from the experience. In light of this, there is a lack of calibration
between the intended outcome and the actual outcome. Educators also have a difficult time measuring how students have changed after their study abroad experiences, and the alignment of the pre and posttest design to the outcomes each stakeholder hopes to see as a result of each program (Anderson, Lawton, Rexeisen, and Hubbard, 2006). This study helps answer the call for a more formal study of short-term study-abroad outcomes alongside more clearly delineated goals of each unique program. The challenge for institutions is how to identify these goals and learning outcomes for their often very individualized faculty-led short-term study abroad, as well as how they communicate these important and desired outcomes to students, while also aligning with institutional goals.

The results of dynamic systems of evaluation can positively impact the nature of study abroad programs at distinct institutions while positively impacting the outcomes of learners when goals are intentional and agreed upon by all stakeholders. As noted above, this is important because there is often a mismatch of what institutions hope students gain out of a global experience versus the change in students’ cross-cultural competencies as a result of their global experience. While no assessment is required by the accreditation body, evaluations that investigate learning outcomes of short-term study abroad can help answer some of those questions, especially when focused on understanding how students change as a result of their experience through both quantitative and qualitative data. Results can also help institutions adjust their programming and how they communicate their expectation of student involvement, making the learning outcomes clear for everyone.

Deardorff’s (2006) Intercultural competence theoretical framework discusses and has identified many key questions that are often asked by institutions who struggle to measure the outcomes of their study abroad programs. These include how to measure the effectiveness of
programs, how to determine if students who participate are cross-culturally competent, and what it means to be culturally competent, providing a lens through which to view the impact of internationalization efforts in higher education. Adding to the literature on the impact of short-term study abroad, this framework can help a variety of administrators revisit their institutional definitions of intercultural competence to be sure they are relevant and align with the set of outcomes they wish for their students to have as a result of those experiences. In addition, measuring changes in students’ cultural agility defined as, “the ability to quickly, comfortably, and effectively work in different cultures and with people from different cultures”, after a short-term study abroad program can help administrators understand the specific impacts such programs can have on the cultural competency of U.S. undergraduate students (Caligiuri, 2012, p.5). It can also help create a pipeline of future professionals that have the ability to be successful in collaborating and leading in an increasingly global workplace.

Summary of Findings

This study adds to the current growing literature on short-term study abroad outcomes and how students think about the mindset and skills needed to successfully work and communicate with people from other cultures. For instance, Olsen and Lalley (2012) found participation in short-term study abroad programs to help students’ ability to interact with people from different cultures in different settings, leading to an increase in the ability to work in teams, and improvements in cultural sensitivity. Yet, Ingraham and Peterson (2004) were also able to find that study abroad programs at Michigan State University have an impact on students’ personal growth, intercultural awareness, and depending on the discipline, an impact on the professional development of students. This reinforces the need for a more formalized but flexible mode of identifying outcomes of study abroad and can be built off Deardorff’s
Intercultural Competency Framework. Specifically using Deardorff’s Intercultural Competency framework that cycles individuals through a process of causal relationships between the inputs of attitudes and knowledge comprehension as they relate to internal and external outcomes after an international experience, more should be done to understand the process orientation and if there are specific interventions that can assist individuals to gain the most out of their cross-cultural experiences.

**Cultural Agility**

The study’s overall conclusion that changes in cultural agility between the control and treatment groups were not statistically significant indicates that participation in a faculty-led short-term study abroad program has no effect on changes in students’ ability to effectively work and interact with people from other cultures. The results align with previous studies showing little to no impact on study abroad programs four weeks or less, including Dwyer’s (2004) study of the impact of study abroad program duration in which it was confirmed that the long-held notion that more is better; or the longer students are abroad the more they achieve “academic, cultural development and personal growth” (p. 151). The lack of measured change could be for a variety of reasons including the short duration of the time abroad, the ability or lack thereof intense, immersive interactions with host nationals, as well as the ability to have guided reflection provided by faculty members while abroad (Dwyer, 2004; Franklin, 2010; and Gates 2014). Implications and future directions will be discussed in the discussion section.

Compared to students who went abroad, the students who did not travel started with similar cultural agility scores before their experiences in the summer of 2018 and had no significant overall change after their respective experiences in the summer of 2018. This result supports the null hypothesis for research question 1, that students who participate in a faculty-led
short-term program would not have significant changes in cultural agility as a result of their participation.

Dwyer’s study of the International Education of Students (IES) data spanning 50 years showed longitudinal correlations between program features including “language study, housing choice, duration of study, enrollment in foreign university courses, participation in an internship or field of study, among others – and a variety of student outcomes” (2004, p. 152). Olsen and Lalley (2012) found that evaluating students two and three years after their experience show propensity to study abroad again, if they were to undertake additional language in the future, and if their sense of teamwork and cultural sensitivity had improved. A majority of the respondents in their study believed that both their teamwork and cultural sensitivity in terms of interacting with people from other cultures improved. This study’s results along with previous studies suggest there could be long term effects of participation in study abroad that may not be able to be measured until a much longer time after the initial experience. This study recorded cultural agility scores months before students went abroad, and then four months after they returned.

While the post survey asked students to fill out additional demographic and programmatic information, and some open-ended questions, questions asking the intentions of students who did or did not go abroad were not included. A review of the literature shows these intentions can often range from social pressure to go abroad, or to gain an international experience (Fitzsimmons, Flanagan, & Wang, 2013; Desoff, 2006). It may not be a student’s priority to effectively communicate and interact with others, as identified by the goals of this study, and the desires of employers who are looking for students who can compete in a global marketplace. Nyaupane, Paris, & Teye, (2010) determined that students want to go abroad to travel internationally, escape, and for both social and academic reasons, not necessarily focused
on how they may work and communicate effectively with people from other cultures. This could be a gap in the provided orientations, the ability for reflection and what students are being asked to reflect about, as well as guidance on program learning objectives. Faculty may have a different view than students on what they should gain as a result of program participation. Both sets of students did indicate in their open-ended survey responses that they acknowledged that openness and the desire to learn about those different from you, though the students who went abroad did not mention specifically what they gained as a result of the experience. The open-ended survey questions could have been asked differently to gain this type of information.

Future researchers should think about testing students again at predetermined intervals to see if there were any long-term effects of the experience, how it might have influenced them to go abroad again and expand their opportunities to increase their intercultural interactions. In addition, a larger sample size could help determine additional factors this study was unable to drill down to including how courses faculty taught abroad were or were not adapted to fit the context of the county the students were studying in. A more unified effort to collect this data not only at one type of institution, but a variety of colleges and universities including 2-year, 4-year public and private could greatly add to the research.

**Gender and Ethnicity**

When looking specifically at the group who went abroad, it was found there was no statistically significant effect of gender or ethnicity, or the interaction between gender and ethnicity of the treatment group in relation to their post-experience cultural agility changes. This supports the null hypothesis of research question 2, that gender and ethnicity play no role in students’ changes in cultural agility. Chieffo & Griffith's study (2004) supports similar findings and showed students who participate in study abroad are typically disproportionately female, and
more heavily attended by students in STEM than majors in humanities or social sciences. While their study did not measure change, it did show that students who went abroad were more “confident in their levels of intercultural awareness and functional knowledge” (p. 175).

Tarrant and Lyons (2011) however, showed that for students who are going abroad for the first time, their participation in short-term study abroad decreases the difference in environmental citizenship scores, but the difference in scores between males and females increases. It was found that females reported significantly higher levels of intended environmental citizenship (Tarrant and Lyons, 2011). Furthermore, Hett was able to show that females scored higher in global mindedness than males following participation in a study abroad program (1993). In contrast, Kehl and Morris’ study showed that males reported higher levels of global-mindedness than female participants, after a short-term study abroad experience (2008).

The contradictory findings in a variety of studies show more must be done to understand how gender influences students’ experiences abroad.

Additionally, the literature on underrepresented students greatly focuses on the reasons why students do not participate in greater numbers, and how to increase diversity abroad, not necessarily on their experiences as compared to their peers (Sweeney, 2013; Goldstein and Kim, 2006; Metzger, 2006). The dearth of information and impact specifically of students of color is another area that needs to be explored and is greatly needed. This study was unable to detect a significant difference in cultural agility scores of students by ethnicity or race, mostly due to the small numbers of underrepresented minorities in the sample.

The contradictory findings around gender and ethnicity point to more robust research needed to determine what kind of changes short-term study abroad can have on larger cohorts of
students, as well as thinking more critically about increasing the numbers of underrepresented groups on study-abroad programs.

**Cultural Humility**

One of the most interesting findings of the study includes significant decrease in the cross-cultural competency of cultural humility of the students who did not go abroad. This finding supports the hypothesis of research question 2, that participation in a short-term study abroad will have an effect on the changes in students’ cross-cultural competencies, just not in the direction one might expect.

Cultural humility, Opdal refers to as “the state of mind that signals we have reached the limits of our present understanding and things may be different from how they look” (2001, p. 128). This surprising finding could indicate that students who do not participate in short-term study abroad may have more challenges with opportunities to seek advice and being open to feedback from those different from them, and that they have not begun to explore the limits of their own understanding. Isaacson’s (2014) work clarifying the concept of cultural humility used a triangulation of the quantitative data compared with a phenomenological analysis of nursing students who considered themselves culturally competent before an immersive intercultural experience. What she found after the experience was a downward shift in cultural competency scores. Similarly, it could be deduced that students may view themselves one way and still demonstrate behavior that is contradictory to measured self-reported outcomes.

Caligiuri, Baytalskaya, and Lazarova (2016) found that for expatriates, support from host nationals affected performance. They also found that the ethnocentrism and cultural humility moderate expatriates’ perception of support and feedback while they are abroad. This impact directly affects the success of their international assignments (Caligiuri et al., 2016). This study,
while it does ask how much students were able to interact with host nationals, did not ask students what kind of support they felt they had from either faculty or host nationals while abroad. More research is needed to understand the impact of host national support of undergraduate students abroad.

The qualitative findings of this study align with Isaacson’s (2014) study in that students verbalized traits and characteristics they found needed to be culturally agile, while perhaps not practicing or acting out those traits themselves. The study conducted by Anderson, Lawton, Rexeisen and Hubbard (2005) was unable to draw any larger conclusions from the data used to assess the “extent to which a short-term faculty-led study abroad program can affect the cross-cultural sensitivity of student learners” (p. 457). They showed students “lessened their tendency to see other cultures as better than their own and improved their ability to accept and adapt to cultural differences” (p. 464). What is still unclear is where in the process did students shift to that frame of mind when putting the experience in context of Deardorff’s framework. More can be done to understand what about the interactions that students have can influence how they think about others, and how faculty can structure programs that assist with that growth.

**Student Perceptions**

The qualitative data supports the quantitative findings that found students who participated in a short-term study abroad and those who did not engage both shared that openness, curiosity and discovery, and adaptability, flexibility and empathy are important traits they believe necessary to effectively communicate and interact with people from other cultures.

This was found to be similar to the results of Chieffo and Griffith’s (2004) study on short-term study abroad which included responses from students that related to personal growth in terms of “adaptability, flexibility, patience, responsibility, respect for others, and appreciation
for the arts” (p. 173). Additionally, Fitzsimmons, Flanagan and Wang (2013) found no difference in the attitudes of students towards short and long-term study abroad programs in terms of personal development and learning. Students have found to make meaning of their short-term study abroad experiences that can help them understand social issues and privilege (Allen, 2010).

Jones et. al (2012) showed that whether abroad or domestically based, by pushing students out of their comfort zones students gained a better understanding of both privilege and understanding about social issues and cultures. Students who went abroad were also able to frame their global experiences in a way that helped them reframe what they found important in the world. Goel, De Jong, and Schnusenberg (2010) found mixed support in their study for the influence on personality traits including, “conscientiousness, extraversion, and openness to experience” on study abroad participation (p. 261). Students in this study overwhelmingly cited being open and having a desire to learn more about others was important to be able to get along with those from different cultures. What did not come through in the open-ended responses was a sense that students were either interested or had been pushed out of their comfort zone while abroad.

This type of transformative learning is one of the impacts that short-term study abroad can have on undergraduate students, and more should be done to understand how institutions can support faculty while developing not only global programs, but curricula, that can help support and push students out of their comfort zone whether they go abroad or stay domestic.
Implications for Theory

Adding to the literature on the impact of short-term study abroad, this model of dynamic assessment using both quantitative and qualitative data can help a variety of administrators revisit their institutional definitions of intercultural competence to be sure they are relevant and align with the set of outcomes they wish for their students to have as a result of those experiences.

The surprising finding of this study was the significant decrease in the cultural humility of students who did not go abroad. Cultural humility is a term that shows a lack of clarity of meaning (Bennett, 2009; Mendenhall, 2001; Gregerson, Morrison & Black, 1998). It is often lumped together with other indicators of intercultural competence including “suspension of judgement, cognitive flexibility… and tolerance of ambiguity” (Bennett, 2009, p. 129). Bennett defines it as a state of wonder (2009). Tangney’s (2000) review of research showed that the challenges in understanding the term itself and its construct as an issue for further study. More research is needed to understand what happens over time, and what type of interactions may influence how individuals come to understand they may have reached the limits of their understanding on certain topics.

An example in medical education research provides a model of competency-based approaches that could be applied to study-abroad and cultural humility issues. Wear (2008) was able to identify the application of knowledge, after an ongoing process of reflection that one’s knowledge is never complete and inevitably biased. Without both skills and knowledge, it is unlikely medical professionals can be empathetic, respectful or culturally informed (2008). The results of this study point to the need to understand additional steps that faculty can take to
ensure students understand the limits of their knowledge and how that may influence how they see other cultures and interpret cross-cultural interactions.

**Implication of Findings**

These research findings hold important implications for students, faculty, administrators, and institutions. For one, it is clear that if institutions desire that students gain a certain set of competencies, faculty running short-term study abroad programs should understand what those competencies are, and how they may be incorporated into the content and experiences provided for students while abroad. The significant investments that are made in faculty-led study abroad programs often tout their ability to change students’ lives, but what that means needs to be clearer not only to students, but also to faculty. Being able to help frame students’ expectations for such programs can help administrators develop programs that are in line with student goals as well as institutional goals, as shown by Allen’s (2010) case study that disclosed different motives for language acquisition which resulted in different learning outcomes for students depending on their personal goals before they started their international program.

Salisbury et. al (2008) determined that one of the main goals of study tour programs, or short-term programs less than eight weeks, include goals of increase interest in course topics, the country, and people that the students interact with, but the in-depth exploration on these programs is often lacking, and are often viewed as tourism. Typically, there is less time for in depth exploration of topics and sites on these types of programs because they often visit many cities or countries on seven to twenty-eight-day programs. This finding, along with the present study results point to additional steps that faculty could take to help situate students' pre-departure, while ensuring proper time to reflect and understand the learning outcomes the faculty member hoped for them to gain while abroad. Additionally, the results of this study also show
that more must be done to fully understand how students change as a result of their participation in short-term study abroad, and what type of interventions can be instituted to help improve the cross-cultural competencies that institutions often claim benefit those who go abroad.

**Limitations**

The limitations of this study lie in its small sample size, which hindered the determination of a variety of factors including how program type impacts changes in cultural agility. Similar to national study-abroad trends, the sample size skewed more towards females, and those who were not from underrepresented minority groups. From a race perspective, the study lacked a diverse group of participants. The small number of underrepresented minorities who participated did not allow the researcher to use quantitative data to compare groups and type of programs as it related to ethnicity. The small sample size of the study also hindered the ability to dig deeper into the type of experience students had compared to their cultural agility cross-competency scores. Having a better understanding of how students were able to situate what they were learning, and the interactions they were having with host nationals could have provided more information about what type of interventions could be effective in helping students gain the most out of their experience.

One of the disadvantages in using a quantitative design is that it may not be able to explore the problem or phenomenon in depth as a qualitative study might (Muijs, 2010). By using a predetermined instrument, variables that were not thought of or included could have been instrumental in seeing the differences in changes of different cross-cultural competencies. For example, the reasons a student might choose to enroll in a program will be lost by only looking at survey questions, whereas a using more in-depth open-ended questions may expose underlying motivations that could play into a student’s perspective on the place, topic or people they would
be interacting with on their chosen program. This mix-method approach aimed to address some of this but could have gone more in depth with participant interviews instead of relying upon open ended survey questions to investigate ideas centered around intent and desired outcomes. For example, students could have been asked what the goals of their program were, and if they felt they reached those goals, to see if there was a match in expectations. It would also provide more information on how students understand what faculty believe they should be learning from the experience.

Selection bias, in which someone may decide they would like to participate or not because of their interest in a study or topic, is a concern for many studies (Lavrakas, 2008). For this particular study, self-selection bias had the potential to decrease the likely difference between the two groups, as the students who answered the post-survey may be more interested in program outcomes than the students who did not answer. Additionally, students in the cohort are all high achieving and already had high levels of cultural agility as a result of their desire to be part of this cohort, shown by the similar cultural agility pre-experience mean scores. Unknown factors may also have affected the results in this case, including what type of global experiences, or cross-cultural experiences students may have had in between the time they took the pre and post survey, which was not asked of the participants. In addition to design limitations, the lack of student responses affected the population sampled in the study.

**Areas for Future Research**

There are several areas of this study that could be expanded upon to gain a deeper understanding of how students change as a result of a short-term study abroad experience. A deeper understanding of what happens during the process orientation piece of Deardorff’s framework could help administrators understand what factors directly impact students’ cultural
agility, thereby influencing program development. Secondly, surveying students at different time points after the experience could help determine if time and the ability to reflect post-experience play a role in how students view their own cultural agility and the role their global experience may have played in that change. In addition to quantitative data showing the significance or insignificance of cross-cultural competency changes, more in depth interviews could be done to gain a greater sense of the experience students had while abroad. Researchers could also ask faculty to provide syllabi with learning outcomes to see how they may be able to be mapped to the instruments used to assess students’ learning.

The next logical step would be to conduct this study with a larger sample size. The small sample size and cohort of students from the same university make it hard for the study to be generalizable. The inability to drill down by ethnicity was a real short-coming of this study, as with many, and is important to understand. The additional complexity of understanding more about the types of interactions students had while abroad, including host national interaction, time building relationships, and the course content as it relates to the country where students study could be understood more deeply with greater amounts of in-depth data. This could also be done with post experience interviews.

Short-term study abroad can be transformative for undergraduate students. The results of this study point to further identifying intervention strategies that faculty can undertake while abroad, and in country to help understand the limits of their knowledge, thereby influencing how they see other cultures and interpret cross-cultural interactions. More should be done to understand how institutions can support faculty while developing not only global programs, but curricula that can help support and push students out of their comfort zone whether they go abroad or stay in the country.
Conclusion

The results of this study showed that students who did not attend a short-term study abroad program had a statistically significant decrease in their cross-cultural competency of cultural humility. As the only significant finding of this study, this result implies that students who do not participate in short-term study abroad may have more challenges with accessing opportunities to seek advice as well as being open to feedback from those different from themselves or may be at a disadvantage of practicing intercultural interactions.

The additional findings emerging from this study show changes in cultural agility between the control and treatment groups that were not statistically significant, supporting the null hypothesis of the overall research question, “Do students who participate in a short-term study abroad program show significant changes in cultural agility?” There was also no significant effect for gender, URM status, housing type, faculty type, ability for reflection, and opportunities for interacting with host nationals and the ability to communicate and interact with people from different cultures. The open ended survey comments support the quantitative findings that both students who participated in a short-term study abroad program and those who did not, shared that “openness”, “curiosity and discovery”, and “adaptability, flexibility and empathy” are important traits they believe necessary to effectively communicate and interact with people from other cultures.

As the pressures of globalization force institutions of higher education to internationalize, more can be done to help provide administrators and policy makers with information on how to identify the developmental outcomes students acquire by participating in short-term faculty-led global experiences. Additional research is needed to understand what impacts different variables have on students’ abilities to work and communicate with people from other cultures. The rise in
short-term study abroad program participation points to the need to create clear goals and understand the objectives of all stakeholders, so programs can be properly assessed. By using a mixed method approach to evaluation, we can gain a better understanding of the student experience and help guide faculty as they are developing these short-term experiences with interventions and tools that can help students understand the limits to their knowledge, and set them on a path to be culturally agile students and eventually professionals.


Clevedon, UK: Multilingual Matters.


Appendix A

Request to Participate in Research

Northeastern University, Department of: College of Professional Studies, Graduate School of Education

Name of Investigator(s): Dr. Bryan Patterson, Principal Investigator
Ms. Lauren Pouchak, Student Researcher

Project: DEVELOPMENT OF CULTURAL AGILITY IN HIGH ACHIEVING EMERGING ADULTS: THE EVALUATION OF A SHORT-TERM STUDY ABROAD EXPERIENCE

Request to Participate in Research

We would like to invite you to participate in a web-based online survey. The survey is part of a research study whose purpose is to understand the impact of short-term study abroad on students’ cultural agility. This survey should take about 25 minutes to complete.

We are asking you to participate in this study because you are a member of the first cohort of University Honors Program Students to receive a fee waiver to participate in the Dialogue of Civilization program for the summer of 2018. You must be at least 18 years old to take this survey.

The decision to participate in this research project is voluntary. You do not have to participate and you can refuse to answer any question. Even if you begin the web-based online survey, you can stop at any time.

The possible risks or discomforts of the study are minimal.

There is always the possibility of tampering from an outside source when using the internet for collecting information. While the confidentiality of responses will be protected once the data are downloaded from the internet, there is always a possibility of hacking or other security breaches that could threaten the confidentiality of responses. Please know that you are free to decide not to answer any question.

There are no direct benefits to you from participating in this study. However, your responses may help us learn more about how Northeastern University’s international programs impact student development.

As a token of our appreciation for completing the survey, you will be entered into a raffle to win one of 10 $20 Amazon gift cards.

Your part in this study will be handled in a confidential manner. Any reports or publications based on this research will use only group data and will not identify you or any individual as being affiliated with this project.
If you have any questions regarding electronic privacy, please feel free to contact Mark Nardone, NU’s Director of Information Security via phone at 617-373-7901, or via email at privacy@neu.edu.

If you have any questions about this study, please feel free to contact Lauren Pouchak Pouchak.l@husky.neu.edu, the person mainly responsible for the research. You can also contact Dr. Bryan Patterson, [name and contact information], the Principal Investigator.

If you have any questions regarding your rights as a research participant, please contact Nan C. Regina, Director, Human Subject Research Protection, Mail Stop: 560-177, 360 Huntington Avenue, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: n.regina@northeastern.edu. You may call anonymously if you wish.

This study has been reviewed and approved by the Northeastern University Institutional Review Board (# CPS18-11-15).

By clicking on the “accept” button below you are indicating that you consent to participate in this study. Please print out a copy of this consent form for your records.

Thank you for your time.

Lauren Pouchak
Appendix B

Invitation to Participate in Study

Dear (personalized),

My name is Lauren Pouchak and I am currently a doctoral student in the Doctor of Education (Ed.D.) program at Northeastern University. I am conducting research on how short-term study abroad programs impact students’ cultural agility. I am inviting you to participate in this study, given your involvement as a member of the first cohort of University Honors Program Students to receive a fee waiver to participate in the Dialogue of Civilization (DOC) program during the summer of 2018.

If you agree to participate in this study, you will be asked to complete a questionnaire as well as the Cultural Agility Self Assessment (CASA) survey. The questionnaire will ask you a series of questions about your activities during the summer of 2018, and then prompt you to begin the CASA survey. Even if you did not participate in a DOC this summer, we are still interested to know what you did over the summer, and how it may be associated with changes in cultural agility.

In appreciation of your time, you will be entered into a raffle to receive one of 10 $20 Amazon gift cards upon completion of the online CASA survey.

Your participation is completely voluntary and if you choose not to participate, it will not impact your relationship with the program or the university.

The study is supervised by Dr. Bryan Patterson, Assistant Teaching Professor with the School of Education at Northeastern University and has been reviewed and approved by the Northeastern University Institutional Review Board.

If you are interested in participating in the study, please reply to this email. If you would like more information or have questions, please contact me at Pouchak.l@husky.neu.edu

Thank you in advance for your time.

Lauren Pouchak, MEd, MPA
Doctoral Student, Northeastern University
Pouchak.l@husky.neu.edu
Appendix C

Post Experience Survey

Preliminary Questionnaire
(To be completed by study participants before the post-experience CASA survey questions)

Demographic information
1. To which gender do you most identify?
   a. Female
   b. Male
   c. Prefer not to answer
2. Are you of Spanish or Latino origin?
   a. Yes
   b. No
3. (If yes) What would best describe you?
   a. Black/African American
   b. Asian
   c. Pacific Islander
   d. Native American
   e. White/Caucasian
   f. Multiracial/Multiethnic
   g. International student
   h. Prefer not to answer
4. What is your present or intended major_____________
5. What kind of experience did you have during the summer of 2018?
   a. Northeastern University Dialogue of Civilization (DOC)
   b. Traditional Study abroad
   c. International travel on my own or with family
   d. Coursework at Northeastern
   e. Work
   f. Internship
   g. Volunteering
   h. Other (enter)
6. Which program did you attend? (list all DOC programs for those answering a)
7. What classes did you take? (for those selecting d)
8. How long did you participate in your summer activity?
   a. 1-2 weeks
   b. 3-4 weeks
   c. 5-6 weeks
   d. More than 6 weeks
9. How many semesters of foreign language have you taken?
   a. 0
   b. 1
   c. 2
   d. 3
   e. 4 or more
10. What was your housing situation in the summer of 2018? (Please make a selection based on the descriptions below)
    a. I lived in a dorm or residence hall.
    b. I lived in a dorm with a brief opportunity for homestay.
    c. I lived in a dorm part of the time, and in a homestay part of the time.
    d. I lived in a room that I rented from my homestay family.
    e. I lived as a member of the family in a homestay.
    f. I lived in a hotel/apartment on my own or with other students on my program.
g. I lived at home.

(For students who selected a,b for #5):

11. Which phrase best describes the majority of the faculty who taught you in your study abroad program?
   a. Only faculty from my home university
   b. Faculty from my home university/Other US univ.
   c. Faculty from host culture & home univ.
   d. Faculty from all over the world
   e. Faculty from host country alone

12. To what degree were you encouraged to think about or reflect upon your study abroad / cultural experience?
   a. None: No provisions for cultural reflection at all
   b. Initial Guidance: Orientation was provided prior to departure for this program
   c. Some Guidance: Orientation was provided prior to departure and continued into program
   d. Extensive Guidance: Pre-departure orientation, mentoring, ongoing orientation or course in cross-cultural perspectives, reflective writing and research

13. How much opportunity did you have for interacting with people from the host culture and interacting with them in daily life, experiencing their way of life?
   a. None: No opportunities
   b. Isolated: Almost none or very limited opportunities
   c. Optional: Optional participation in occasional integration activities
   d. Required/Extensive: Required regular participation in cultural integration program, extensive direct cultural contact via service learning, internship

14. What kind of mindset do you think is important to be able to successfully communicate and interact with people from other cultures? (open ended for all students)

15. What kind of skills do you think are important to be able to successfully communicate and interact with people from other cultures? (open ended for all students)

(survey then links to CASA questions)

To gain access to the CASA survey questions, please contact TASCA Global:

EMAIL
info@TASCAglobal.com

TELEPHONE NUMBERS
USA +(1) 857-488-4410
UK +44 (0)1344 898001
South Africa +27 12 1420010
India +91 956 0 65 4422