Intercultural Communication Apprehension: A Multidimensional Perspective of Communication Between International and Domestic Students

Christina van Essen

Minnesota State University, Mankato

Follow this and additional works at: https://cornerstone.lib.mnsu.edu/etds

Part of the International and Intercultural Communication Commons

Recommended Citation

This Thesis is brought to you for free and open access by the Theses, Dissertations, and Other Capstone Projects at Cornerstone: A Collection of Scholarly and Creative Works for Minnesota State University, Mankato. It has been accepted for inclusion in All Theses, Dissertations, and Other Capstone Projects by an authorized administrator of Cornerstone: A Collection of Scholarly and Creative Works for Minnesota State University, Mankato.
Intercultural Communication Apprehension:
A multidimensional perspective of communication between
international and domestic students

By
Christina van Essen

A thesis submitted in partial fulfillment of the
Requirements for the degree of
Master of Art
in
Communication Studies

Minnesota State University, Mankato
Mankato, Minnesota
May 2020
03/18/2020

Intercultural Communication Apprehension:

A multidimensional perspective of communication between
international and domestic students

Christina van Essen

This thesis has been examined and approved by the following members of the student’s committee.

___________________________
Advisor: Dr. Kristen Cvancara

___________________________
Dr. Laura Jacobi

___________________________
Dr. Daniel Sachau
Acknowledgements

This thesis is dedicated to those who supported me throughout my time thinking about, writing, and editing my thesis. Special gratitude goes to my advisor Dr. Kristen Cvancara who has not only been a great mentor throughout the process, provided me with interesting insights, and asked the right questions to push me, but also lifted my spirit to continue this process. Without her continuous support, my thesis would not have reached the level it did.

In addition, great appreciation is given to my supervisor, committee member, and mentor Dr. Laura Jacobi who provided great encouragement and insights in times of need, and Dr. Dan Sachau who provided great suggestions for this thesis.

Lastly, I would like to acknowledge my friends and family who listened to me and provided welcome distractions. In particular, I wish to acknowledge my fiancé Rex Chng for making me smile in times of frustration and being a great listener when I needed it. Additionally, all the people I came across in my travels who have shared their stories have hugely contributed to bringing this project to life. Without their observations and experiences, I wouldn’t have known about the experiences of international students from different cultural, national, and racial backgrounds.
Abstract

This research looks at different factors influencing international students’ level of intercultural communication apprehension (ICA), the difference in the level of international students’ (participants) ICA experienced towards domestic and international students, and lastly the influence of this ICA on the social connectedness participants experience while living in the United States. Findings show that participants’ comfort in using English, and their cultural sensitivity had a significant influence on ICA when all variables were considered. Findings also show that participants are more apprehensive in communicating with American students as compared to international students. The combination of ICA towards American and international students results in the highest variance in social connectedness participants experience. This research implies that ICA is not accurately represented through solely one ICA score, and needs to be measured with more nuance to accurately represent apprehension people face in communication with culturally different people. In addition, more cultural and language training needs to be provided pre-departure and throughout the duration of their studies to provide international students more exposure to situations they might face in the United States.

Keywords: international students, intercultural communication apprehension, social connectedness, cultural sensitivity
Table of Contents

Chapter One: Introduction & Literature Review ................................................................. 1

Chapter Two: Method ......................................................................................................... 18

Chapter Three: Results .................................................................................................... 22

Chapter Four: Discussion ................................................................................................. 27

Chapter Five: Conclusion ................................................................................................. 36

References .......................................................................................................................... 37

Appendices ........................................................................................................................ 43

Tables ................................................................................................................................... 43

Figures ............................................................................................................................... 46
Chapter One: Introduction & Literature Review

The feeling of belonging is a basic human need (Baumeister & Leary, 1995). Belonging is conceptualized in this study as having a stable social network in which a person exchanges support and has frequent conflict free interactions with others. Humans need the support of other people to thrive and develop. Interestingly, everyday students around the globe are deciding to leave behind their trusted social communities to move to the United States to pursue an education. In 2012, I was one of the 250,920 new international students arriving to the United States (Institute of International Education, 2019). My dreams involved a lot of American friends and creating a place in which I belonged. However, once I arrived on the west coast at my community college campus, reality hit that domestic students were not as excited about international students as I expected. I felt alienated in the community and was anxious to communicate with people who were native English speakers. I found I developed a much deeper connection with the other international students arriving at the same time as I did. We had an ability to share the homesickness, cultural adjustments, and acculturation stresses through the relationships we developed with each other. This shared experience, during a very vulnerable stage of my study abroad, led me to establish more friendships with international rather than domestic students.

Listening to similar stories expressed by my international friends, I observed that international students constantly negotiate difficulties connecting with domestic students. For example, many of the people around me expressed a fear in initiating conversations with domestic students, and a hardship trying to find topics to talk about due to a perceived lack of commonality between them and domestic students. It is the realization of these experiences that prompted me to investigate what Neuliep and McCroskey (1997) first researched and called
Intercultural Communication Apprehension (ICA). They defined ICA as “the fear or anxiety associated with either real or anticipated interaction with people from different groups, especially different cultural or ethnic groups” (p. 147). The current study examines factors relevant to the ICA international students experience that likely decreases belonging and inhibits the development of social connectedness and friendship quality on campuses in the United States.

It is increasingly important to understand the international student experience, especially how they go about initiating and maintaining relationship, to adequately support the increasing number of international students seeking a university degree in the U.S. Unlike years ago, the U.S. is losing ground in the number of international students attending domestic universities. Countries like China, Australia, and Canada are more actively recruiting students, leaving the U.S. in a near-deficit in international student enrolment (Nedlund, 2019). To investigate this trend from a communication lens, the current research will look at: 1) the growing dependence of U.S. universities on international students, 2) communication situations international students face on campuses, 3) how these experiences impact intercultural communication apprehension, and 4) how ICA influences friendship formation and social connectedness.

**Importance of International Students in the US**

In the last 15 years, international students have become an integral population within the American higher education system. There are a number of ways in which international students contribute to the U.S. college environment and economy. International students add to the campus environment financially via tuition and purchases in local businesses, the contribution of different cultural perspectives to campus communities, and by diversifying the U.S. workforce.

**Severity of dependence.** Every year, close to 300,000 new students are moving to the United States to pursue higher education. Since the school year 2005/2006, the total number of
foreign students studying in the United States has nearly doubled, from 564,766 to a total of 1,095,299 students in the 2018/2019 year (Institute of International Education, 2019). Having international students in the classroom has become a norm rather than an exception.

For many years, the enrollment number of new international students has been rising, however, it hit a turning point in the 2016/2017 school year when new student enrollment started decreasing (Institute of International Education, 2019). With the hostile international rhetoric against foreigners and the “America First” attitude communicated by the current political administration’s policy, recent high school graduates and other prospective students looking to move abroad are rethinking their options within the U.S. International students are considering other countries in which to study or to stay in their home countries. For example, Chinese officials sent out an official message to Chinese students to warn them about the U.S.-Chinese trade war and the difficulty Chinese students have in obtaining U.S. F1-visas (Blanchard, June 2019) which is anticipated to have a chilling effect on future enrollments. Additionally, Amnesty International (August 2019) issued a warning for gun violence in the United States calling the violence a “Human Rights Crisis.” These messages from official government institutions and international peace organizations will increase anxiety for students looking to go abroad as they are entering a country in which they have little to no knowledge of the culture within the country, except for what is portrayed in the media or seen in short-term trips abroad to critically examine the likelihood of such acts of terrorism happening to them.

Despite the decrease in number of new international student enrollment, the Institute of International Education (2019) still reports slight growth of the overall number of student visa holders in the United States. Some schools, such as the New School in New York report 31% of their students are internationals (US News, n.d.). This creates a significant dependency on
international students, and if the enrollment level drops, it might have disastrous consequences for universities. For example, Bothwell (2018) reports that universities started realizing the financial dependence on international students’ tuition money, to the point that the University of Illinois, Urbana-Champaign campus annually pays $424,000 to insure itself against a decrease in enrollment of Chinese students in particular.

Financial incentive. From an administrator’s perspective, international students are appealing due to their contribution to tuition revenue that offsets higher operating costs and domestic student declines in enrollment. For example, the University of California system has been widely criticized for accepting more out of state students than California residents (The University of California, 2015). Mitchell, Leachman, and Masterson from the Center for Budget and Policy Priorities (2017) report that state funding for higher education has significantly decreased from 2008-2017, spending on average 16% less per student as compared to a decade ago. Universities are looking at international students who pay out-of-state tuition as a solution to fill this gap in finances.

In addition, the local community surrounding universities benefits significantly from international students through purchases of goods and services students consume in the area, such as food at a grocery store, personal entertainment at the local theater, and rent for an apartment. The Association of International Educators (NAFSA) reported that international students contributed a total of $41 billion to the U.S. economy in 2018-2019 academic year, and three U.S. jobs were created or supported for every seven international students (2019). This economic support does not always leave when students graduate. The Partnership for a New American Economy (2012) reported that “76% of patents awarded to the top 10 patent-producing US universities in 2011 had at least one foreign-born inventor” (p. 6). These patents contribute to
industries such as manufacturing, information technology, pharmaceuticals and more. The contribution of foreign born, US educated employees is undeniably important.

**Diversification of education.** Additionally, universities are seeking to diversify their student population. In an increasingly connected world, people are not solely competing for jobs and resources with people locally, instead, competition is globally focused. Understanding different cultures is vital to prepare students for the ever-changing, globalized world in which they will live and work. Little research has been done on the consequences of an increase of diversity on college campuses, neither focusing on the traditional white student nor on the student of a racial or cultural minority background. Hu and Kuh (2003) did look at the impact racial diversity had on college campuses and found that racial diversity is beneficial for both students of Color and Caucasian students, however, the effect was generally stronger on Caucasian students. Findings like these indicates the benefit of diversity is measured from the perspective of the already dominant group, and little is done in the preparation of minority students to accommodate their needs. More research should address how higher education benefits minority students, and how to create a more accepting environment for more than the Caucasian student.

**Difficulties faced by international students**

Despite the increasing financial dependence universities, local economies, and the system as a whole have on international students, little effort is made to accommodate for the level of comprehension and cultural knowledge international students bring to campus and must rely on to build belonging with other students. Due to their formative years spent in a non-U.S. context, students lack knowledge of the educational, social, and political system, yet universities expect students to function like natives from the moment they arrive. Previous research examining
international student experiences focused on a variety of different research topics, such as the effect of the ability to speak the host language (Li, 2015; Wong, 2015), friendships (Williams & Johnson, 2011), racial discrimination faced by international students (Zhang, 2015), and belonging in the host culture (Glass, Kochiolek, Wongtrirat, Lynch, & Cong, 2015; Rivas, Hale, & Galloway Burke, 2019). Little previous research investigated ways in which campuses could better meet the needs of international students to promote global conversations to help all students feel a stronger sense of belonging on campus. A particularly troublesome obstacle international students are facing in the process of creating friendships and developing a sense of belonging is argued to be intercultural communication apprehension (ICA), which likely inhibits social and internal desires to communicate with a range of students on campus. Of specific focus in the current study are the difficulties international students face related to language proficiency, establishing friendships, racial discrimination, and establishing a sense of belonging to the campus community.

Language proficiency. International students face a variety of difficulties in connecting with a local community, most obviously due to the difference in language spoken. A significant number of international students coming to the United States do not speak English as their native language. Wang, Ahn, Kim, and Lin-Siegler (2017) looked at reasons why international students are avoiding communication with Americans and found a variety of language related issues. Nearly 40% of the students surveyed felt that their English proficiency was not good enough to communicate with American students. This perception of the in-ability to speak English likely increases the anxiety to speak with people who are native English speakers, as there is a fear of misunderstandings and being outed as non-native. When an international student is trying to communicate with a native speaker and gets criticized verbally or non-verbally for not speaking
English fluently, it likely reinforces their insecurities and might even make students question their self-efficacy. Investigating this phenomenon in a familial context, Wong (2015) found that students with lower perceived English proficiency experience more anxiety in communicating with their host family. As a result, students used rejection, avoidance, and passivity as strategies in interactions with their host families. Reductions in student anxiety levels decreased after sufficient communication with their host families, however, for some students this might not even happen due to the disengagement strategies they use to go about the communication with the host families initially.

Formation of friendship. When international students move abroad, they are frequently faced with the reality that they do not know anyone or have any friends in the new host country. Unlike exchange students, international students are not arriving to the new country as part of an integrated program they follow with fellow students from their native country. Unless students are going abroad through an agent who provided a chance to meet other students from their country, they are likely to know no one upon arrival. Every relationship a student experiences in their first months studying abroad must develop beyond the initiation stage of relationship formation (as described by Knapp and Vangelisti, 1984). With no knowledge about the other person at all, international students must extend an enormous amount of emotional resources and time to establish friendships. When they arrive in a new country with no social network in place, international students are likely to be looking for relationships that are more inter-dependent in nature in which both sides of the friendship can rely on each other for social, emotional and physical support. Imagine being in a foreign country, several hours of time difference away from your family. When something like a health emergency, an intense feeling of missing family, or more technical things such as car problems happen, one cannot rely on family to assist in solving
the issue. This is where many international students rely on the friendships they established in which there is a strong feeling of responsibility towards each other’s well-being, which in turn helps them in resolving difficulties. Relationships, however, take time to reach this stage in which people feel like they can trust and depend on each other. Especially in the first months of moving abroad, the discomfort of not knowing the new culture, as well as not yet having a social support network could create intense difficulty in the cultural adaptation an international student experiences.

When people are in a well-established or known social context, new relationships are likely to be formed with some prior background through a potential introduction from mutual friends. At the bare minimum, people understand the cultural framework in which both partners exist. For most relationships formed by international students this is not the case, as cultural backgrounds could change immensely based on the country and cultural context from which someone originates. The understanding of these cultural differences is referred to as intercultural sensitivity (Stafford, et al., 1997). Bennett (1986) explains that an increased intercultural sensitivity is marked by lower ethnocentrism. When people are less culturally sensitive, they are more likely to show signs of denial and defense against difference, which could stand in the way of establishing meaningful relationships with people from a different cultural background. Experience with living abroad increases one’s cultural sensitivity (Johns & Thompson, 2010), as exposure to cultural differences changes people’s cultural sensitivity. This suggests the duration of time spent living abroad might also influence one’s cultural sensitivity.

Unlike international students, most American students already have a network in the same country of their university and don’t have as much interest in spending a lot of time and resources in establishing interdependent relationships with international students. Because
international students are likely to look for intense, involving relationships, they frequently complain about the already established networks of their domestic peers. Gareis (2012) indicates that a perceived lack of interest from American students in establishing friendships with international students limited the chances for international students to create friendships with domestic students. This perceived lack of interest might not be solely based on assumptions from international students. McKenzie and Baldassar (2016) found that domestic Australian students considered international friendships unnecessary and were “unimagined” by the domestic students. Ironically, the domestic students blamed international students for the lack of these relationships, explaining the reasons to be “international students tended to ‘group together’, due to the language barriers, cultural differences, and because university social events often targeted international students” (p. 707). Domestic students indicate that establishing friendships with international students takes too much effort as compared to establishing domestic friendships and they are not formed naturally the way domestic friendships are (McKenzie & Baldassar, 2016; Bennett, Volet, & Fozdar, 2013).

Another possible explanation for this perceived disinterest might be partly due to a difference in understanding of what it means to be a friend in different cultures. Gareis (2000) found that several of the German students she interviewed experienced a difference in what it means to be friends. The Germans interviewed explained that their friendships with Americans remained shallow or superficial. International students might perceive these surface-level interactions as a disinterest in establishing a deeper relationship and as rejecting a friendship altogether.

**Racial discrimination.** In severe cases, some international students experience discrimination in the host country, sometimes in ways they may not have experienced in their
native country. Notably, students who are part of a racially or culturally dominant group in their native country and are considered a racial or cultural minority in the host country could find this renegotiation of their identities difficult. Asante, Sekimoto, and Brown (2016) described the way in which African students arriving to the United States have to re-evaluate what it means to be black. Lee and Rice (2007) asked students about their experiences living in the United States and specifically about instances in which they were unfairly treated or discriminated against. Students of color in particular indicated that they felt treated unfairly and felt a level of hostility against them. European students living in the United States have not appeared to have indicated the same intensity of discrimination and exclusion, which might indicate that a closer similarity, racially and culturally, might result in a lesser degree of exclusion overall. Racially and culturally similar people might, in fact, be less conscientious and aware of their differences with the native population and in turn might not be as anxious in their communication.

An unusual form of discrimination is one in which international students must live up to favorable expectations that are not representative of their personal experience or abilities. Zhang (2015) found that American students stereotype Chinese students as smart and hardworking. Zhang continues that these stereotypes might actually be perceived a threat and consequently have a negative impact on the relationship between the students due to a fear of being less than the stereotype describes. This can put extensive pressure on the student to ensure they are not destroying these positive stereotypes for others, and through that, might avoid communication with the local people.

**Establishing a sense of belonging.** As humans are social beings, international students will have a natural desire to be part of a group or community on their campuses. Prior research on international students and the establishment of belonging has primarily focused on the social
or relational aspect of what it means to belong (Anderson-Butcher & Conroy, 2002; O’Keeffe, 2013; Morrow & Ackermann, 2012; Glass, et al, 2015). Consistent with the current study, this research focuses on the connections made with other people while living abroad; however, inconsistent with the current study is the existing research’s disregard for other aspects that could influence belonging. Difficulties highlighted here that extend the concept of belonging include language proficiency, cultural sensitivity, perceived cultural similarity, and minority status, - all of which may impact the establishment of relationships in the campus environment, increasing difficulty, and resulting in the development of in- and out-groups which influence who is and isn’t part of the social environment.

It is clear there are many variables that go into establishing the feeling of belonging an international student may experience on a university campus. For example, the feeling of belonging is not solely made up of being socially connected, there are also aspects of feeling like one is part of a cultural or physical space and has the potential to be influenced by more aspects. Prior research on international students has found that forging local relationships has helped students in establishing a feeling of locality and belonging, increased language capabilities, and re-evaluation of their hosts in the new region (Glass, 2018; Wong, 2015; Johnson, Heeok Heo, Reich, Leppisaari, & Lee, 2015). Additionally, relationships do not solely come from one side and need input from both the campus community and the international students. The perceptions we hold of people who are not “like us” could limit people’s ability to create these connections and ultimately give international students the feeling like they don’t belong to the society. It therefore is important to look at the level of apprehension between international and domestic students and the impact it has on the communication between the different groups. Thus, addressing the complexity of belonging in the current study goes beyond the scope of existing
research by building on the importance of belonging through social connectedness and adding an element of anxiety anticipated to impact relationship formation.

**Intercultural Communication Apprehension (ICA)**

International students face many different factors that can contribute to a level of anxiety in communication with other students. This anxiety can lead into a more profound and deep apprehension if it is not matched with positive interaction experiences. Most people experience low levels of anxiety in everyday conversations; however, between different cultural and ethnic groups, anxiety is more likely to take place and is anticipated to occur at a higher degree. Neuliep and McCroskey (1997) developed the intercultural communication apprehension scale as an extension of the previously developed Communication Apprehension (CA) scale. ICA is defined as “the fear or anxiety associated with either real or anticipated interaction with people from different groups, especially different cultural or ethnic groups” (p. 152).

McCroskey and Neuliep (1997) found that there was a need to distinguish between the original CA scale to reflect the intercultural and ethnic differences between people to acknowledge the additional level of novelty due to cultural differences between people that could cause a higher level of awareness and anxiety in an interaction. Though the ICA scale gives insight on the general apprehension people face when communicating with culturally and/or ethnically different people, it does not identify variations of ethnic and cultural differences. People’s religious, historical, and family background could cause them to consider certain groups of people more favorably, despite being from a culturally or ethnically similar background. For example, a person of an Indonesian background might consider a Caucasian American more favorably than a Caucasian Dutch person due to a historical background of colonization from the Dutch. The Caucasian Dutch and Caucasian American could be very similar in culture, but the
historic baggage might weigh very strongly in the evaluation of a person. However, when situated in the U.S., where both the Indonesian and Dutch person are labeled as foreigner, the perception and apprehension might be different. When international students move abroad, they are likely to be interacting with people from a variety of different cultural backgrounds of whom they are unfamiliar, including both Americans and international students from regions of the world other than the area they are from. International students likely respond differently to Americans, as compared to fellow international students. There is a similarity between international students due to a shared understanding of being a foreigner, lacking some of the cultural capital, and being far away from family and other loved ones which provides international students a very strong basis for creating conversation among their international communities based on shared experiences.

Little is known on what causes the level of ICA to be different between people, or what causes the ICA to be occurring to higher or lower degrees. Chen (2010) is one of the few scholars who researched possible causes of ICA. He looked at the relationship between intercultural sensitivity on ethnocentrism and ICA. Chen found that there is a negative relationship between intercultural sensitivity and ICA, meaning when someone’s level of intercultural sensitivity is higher, they experience lower degrees of ICA. Similarly, with higher levels of intercultural sensitivity, people show lower levels of ethnocentrism. Intercultural sensitivity consists of five dimensions, including “interaction engagement, respect of cultural differences, intercultural confidence, interaction enjoyment, and intercultural attentiveness” (Chen, 2010, p. 4). Chen’s findings indicated that the ICA was most strongly related to the respect of cultural differences and intercultural enjoyment. Communicating this respect and enjoyment understandably reduces levels of ICA as it will spark someone’s curiosity to engage
with others and learn more about the differences in culture, and therefore reduce the anxiety someone feels towards differences.

Neuliep (2012) looked at impacts of uncertainty on intercultural communication apprehension. There is always a degree of uncertainty when communicating with someone from a different culture. This uncertainty can spark a level of anxiety for people which can limit their ability to communicate. *Anxiety uncertainty management* refers to the interaction between uncertainty, anxiety, mindfulness, and communication effectiveness (Gudykunst, 1993). People generally attempt to reduce uncertainty, whether it is through avoiding the situation or facing the situation. The desire to reduce uncertainty is a natural human response, documented in 1975 by Berger and Calabrese in their seminal work on establishing uncertainty reduction theory. Neuliep’s research indicated that there is a significant and negative correlation between someone’s ICA and uncertainty reduction during initial intercultural interactions, however, there was no significant level of ICA during intracultural interactions. This indicates that a presumed level of similarity can reduce the level of ICA someone indicates. If international students are seeing other, culturally different international students as more similar to them than Americans, there is a possibility that they might face lower levels of ICA when communicating with other international students as compared to interactions with domestic students.

ICA can have serious consequences on the adjustment of international students studying in the United States and has received attention for how it relates to other variables such as ethnocentrism, willingness and intention to communicate with others. Lin and Rancer (2003) proposed a model looking at the relationship between ethnocentrism and ICA and the impact both have on international student willingness to communicate and intentions to participate. They found that both ethnocentrism and ICA negatively relate to the willingness to
communicate, and intentions to participate relates positively. This means that international students who feel high levels of ICA towards Americans are less willing to communicate with the domestic students and are less likely to participate with this group of people. This might intensify barriers between the domestic and international student population.

The current research examines the ICA international students experience in communication with American and other international students, and investigates potential variables that may contribute to levels of ICA. The investigation links different factors of apprehension that may be impacting an international student’s ability to forge friendships with domestic students. Due to the difference in experiences, international students are anticipated to experience a strong degree of intercultural communication apprehension when communicating with American students that will ultimately impact the sense of belonging they feel on a campus.

Many factors may account for the lack of relationship initiation between international and domestic students that may relate levels of ICA experienced to a student’s ability to develop friendships and establish a social connection on a university campus. The current study predicted comfortability in using English conversationally, time studied abroad, previous experience being a minority, perceived similarity, and cultural sensitivity will all impact students’ ICA and ultimately students’ social connectedness. Neuliep (2012) found that perceived similarity results in lower levels of intercultural communication apprehension. To test for connections between the discussed factors a series of predictions were advanced. Based on Neuliep’s work, it was initially predicted that international students will associate less ICA when interacting with international students from different cultural backgrounds than their own compared to more ICA associated with interacting with domestic students (see Figure 1). This leads to the hypothesis;
H1: International students experience a lower level of ICA in anticipated interactions with each other, as compared to international students anticipating interactions with domestic students. It is not only important to know if ICA is differently perceived by international students, but also what variables influence the experience of ICA by international students. There are a number of factors that could influence ICA (see Figure 2) such as perceived language proficiency, cultural sensitivity, time spent abroad, previous exposure to being a racial minority, and perceived similarity to the host culture. Therefore, H2 tests the influence these variables have on ICA.

H2a: A higher comfort level to communicate in English is related to lower ICA.

H2b: Time lived abroad is negatively related to ICA.

H2c: Previous exposure to being of a minority status is related to lower ICA.

H2d: Higher perceived cultural similarity is related to lower ICA.

H2e: Intercultural sensitivity is negatively related to ICA.

Ultimately, belonging is the final concept investigated in the current research, with special focus on how ICA relates to a sense of belonging among international students on a university campus. To date, extant research has mostly focused on social connections to operationalize what it means to belong. Even though many factors impact belonging, the lack of a quantitative scale operationalizing all of the factors lead the current study to operationalize the level of social connectedness (SCS) international students report as a measurable representation of belonging. This research is exploring how ICA is influencing the degree to which an international student feels connected to the new environment in which they live (see Figure 3). As social connections are a large aspect of the feeling of belonging, it is important to know if the experience of ICA is influencing this ability to feel as though they belong. Students might avoid establishing
interpersonal relationships when faced with high anxiety, which might make them less susceptible to feeling connected to people around them. Therefore;

H3: Overall ICA is negatively related to social connectedness.
Chapter Two: Method

Participants

A total of 231 students (male = 117, female = 99) participated in the survey. Participants were required to be international students on either an F-1 or a J-1 visa and received acknowledgement for one volunteer hour on campus for participating. A total of 44 countries were represented of which South Korea (n=36), Nepal (n=25), and Ethiopia (n=16) had the most representatives (see Figure 4 for countries represented). The majority of students reported an age in the range of 18-24 years old (n=181, 78%), followed by 25-34 (n=34), and 35-44 (n=2). 224 students reported to be on a F-1 student visa, 5 students were on a J-1 visa, and 2 students did not indicate their student status. See table 1 for variables based on participants indicated sex.

Procedures

After obtaining IRB approval, participants were recruited using a listserv maintained by the international programs student office and received an email containing an online survey link. The online survey was available for a period of two weeks and was only accessible via the recruitment link. When clicked, the link would open to a consent form designed to allow only students who indicated consent could continue with the survey. Completing the online survey took participants from 20-30 minutes.

At the end of the survey, students were given the option to earn compensation for their time by claiming one cultural contribution hour for participation in the study. The cultural contribution hour could be used towards a required number of hours students need to volunteer each year to qualify for a scholarship. Students were not required to rely on this survey to fulfill their scholarship requirement, as there are many options for completing volunteer hours on campus. The contribution hours were recorded and collected on a separate website from the
survey, attainable only by the international programs staff and not accessible by the researcher. Conversely, the international student office only obtained record of the participants and did not have access to the student survey responses.

**Study Design**

The design used quantitative research methodology to gather data to test each hypothesis via an online survey. Through psychometric measurements, data was obtained on the ICA students feel towards both American students as well as other international students from different cultural backgrounds. Additionally, the variables of perceived language proficiency, cultural sensitivity, time lived abroad, previous exposure to being in a minority position, and perceived cultural similarity were measured to gain a deeper understanding of the influences on ICA. Lastly, the social connectedness scale was used to measure if students experiencing higher ICA feel less socially connected. See Table 2 for descriptive statistics of all variables.

**Intercultural Communication Apprehension.** Neuliep and McCroskey’s (1997) Personal Report of Intercultural Communication Apprehension Scale was included to measure level of participant ICA. This scale was adapted to reflect a clear differentiation between student perceived level of apprehension in communication with other international students from a different native country, and student perceived apprehension in communication with domestic peers (e.g. “While conversing with an international student, I feel very relaxed” or “I dislike interacting with American students”). The adapted scale consisted of 15-items and used a 5-point response set in which options ranged from strongly disagree to strongly agree. A higher score implied a higher level of apprehension. Three different ICA scores were computed, one for ICA towards International students (ICA international), (Cronbach’s alpha showed a strong reliability; $\alpha = .93$), ICA toward American students (ICA American), (Cronbach’s alpha showed
a strong reliability; \( \alpha = .93 \), and overall ICA score (ICA overall), (combined American and international ICA; Cronbach’s alpha showed strong reliability, \( \alpha = .94 \)).

**Aspects related to ICA.** This research examined various aspects predicted to influence the ICA international students experience. Firstly, students were asked “how comfortable are you communicating in English with native speakers?” (English proficiency) which was measured on a 5-point Likert scale ranging from 1 = very comfortable to 5 = very uncomfortable. Secondly, this research investigates students’ time lived abroad on a scale from less than 3 months until 6+ years (time studied abroad). Next, the research looked at previous minority status in the participant’s native country (previous minority status; range of yes or no). Lastly, perceived cultural similarity (cultural similarity) was measured through a 5-point Likert response set asking students “How similar do you perceive your culture to the current culture you live in?” (ranging from 1 = very similar, to 5 = very different).

**Intercultural Sensitivity.** The Intercultural Sensitivity Scale (ISS), developed by Chen and Sarosta (2000) was used to measure student perception of cultural sensitivity. This is a 24-item questionnaire maintained a strong reliability (\( \alpha = .92 \)) and used a 5-point response set ranging from 1 = strongly agree to 5 = strongly disagree, item examples include “I enjoy interacting with people from different cultures,” and “I can be as sociable as I want to be when interacting with people from different cultures”. A higher score reflects a better awareness and more comfort in cross-cultural communication.

**Social Connectedness.** The Revised Social Connectedness Scale, (Lee, Draper, & Lee, 2001) was used to measure the social connectedness students experience while living abroad. The 19-item questionnaire maintained strong reliability (\( \alpha = .91 \)) and used a 6-point response set ranging from 1 = strongly disagree to 6 = strongly agree. Item examples include questions such
as, “I see people as friendly and approachable,” “I find myself actively involved in people’s
lives,” and “I feel disconnected from the world.” A higher score in social connectedness
indicates more attachment to the people students interact with.
Chapter Three: Results

This research analyzed data using t-tests, and regression analyses to learn more about the difference of ICA experienced towards American and international students, the impact of variables on ICA, and how ICA ultimately influences students’ social connectedness. Due to the length of the survey (total survey consisted of 176 questions), not every participant finished the full survey. Therefore, the number of participants in each analysis varies based on the number of students who completed each scale. See table 2 for relationship between all variables.

**H1: ICA towards domestic and international students.**

A paired samples t-test was run to test the difference international students experience ICA overall towards international students as compared to domestic students (t(208) = 8.90, p < 0.001). Students reported a significantly higher average ICA overall score towards domestic students (n= 209, M = 2.45, SD = 0.84) as compared to ICA reported towards other international students (n= 209, M = 1.98, SD = 0.69). H1 was supported.

**H2a: English comfortability and ICA.**

A subset of the sample of participants (n = 52) was asked about their perceived English proficiency in conversation with native speakers. Among those participants, a regression analysis was run to test the relationship between English proficiency and ICA overall: \( \beta = 0.64, t = 5.94, (F(1, 51) = 35.32, p < 0.001) \). The sample multiple correlation coefficient (R) was 0.64. This indicates that 40.9 percent of the statistical model variance in ICA can be accounted for by someone’s proficiency using English.

A post hoc analysis was performed to test English comfortability in communication relative to domestic and international student ICA. The level of ICA American experienced towards American students indicated a stronger relationship with perceived English proficiency:
$\beta = 0.73, t = 7.87, F(1, 55) = 61.98. p < 0.001$. The sample multiple correlation coefficient ($R$) was 0.73. This indicates that for communication with American students, 53 percent of the statistical model variance in ICA can be accounted for by someone’s comfort to speak English. Interestingly, the comfort in using English was much less of a contributor in the ICA students felt to international students, $\beta = 0.42, t = 3.31, F(1, 52)= 10.96. p = 0.002$. The sample multiple correlation coefficient ($R$) was 0.42. This means that 15.8 percent of the statistical model variance in someone’s ICA towards international students can be accounted for by the level of comfort students have in communication with other international students.

**H2b: Time lived abroad and ICA.**

A regression analysis was conducted to test if the longer students lived abroad, the lower their reported *ICA overall* ($n = 199$). The relationship was significant: $\beta = -0.20, t = -2.80, F(1,198) = 7.84. p < 0.006$. The sample multiple coefficient ($R$) was 0.20. This indicates that, with time, students are likely to reduce their *ICA overall* level. Time accounts for approximately 3.8 percent of the statistical model variance in ICA. Therefore, H2b was confirmed.

**H2c: Previous exposure to being of a minority status and ICA.**

A *t*-test was conducted to compare the average *ICA overall* reported among international students who were and were not of a minority status in their home country. Due to the small number of participants who indicated they were a minority in the country they grew up in ($n=37$), it was difficult to draw a conclusion on whether exposure to being in a minority status growing up is in fact reducing the ICA experienced by participants. However, more research with a larger participant pool needs to be done in order to conduct a more reliable and generalizable conclusion on this topic. Levene’s test for equality of variance was not significant ($F = 2.03, p < 0.16$). This preliminary research does not confirm H2c.
**H2d: Perceived cultural similarity and ICA.**

A regression analysis was conducted to test the relationship between perceived *cultural similarity* and reported *ICA overall*. A majority of students ranked their culture as very different or somewhat different from the U.S. culture (n = 159). The results indicate perceived similarity was a significant predictor for international student reported ICA: $\beta = -0.15$, $t = -2.22$, $F(1, 205) = 4.91$, $p < 0.03$. The sample multiple correlation efficient was 0.153, which indicates that approximately 2 percent of the statistical model variance in *ICA overall* could be accounted for by the individuals perceived *cultural similarity*. Therefore, H2d is confirmed.

**H2e: Intercultural sensitivity and ICA.**

A regression analysis was conducted to test if reported cultural sensitivity of students predicts students’ ICA. Results show that students (n = 186) who experience higher cultural sensitivity experience lower degrees of ICA. This relationship was significant: $\beta = -0.65$, $t = -11.59$, $F(1, 185) = 134.34$, $p < 0.001$. The sample multiple correlation coefficient ($R$) was 0.65. This indicates that 42.1 percent of the statistical model variance can be accounted for by someone’s level of ICA. Therefore, H2e was confirmed.

To examine this relationship further, a post hoc test explored if differences existed between the way in which international students’ intercultural sensitivity related to ICA towards Americans as compared to other international students. Students’ ICA towards Americans was significantly influenced by their cultural sensitivity: $\beta = -0.48$, $t = -7.54$, $F(1, 189) = 56.86$, $p < 0.001$. The sample multiple correlation coefficient ($R$) was 0.48. This indicates that 23.1 percent of the statistical model variance can be accounted for by someone’s level of ICA towards American students. For international students, the findings also showed significance: $\beta = -0.69$, $t = -12.66$, $F(1, 187) = 160.21$, $p < 0.001$. The sample multiple correlation coefficient ($R$) was
0.68. This indicates that 46.1 percent of the statistical model variance can be accounted for by someone’s level of ICA.

After testing each variable separately, another post hoc analysis was conducted to run a regression with the H2a, b, d, and e variables in one equation so it would be possible to see the different variance each variable accounted for in the same model \((F(4, 40) = 15.74, p < 0.001)\). The sample multiple correlation coefficient \((R)\) was 0.49. This regression results in yielding significant influence of English proficiency \((\beta = 0.065, p < .001)\) and ISS \((\beta = -0.45, p < .001)\), however findings for the time studied abroad and the cultural similarity were not significant in predicting ICA overall.

**H3: Overall ICA and social connectedness.**

A regression analysis was conducted to test if ICA overall predicts social connectedness. Results show that students \((n = 198)\) who report higher levels of ICA also report less social connectedness. The relationship was significant: \(\beta = -0.51, t = -8.32, F(1, 197) = 69.23, p < 0.001\). The sample multiple correlation coefficient \((R)\) was 0.51. This indicates that 26 percent of the statistical model variance can be accounted for by someone’s level of social connectedness. Therefore, H3 was confirmed.

A post hoc regression analysis was performed, and the results indicated a difference between the way in which social connectedness is influenced by ICA towards international students as compared to domestic students. The ICA associated with American students (ICA American) showed a significant relationship: \(\beta = -0.44, t = -6.88, F(1, 202) = 47.38, p < 0.001\). The sample multiple correlation coefficient \((R)\) was 0.44. This indicates that 19 percent of the statistical model variance associated with a participant’s social connectedness was accounted for by someone’s ICA towards Americans. When looking at the ICA associated with international
students \textit{(ICA international)}, a significant relationship was found, $\beta = -0.46$, $t = -7.31$, $F(1, 199) = 53.46$, $p < 0.001$. The sample multiple correlation coefficient ($R$) was 0.46. This indicates that 21 percent of the statistical variance in the model indicated someone’s social connectedness can be accounted for by an international student’s ICA towards fellow international students.
Chapter Four: Discussion

This research found that international students experience different levels of ICA and multiple variables influence level of ICA. In addition, ICA has a strong relationship to students’ social connectedness. These findings have an impact on the way in which we understand ICA, what we should prioritize in new student orientation, and how universities can impact the way in which students experience social connection on campuses.

Regarding the relevance of H1, research on ICA has primarily focused on the apprehension that differs between people and has scored people on a general level of ICA. However, a noteworthy finding of this research is that ICA may be more useful as a concept if it is measured specifically according to who the participant considers in answering the questions in the ICA questionnaire. The difference in ICA mean scores participants reported towards American and international students differed in a significant and noteworthy manner regarding the experience of apprehension. This research is giving a first look at the way in which these ICA scores could differ based on culturally different conversational partners. This is important because currently published research measuring people’s ICA has disregarded differences in the way in which we perceive people based on specific cultural differences. This also means that recommendations of training on reducing ICA scores have been measuring a generic level of ICA, however, tackling anxiety based on specific cultural groups could more effectively and efficiently help in reducing ICA. More research should be performed to understand if aspects like colonization, historical conflict, or differences such as racial differences impact on the way in which we perceive a conversational partner.

Regarding the relevance of the series of H2 tests, a number of different possible contributing factors have been looked at in understanding what could influence the overall
combined score of ICA and some variances influence this score to a greater or lesser degree. Regarding the level of comfort students feel in conversing in English with native speakers, the findings indicate the more comfortable students are in conversations with native speakers, the lower their communication apprehension. Most interesting, however, is seeing the degree to which the comfort in English is influencing the apprehension experienced. In communication with Americans, the comfort in communicating in English is influencing the ICA more as compared to the way in which it influences the communication with other international students. International students might be worried about being misunderstood, perceived less capable as they are, or being outed as a foreigner. Comparatively, when conversing with other international students, most students will understand that they are also not the experts in the use of the English language. This could reduce the anxiety of making mistakes as it might be more commonly understood that mistakes are made in using English, and students are fluent in more than one language, which is an accomplishment in and of itself. Interestingly, universities focus heavily on cultural knowledge during orientation programs. Many universities hold a minimum requirement of English ability when admitting students (generally tested on reading, writing, listening, and speaking), however, once a standard score is met, no continuous effort is made to ensure students feel comfortable using English in conversations. Understanding the importance of English proficiency on a students’ apprehension makes it important for universities and colleges to consider continuous training in using English conversationally.

The length of time students studied abroad significantly related to the level of ICA they reported, and although not of great influence, and not of significance when tested in conjunction with the other variables, it is important to look at the implications of this result. In general, the longer the exposure to the host culture, students might decrease the anxiety when conversing
with Americans, but this is not guaranteed. Stable rates or increases in anxiety might be associated with a few different reasons. Time in and of itself might not have an influence on a students’ social experience living abroad. Students might have lived abroad for years without establishing meaningful interactions that would change the apprehension they face in intercultural interactions. Many orientation programs student partake in are only offered during orientation, or during a first semester. A combination of factors plays into this decision as money and resources need to be invested into these programs. Programs, however, cannot assume that with time students will adjust, and a continuous effort needs to be made to even reach out to students who have been in the U.S. for a number of years to check-up on the apprehension they experience.

Similar to the length of time lived abroad, though it might sound reasonable that students who have experience being in a minority status in their country growing up might have more experience communicating cross-culturally and therefore experience lower apprehension, the results do not support this hypothesis. The number of participants who indicated they were in minority status in the country they grew up in was small (n = 37), which might have contributed to the lack of a significant $p$-value. This might indicate that students in minority standing have actually internalized an identity associated with a higher baseline level of anxiety. More research in this characteristic is warranted.

Surprisingly, the level of perceived cultural similarity has little influence on students’ ICA score, and, when ran in conjunction with other factors, the cultural similarity was not significant in predicting students’ level of ICA. As previously discussed, when one perceives another culture as very different, it could lead to a much higher level of anxiety due to the potential fear of not understanding the culture and its habits. Neuliep (2012) explained that the
anxiety is related to the level of ICA someone experiences. A potential explanation for this contradicting finding might be that people who are considering their culture very similar to the culture in the U.S. might be less aware of the small differences which potentially unconsciously creates this level of apprehension. In contrast, even if students perceive the U.S. culture to be different from their own, they may harbor a desire to adapt – which may impact level of ICA in unknown ways.

Students’ level of cultural sensitivity has a strong influence on their ICA. When students are more aware and mindful of the cultural differences, they are less anxious in communication. This awareness is of major influence on the anxiety students face in intercultural communication. Post hoc analyses revealed a difference in the way in which it influences ICA scores towards Americans and international students. Cultural sensitivity accounted for less of the variance in communication with Americans as compared to more of the variance accounted for ICA towards international students. This might indicate that students have a general understanding of American culture already due to the American media that is going around the world, whereas it might be much harder to be culturally aware on countries that are not as much represented in the media. Therefore, someone who is much more culturally aware on other international differences, will naturally feel less anxious when communicating. It could be helpful for students to get exposure to the U.S. culture prior to their departure to the U.S., not for the purpose of changing the way in which international students interact, but to get to know how differences are manifested and get a better appreciation for the existence of differences. As this has a significant influence on ICA, even in comparison with the other variables, this awareness of difference could ultimately have a noteworthy influence on the way in which students could establish relationships with culturally different people.
Lastly, this research looked at the way in which social connectedness is influenced by the ICA students experience. The overall ICA students experience is of major influence on the social connectedness students perceive as it accounts for a significant variance in ICA scores. Interestingly, though, it is the combination of the ICA towards Americans and international students combined that has greater influence on student’s social connectedness. This indicates that international students are likely feeling the desire to connect to both international and domestic students, rather than just one group. These findings are in line with the findings of Chen (2010). As people are social beings, the lack of feeling of connection has the potential to have consequences on the overall well-being of students. Though social connectedness is not the only part of the feeling of belonging, previous research relies heavily on the connection we have with others as a central part in conceptually thinking about the feeling of belonging.

There are some limitations which might influence the findings and should be considered when designing future studies of this nature. First, the group of international students participating in this study is not representative of the national backgrounds of all international students. The main three countries represented (South Korea, Nepal, and Ethiopia; accounting for a combined 32.9 % of all participants) do not represent all the countries from which international students in the U.S. originate. Institute of International Education (2019) reports that the three countries sending most students to the U.S. are China (33.7% of all international students), India (18.4 % of all international students), and South Korea (4.8 % of all international students). There is a strong underrepresentation of certain countries in this research, and more research must be performed to understand the influence on students. In addition, it is unknown if the students have a cultural framework of the American culture beyond their experience in the Midwest. The part of the country in which the research is performed is known to have very little
cultural and racial diversity. In addition, the culture in this part of the country has a strong value of family relationships, making it difficult for international students to enter social groups due to fairly closed social networks among domestic students. More research needs to be performed to confirm these findings in areas with more cultural diversity.

**Implications for Campuses and Communication Research**

The implications of this research are important if U.S. universities and campuses are to instill a stronger sense of belonging and social connection between international and domestic students. Specifically, the findings indicate three major areas for application: 1) revision and expansion of orientation and adaptation programs for international students when arriving to a campus, 2) development of ongoing programs to integrate and foster more domestic and international student interaction throughout curriculum and across departments, and 3) Communication models should be adjusted to more accurately reflect variables impacting the experiences of people living in a foreign social context.

Firstly, orientation programs need to be adjusted to fit the needs of international students more strongly. The U.S. is an ethnocentric country in which the ability to communicate in English is considered important for the way in which people function in this society. As this research indicates, students’ comfort in using English conversationally and their cultural sensitivity are strong predictors of their communication apprehension. Yet, orientation programs provide limited opportunities for new students to practice conversation in mindful and meaningful ways. Potential changes in the orientation program could include an online pre-departure orientation specifically focused on issues students might face during early stages of their study abroad program to help students prepare for the difference in cultural practices. Examples of culturally specific training could model conversational English in relevant instances
via informationally illustrating how to open a bank account in the United States, how to navigate the medical system and how it generally works (for example, differences between the emergency room, urgent care, and primary physician), common conversational scripts in stores, restaurants, and on campus. Audio-visual examples such as videos will help students in understanding what language and nonverbal communication is appropriate in the situations, enabling students to identify differences from the way in which these practices are performed in their native countries. In addition, providing continuous on-campus practice and training in conversational English will help students to understand the complexity of the English language. Such training could include informal and social conversations on topics such as: how to use certain terms or verbiage, commonly used sayings and their meanings (including questions such as “what’s up?”), or frequently used media references to better understand conversational context. A feasible way to offer both types of training is to implement it through on-campus advocacy groups (registered student organizations) interested in assisting students through their adaptation in the U.S. Some colleges already implement such programs through “campus talks” which provide a weekly time and place on campus which is open for all students to attend. Sessions have prepared themes, but conversations don’t have to remain on this topic. Student volunteers and community members such as local retirees, could come and enjoy students’ company while students could establish mentorship relationships with the local community members attending.

Secondly, more effort needs to be made to connect domestic and international students in a proactive manner. This research shows that for international students both the relationships they create with international and domestic students are important to create a level of social connectedness. One way in which this could be accomplished is via curriculum initiatives, by adapting assignments in which students need to actively interact cross-culturally. Especially in
general education classes in which there is high potential for students to practice interactive learning. For example, courses in English, communication studies, or sociology could include a cultural perspective associated with assignments in which students could learn from each other’s background or work together to get exposure to people outside of their cultural framework. This does not have to result in extra work for instructors, as it could use class activities and assignments that already exist. Instructors could be enabled to be more conscious in creating discussion groups for students or have group activities that would foster cross-cultural conversations, especially if these efforts were to be recognized by Dean’s and university administrators as positively contributing to the campus climate and specifically to student retention rates.

Lastly, from a research perspective, communication studies should focus more on the way in which people from a variety of different backgrounds interact in a foreign environment, and an easy way to develop theory in this direction is to design studies that meld intercultural and interpersonal approaches. As addressed earlier in this research, there might be different ways in which friendships are established for international students in the United States. The apprehension students face is likely to decrease the establishment of relationships with Americans; and vice versa. However, there might also be a difference in the type of friendships international students need, and a difference in the way in which students approach these friendships which might limit the way in which they are forming. Applying Knapp and Vangelisti’s (2008) model of relationship development to understand the way in which American students develop their relationships as compared to the way in which international students form relationships is a fruitful avenue to explore in future studies. Research could specifically focus on whether there is a difference in the stage students desire their friendships to be at (eg.
intensifying, integrating, or bonding), the resources expected to be exchanged at each stage, and the typical speed in which they desire these relationships to move through different stages of relationship development.
Chapter Five: Conclusion

This research provides a deeper understanding in the way in which we understand the ICA international students experience when attending university at a U.S. campus. There is a significant difference in the way in which international students experience ICA towards American students as compared to how they experience ICA towards international students. This research found two significant influences on ICA; the comfort of using English in conversation and the cultural sensitivity they harbor when they arrive. Unlike previously predicted, the time lived abroad, coming from a minority background, and the perceived cultural similarity are not as strong of an influence on the level of ICA students experience as anticipated. Lastly, the overall level of ICA influences the social connectedness students experience while living abroad.

Practical implications of this work suggest educators and practitioners in higher education who want to enhance the success and belonging of international students on their campuses should consider developing programs to support engagement between domestic and international students as a promising strategy to promote belonging and growth. In addition, more communication research should be performed to have a more thorough understanding of the way in which international students establish and maintain different relationships, bridging theory across intercultural and interpersonal paradigms.
References


Blanchard, B. (2019, June 3). China warns students, academic risk of studying in the U.S.

Retrieved from https://web.uri.edu/iaics/files/01Guo-MingChen.pdf


Li, X. (2015). International students in China: Cross-cultural interaction, integration, and

https://doi-org.ezproxy.mnsu.edu/10.1080/15348458.2015.1070573


NAFSA International Student Economic Value Tool. (2019). Retrieved from


Appendices

Tables

Table 1

*Participant variables mean, standard deviation, and number of participants based on sex*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>ICA overall</td>
<td>2.18</td>
<td>0.67</td>
</tr>
<tr>
<td>ICA American</td>
<td>2.34</td>
<td>0.75</td>
</tr>
<tr>
<td>ICA international</td>
<td>2.02</td>
<td>0.73</td>
</tr>
<tr>
<td>English proficiency</td>
<td>1.86</td>
<td>1.09</td>
</tr>
<tr>
<td>Time studied abroad</td>
<td>6.72</td>
<td>4.08</td>
</tr>
<tr>
<td>Minority Status</td>
<td>1.77</td>
<td>0.43</td>
</tr>
<tr>
<td>Cultural similarity</td>
<td>3.79</td>
<td>1.20</td>
</tr>
<tr>
<td>ISS</td>
<td>3.80</td>
<td>0.59</td>
</tr>
<tr>
<td>Social Connectedness</td>
<td>4.12</td>
<td>0.83</td>
</tr>
</tbody>
</table>

*Note.* This table demonstrates the mean, standard deviation and number of participants ($M$, $SD$, $n$ respectively) represented in this research for each variable represented.
<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>Min.</th>
<th>Max.</th>
<th>SD</th>
<th>No. of items</th>
<th>n</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICA overall</td>
<td>2.26</td>
<td>1</td>
<td>5</td>
<td>0.63</td>
<td>15</td>
<td>209</td>
<td>.94</td>
</tr>
<tr>
<td>ICA American</td>
<td>2.50</td>
<td>1</td>
<td>5</td>
<td>0.76</td>
<td>15</td>
<td>214</td>
<td>.93</td>
</tr>
<tr>
<td>ICA international</td>
<td>2.01</td>
<td>1</td>
<td>5</td>
<td>0.68</td>
<td>15</td>
<td>212</td>
<td>.93</td>
</tr>
<tr>
<td>English proficiency</td>
<td>2.07</td>
<td>1</td>
<td>5</td>
<td>1.17</td>
<td>1</td>
<td>58</td>
<td>N/A</td>
</tr>
<tr>
<td>Time studied abroad</td>
<td>6.45</td>
<td>1</td>
<td>13</td>
<td>6.45</td>
<td>1</td>
<td>208</td>
<td>N/A</td>
</tr>
<tr>
<td>Minority Status</td>
<td>1.81</td>
<td>1</td>
<td>2</td>
<td>0.39</td>
<td>1</td>
<td>215</td>
<td>N/A</td>
</tr>
<tr>
<td>Cultural similarity</td>
<td>3.97</td>
<td>1</td>
<td>5</td>
<td>1.12</td>
<td>1</td>
<td>215</td>
<td>N/A</td>
</tr>
<tr>
<td>ISS</td>
<td>3.83</td>
<td>1</td>
<td>5</td>
<td>0.57</td>
<td>24</td>
<td>193</td>
<td>.92</td>
</tr>
<tr>
<td>Social Connectedness</td>
<td>4.0</td>
<td>1</td>
<td>6</td>
<td>0.84</td>
<td>19</td>
<td>206</td>
<td>.91</td>
</tr>
</tbody>
</table>

*Note.* This table shows the mean, range (min. and max.), standard deviation, number of items I the scale, number of participants, and Cronbach alpha (M, Min., Max., SD, No. of items, n, α respectively) presented for each variable represented.
Table 3

*Means, standard deviations, and correlations*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ICA overall</td>
<td>2.26</td>
<td>0.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. ICA American</td>
<td>2.50</td>
<td>0.76</td>
<td>.80**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. ICA international</td>
<td>2.01</td>
<td>0.68</td>
<td>.75**</td>
<td>.31**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. English proficiency</td>
<td>2.07</td>
<td>1.17</td>
<td>.41**</td>
<td>.53**</td>
<td>.17**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Time studied abroad</td>
<td>6.45</td>
<td>6.45</td>
<td>.04**</td>
<td>.04**</td>
<td>.01</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Cultural similarity</td>
<td>3.97</td>
<td>1.12</td>
<td>.02*</td>
<td>.00</td>
<td>.08**</td>
<td>.06</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. ISS</td>
<td>3.83</td>
<td>0.57</td>
<td>.42**</td>
<td>.23**</td>
<td>.46**</td>
<td>.15**</td>
<td>.01</td>
<td>.06**</td>
<td></td>
</tr>
<tr>
<td>8. Social Connectedness</td>
<td>4.00</td>
<td>0.84</td>
<td>.26**</td>
<td>.19**</td>
<td>.21**</td>
<td>.27**</td>
<td>.00</td>
<td>.00</td>
<td>.19**</td>
</tr>
</tbody>
</table>

*Note. M and SD are used to represent mean and standard deviation, respectively. * indicates p < .05. ** indicates p < .01.*
Figure 1. Model illustrating the relationships of ICA towards American students, ICA towards International students and the overall ICA score.
Figure 2. Model illustrating anticipated relationship of variables on international students’ overall intercultural communication apprehension (ICA).
Figure 3. Model illustrating the relationship between international student reported intercultural communication apprehension (ICA) and Social Connectedness with other students on campus.
Figure 4. Pie graph showing countries represented in research.