



**Bryant University**

HONORS THESIS

# Intercultural Communication Competence and Empathy Among Physician Assistant Students: The Role of International Experiences

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## **ABSTRACT**

Having cultural competency and empathy towards others has become increasingly important, especially within the medical field. Experiential learning, such as study abroad has been shown to help increase intercultural communication competence (ICC) and empathy amongst students, which is important once those students enter the workforce. It is especially important for health care providers, such as Physician Assistants, to have high levels of ICC and empathy since they are in contact with patients from various cultures and need to have clear and comfortable communication with those patients. The purpose of this study is to confirm the relationship between ICC and empathy as well as determine whether physician assistant (PA) students' international experience has helped them in intercultural interactions with patients and while in school. A survey was sent to Bryant University and Tufts University PA students with questions relating to their international travel history and study abroad as well as questions related to ICC and empathy. Additionally, questions were asked about their experiences in their PA programs and with patients. The data was analyzed with both qualitative and quantitative analysis. The quantitative results supported previous research showing the connection between ICC and empathy but found no significant relationship between international experience and high levels of ICC and empathy amongst PA students. Through qualitative analysis, a connection is seen between international experience and comfortable intercultural communication within PA student patient-provider interactions as well as increased empathy towards patients. This study provides a good foundation for future research into how to adjust the PA curriculum to help improve their intercultural competence.

## **INTRODUCTION**

The world has become a global community and communication between cultures has become a necessity for individuals to thrive within society (Ilie, 2019). Since the world has been changing at a faster pace, it has become more necessary to have the ability to interact with individuals from different cultures. These interactions extend to the classroom, the workplace, and in the healthcare setting (Samovar, 2016). It is paramount to learn about other cultures and to develop intercultural communication skills because it can help facilitate multicultural encounters and it can lead to more openness and tolerance towards others. (Ilie, 2019). It is important for us as a society to learn from one another and to learn that the world is a larger and more diverse place than we may realize. Therefore, it is important to learn to see through the eyes, hearts, and minds of people from cultures other than our own (Chen & Starosta, 1996). As expressed by Chen and Starosta (1996), “to live meaningfully and productively in this world, individuals must develop their intercultural communication competence.”

Intercultural communication can be developed through experiential learning, which focuses on the role of experience in the learning process (Levine & Garland, 2015). International experience and interacting with those from other cultures can be a way for individuals to develop their intercultural communication skills. Higher education has emphasized the importance of study abroad as a means of experiential learning, so students can gain a greater cultural understanding. Studies consistently show that foreign study participants achieve greater intercultural proficiency (Tyner, 2013). Numerous colleges and universities are adding courses on international and intercultural communication to their curriculum to prepare their students for the global workplace (Levine & Garland, 2015). Both on-campus and study abroad courses have been initiated and expanded to enhance student’s knowledge of and sensitivity toward other cultures (Levine & Garland, 2015). Additionally, empathy, an important quality to have in intercultural interactions, can be developed through international travel such as study abroad. As Morgan (1975) states, the valued outcome of study abroad is “simply to help the individual acquire a deep understanding of another culture, and to begin to appreciate and develop empathy for people who are different.”

The value of study abroad can translate into the individual's future career and interactions. Intercultural contact situations where proficient intercultural communication is necessary occur frequently in the workplace, during leisure activities, and in many other parts of society, such as health care, education, and entertainment (Kupka, et al., 2007). Intercultural communication skills are necessary in various job markets and having these skills will make students more competitive in a global market with an increasingly educated population (Williams, 2005).

Specifically, effective intercultural communication and empathy is important for students entering into the healthcare industry. Intercultural communication is the foundation of a competent intercultural care (Yakar & Alpar, 2018); therefore, it is necessary that students entering this field are culturally competent and can communicate efficiently and effectively with those from other cultures. It is necessary for medical providers to be able to understand and properly communicate with those from cultures different than their own so they can provide the best quality service to their patients. Communication effectiveness is vital in patient and provider interactions. Misunderstandings can lead to dissatisfaction, misdiagnosis, lack of any medical care, or even death (Gibson and Zhong, 2005). ICC must be improved amongst current and future healthcare providers so that the cultural differences of patients can be recognized, respected, handled with toleration, and effective communication in diverse cultural settings can be established.

One type of healthcare provider, Physician Assistants (PAs) may benefit from improved intercultural communication skills and empathy because of the number of diverse patients they encounter. The PA profession is one of the fastest growing in the United States, and their demand has increased more than 300 percent from 2011 to 2014 (AAPA, 2021). The role of a PA is unique because they receive generalist medical training which enables them to provide a wide spectrum of patient care (AAPA, 2021), therefore exposing them to a wider variety of diverse patients. To be able to properly care for their patients of varying backgrounds, PAs need to be able to properly communicate, understand, and empathize with their patients.

While there is much research demonstrating the connection between proficient intercultural communication and increased empathy with international travel, more research needs to be conducted considering these elements in the context of healthcare, and within the growing

population of Physician Assistants. Therefore, this research paper will be analyzing the relationship between intercultural communication, empathy, and the role of international travel specifically among students in Physician Assistant programs.

## **LITERATURE REVIEW**

### Intercultural Communication Competence

There are various communication concepts and theories that fall under intercultural communication. An increasingly important concept under this umbrella is intercultural communication competence (ICC). Several terms have been associated with ICC in existing literature including multiculturalism, cross-cultural adaptation, intercultural sensitivity, cultural intelligence, international communication, transcultural communication, global competence, cross-cultural awareness, and global citizenship (Fantini, 2009). For this study, the term ICC will be used. ICC can be defined as effective and appropriate communication and behavior in an intercultural setting (Deardorff, 2006). It has been a challenge to create a standard definition for ICC (Hajek & Giles, 2003) because ICC is often subjective to the cultures of the individuals involved (Arasaratnam, 2005).

For the purpose of this study, ICC will be defined using the pyramid model created by Deardorff (2006). In this model, identified elements of intercultural competence and assessment methods were agreed upon by intercultural scholars and administrators, helping to create a comprehensive understanding of ICC (Deardorff, 2006). The scholars were able to reach a consensus on 22 essential elements of intercultural competence that primarily involved communication and behavior in intercultural contexts (Deardorff, 2006). The model focuses on both the internal and external outcomes of ICC based on the development of specific attitudes, knowledge, and skills inherent in ICC (Deardorff, 2011). This model of ICC (Appendix A) places the components of ICC within a visual framework that can be entered from various levels with the components at the lower levels enhancing the upper levels (Deardorff, 2006). Additionally, it stresses the importance of process orientation or mindfulness at each level, essentially, being aware of the learning that occurs at each level and the necessary process skills that are needed for acquisition of intercultural competence (Deardorff, 2006). Furthermore, the pyramid model allows for

degrees of competence, meaning that the more components acquired and developed increases the likelihood of a greater degree of intercultural competence as the external outcome (Deardorff, 2006).

At the base of the pyramid model are attitudes, specifically, the attitudes of openness, respect (valuing all cultures), and curiosity and discovery (tolerating ambiguity) (Deardorff, 2006; Deardorff, 2011). One's preconceived attitudes are important to consider when gaining knowledge and continuing to become more culturally competent. Stated by Okayama, Furuto, and Edmondson (2001), "awareness, the valuing of all cultures, and a willingness to make changes are underlying attitudes that support everything that can be taught or learned" (p.97).

The second level of the pyramid includes specific skills for acquiring and processing knowledge about other cultures as well as one's own culture (Deardorff, 2011). These skills include being able to listen, observe and interpret in addition to being able to analyze, evaluate and relate (Deardorff, 2006). These skills point to the significance of process in obtaining intercultural competence and the attention that needs to be paid to developing these important skills (Deardorff, 2006).

Moving up the pyramid, internal outcomes such as adaptability, flexibility, ethnorelative view, and empathy are emphasized. Internal outcomes are important because it involves an internal shift in frame of reference which helps to enhance the external outcome of ICC (Deardorff, 2006). At the top of the pyramid is the external outcome of intercultural competence, "behaving and communicating effectively and appropriately (based on one's intercultural knowledge, skills, and attitudes) to achieve one's goals to some degree" (Deardorff, 2006). Though all the internal outcomes of ICC are important to help achieve the main external outcome of ICC, much of the literature focuses on empathy as a key component of ICC that is important to consider within the context of cultural competence.

### Empathy

Deardorff recognized empathy as an important internal outcome of developing ICC (2006). Empathy can be defined as "the capacity to clearly project an interest in others as well as to obtain and reflect a reasonably complete and accurate sense of another's thoughts, feelings, and

/or experiences” (Ruben, 1976), or simply as, “seeing the world through the eyes of another” (Howick & Rees, 2017). Empathy consists of three main criteria including: an awareness of another’s experiences, an empathizer who shows and communicates empathy to a receiver, and empathy correlates with beneficial effects for the receiver (Merlini & Gatti, 2015).

In the context of ICC, empathy plays an important role. Empathy has long been an established component of ICC (Calloway-Thomas, Arasaratnam-Smith & Deardorff, 2017). Scholars in intercultural communication position empathy as the means of leaping over the barriers in intercultural communication, and as an important component of effective communicative competence (Chen, 2013). In a study by Arasaratnam, Banerjee, and Dembek (2010), a direct causal relationship between empathy and intercultural competence was found as well as empathy and positive attitudes towards people from other cultures and active listening, which are both components of ICC. Those who are more empathetic have increased ICC, more positive attitudes towards those from other cultures, and are more active listeners.

However, according to Zhu (2011), there are several barriers to developing intercultural empathy. These barriers include stereotypes and prejudices that may lead to negative inferences towards others; overreliance on human universals without paying attention to cultural differences; lack of awareness of cultural differences, especially in underlying values patterns of thinking; and indiscriminate application of one’s own cultural practices (Zhu, 2011). It is important that these barriers are overcome because empathy is important in intercultural interactions. Additionally, Arasaratnam (2006) found that empathy compensates for instances when one has no previous experiences in intercultural communication. Therefore, developing one’s empathy is necessary to help individuals communicate in intercultural interactions. A keyway to develop empathy may be international travel and the experiential learning it provides.

#### International Travel and Study Abroad

Experiential learning, which focuses on the role of experience in the learning process (Levine & Garland, 2015), is central to the development of ICC (Jacobson, 1996). Experiential learning happens when learners discover knowledge on their own, through perceptual experiences and insight, typically as a result of personal experience (Stone & Petrick, 2013). Experiential learning can occur through many different types of experiences. Studies have shown that those



who have travelled internationally, whether that be student trips, cruises, traveling for leisure, etc. have developed skills and better understanding of varying topics through experiential learning (Novelli & Burns, 2010; Stone & Petrick, 2013; Weeden, Woolley & Lester, 2011). The experience of travel and discovery provides the opportunity for the traveler to reflect on the experience, thus creating learning (Mouton 2002). Travel is also a likely source of transformative learning (Morgan 2010), and all travel can be potentially transformative (Fordham 2006).

In the context of developing ICC and empathy, international travel can help develop and improve one's ability to communicate interculturally. Studies have revealed that although short-term international travel can improve attitudes toward the host culture, intercultural knowledge is achieved from a more in-depth immersion in a new cultural environment (Fisher & Price, 1991; Moir-Bussy, 2003). Furthermore, research by Billingmeier and Forman (1975) showed extended experience outside of one's own culture has a lasting effect on the individual's intercultural knowledge and overall view of diverse cultures. An example of extended travel common within education is study abroad. International education and study abroad have been a central part of liberal arts education. Today, in most colleges and universities, their goals and mission statements include some version of 'knowledge of other cultures' as a component of a liberal education (Hopkins, 1999). Researchers have questioned the benefits of study abroad and whether it is applicable to skills and qualities needed to be successful in today's world (Williams, 2005) and have questioned the connection between study abroad and intercultural communication.

Williams (2005) study sought to identify and measure the improvement of intercultural communication skills as an outcome of study abroad. As predicted, results showed that students that studied abroad had a greater increase in intercultural communication skills than students that did not study abroad. Findings from Kitsantas and Meyers' (2001) study, which investigated if study abroad enhances college students' cross-cultural awareness, suggest that study abroad students had an increase in their ability to deal with the stresses of the cross-cultural experience, and developed more flexible role behavior, cultural empathy, and respect for the host culture.

Moreover, results from a 2009 study, investigating student intercultural proficiency as a result from study abroad, found that the semester helped shape the students into more globally minded

individuals (Clarke, Flaherty, Wright & McMillen, 2009). The results show that strong relationships were found for the global elements of cultural pluralism, efficacy, and interconnectedness. These findings suggest that study abroad students have a strong appreciation for the array of cultures and an advanced discovery of their interrelatedness with different people and nations (Clarke, et al., 2009).

Overall, these studies suggest that international travel, such as study abroad, heightens students' intercultural communication skills in a variety of areas and deepens their appreciation for other cultures. International travel as a means of experiential learning gives students the opportunity to gain a global perspective in an interactive environment, which is necessary to be successful in today's world. Specifically, this type of experiential learning is beneficial for students entering into industries which require them to be highly culturally competent and empathetic. An industry in which the development of these skills is important is the healthcare industry.

#### Healthcare Setting

ICC in Healthcare Settings. As the United States becomes a more multicultural society there is a need for competent communication between all cultures in every aspect of our lives (Gibson and Zhong, 2005). While there are numerous industries where intercultural communication competence is important, the healthcare industry is one that requires constant ability to communicate well with different audiences. In the context of health care, ICC can be defined as the ability to deliver "effective, understandable, and respectful care that is provided in a manner compatible with patients' cultural health beliefs and practices and preferred language" (Office of Minority Services, 2000). In the United States, the medical community often treats patients with varied languages, cultural background, and perspectives on health. Today, a major challenge that healthcare workers are facing is that a large and growing segment of the patient population is made up of culturally diverse groups (Anand & Lahiri, 2009). Therefore, healthcare workers are faced with the need to improve intercultural competencies that allow them to recognize their own cultural norms, understand the patient's unique viewpoint, and effectively adapt their behaviors to maximize care (Anand & Lahiri, 2009). It is becoming increasingly important for those in this industry to communicate well with those from different backgrounds.

Stated by Anan and Lahiri (2009), “the key to providing quality care to patients of all backgrounds lies in developing skills to learn about cultural and personal beliefs in a respectful fashion.” Cultural competency is essential for high quality, patient-centered care (Papadopoulos, Shea, Taylor, Pezzella, & Foley, 2016). According to the Institute of Medicine’s report: ‘Unequal Treatment Confronting Racial and Ethnic Disparities in Healthcare,’ research consistently reveals that a lack of culturally competent care directly contributes to poor patient outcomes and health disparities (Lehmen et al). When healthcare providers fail to understand the differences between them and their patients, they may unintentionally deliver lower quality care (How to Improve, 2021).

Some methods to improve cultural competence in the healthcare industry include promoting awareness and education and cultural competence training (How to Improve, 2021). Previously mentioned, international travel is a useful form of education which has been shown to help improve ICC. In Gibson and Zhong’s (2005) study among medical providers, they found that intercultural experience greatly improves a medical provider’s ability to communicate with patients from cultures different than their own. Additionally, they found that, providers who lived outside the United States for a period of more than 3 months demonstrated significantly higher levels of ICC and found there to be a positive significant relationship between intercultural experience and ICC (Gibson and Zhong, 2005). These findings support previous research on international travel as a means of becoming more interculturally competent (Clarke, et al., 2009; Kitsantas & Meyers 2001; Williams, 2005) and it also suggests that medical providers would benefit from an international experience so they can learn from cultures different than their own. As the United States increasingly becomes a more diverse place, it is important that providers have the necessary skills to be able to communicate with individuals from different backgrounds and to have developed ICC

Empathy in Healthcare Settings. Empathy, an internal component of ICC (Deardorff, 2006), is also incredibly important in healthcare settings. Gibson and Zhong (2005) examined the relationship between ICC and empathy of medical providers at a healthcare organization. The results of their study show that empathy is positively related to intercultural communication competence, identifying empathy as a primary characteristic of ICC in the healthcare

environment (Gibson and Zhong, 2005). They found that medical providers who can listen well and place themselves in the patients' place are motivated, knowledgeable, skillful, appropriate and effective when communicating across cultures (Gibson and Zhong, 2005).

As previously stated in this study, empathy is defined in various ways. However, within the healthcare context, there is emerging consensus that it involves therapeutic empathy, whereby a Healthcare Practitioner puts themselves in a patient's position to acknowledge their feelings, concerns and expectations and behaves in a way to show that they understand (Derksen, Bensing, & Lagro-Janssen, 2013). According to Howick and Rees (2017), in a healthcare setting, the following components of empathy are deemed to be important, "attempting, as far as possible, to understand another person's situation, feelings and perspective, recognizing the difficulties in putting oneself in another's shoes; communicating that understanding, checking its accuracy; and acting on that understanding in a helpful way."

Parallel to findings on ICC (How to Improve, 2021), lack of empathy corresponds with lower-quality care (Howick & Rees, 2017). Heightened practitioner empathy can reduce pain and anxiety, together with several other health outcomes, while improving general quality of care and patient satisfaction (Howick & Rees, 2017). Additionally, in the healthcare context, increased empathy among providers also benefits the providers themselves. Increased empathy can help improve practitioner wellbeing while also reducing stress and burnout (Howick & Rees, 2017). Therefore, in healthcare it is necessary that providers have high levels of empathy because it benefits both the patient and their own wellbeing. Although it is important for all medical providers to have high levels of empathy and ICC, it is especially important for those individuals looking to become Physician Assistants.

Physician Assistant Programs. The physician assistant (PA) profession is one of the fastest growing in the United States. According to the U.S Bureau of Labor Statistics, the profession is predicted to increase by 31 percent from 2020 to 2030 (AAPA, 2021). PAs are defined as, "licensed clinicians who practice medicine in every specialty and setting who are dedicated to expanding access to care and transforming health and wellness through patient-centered, team-based medicine" (AAPA, 2021). Because PAs have a wide range of medical knowledge, they make it easier for patients to get the proper care they need for a wide range of medical issues.

PAs also make it easier for individuals in the United States to gain access to medical care. According to a 2014 Harris Poll, it was found that 92 percent of Americans who have seen a PA or have a family member who has seen a PA said that having a PA makes it easier for them to have access to medical appointments (AAPA, 2021). Additionally, PAs have been shown to extend the services of physician practices while improving the delivery of care to underserved populations since they are clinically versatile and cost-effective (Crawley, 2012). Because of this, PAs are exposed to a largely diverse population of patients making it necessary that they are culturally competent.

As part of the PA education curriculum, students must be educated on appropriate cultural competency skills as cited by PA education accreditation standards such as, “the curriculum must include instruction to prepare students to provide medical care to patients from diverse populations” (Huckabee & Matkin, 2012). However, results from Erin Sherer’s (2018) study on PA perceptions on providing competent care found that PA students rated their attitudes, awareness, and abilities about cultural competence as considerably greater than their knowledge, skills, and encounters. Furthermore, the study found weaknesses in their cultural competency education including knowledge regarding the cultural context of care; skills associated with managing cross-cultural clinical challenges; and encounters related to coping with aggressiveness and bias (Sherer, 2018). Cultural competency is an important aspect of the PA curriculum, yet students’ knowledge about how to act around patients from different cultures is not necessarily up to par with what it should be. Therefore, it is essential to find new ways of educating PA students on developing their cultural competency so they can provide patients with the best possible care.

### Research Questions

Based on existing literature, it is important that medical providers, specifically physician assistants, be highly culturally competent and empathetic because of the diverse patients that they encounter. It is also necessary to understand the ways in which those looking to become physician assistants can improve their levels of ICC and empathy. Therefore, the following research questions are posed:

RQ1: Are ICC and empathy related?

RQ2: Do those with more international experience have higher ICC and empathy?

RQ3: Does study abroad influence ICC and empathy?

RQ4: What has an international experience meant for PA students about their patient-provider communication?

## **METHOD**

### Participants

Participants (N = 41) were recruited from Bryant University ( $n = 19$ ) and Tufts University ( $n = 15$ ) Physician Assistant (PA) programs ( $n = 7$  missing). All the participants are currently in school to become a Physician Assistant and of those students, 58.5% have at least a bachelor's degree ( $n = 24$ ) and 26.8% have their master's degree ( $n = 11$ ). Ten participants identified as male, and 25 participants identified as female. Most participants ( $n = 17$ ) were between the ages of 26-30 years. Additionally, 53.7% of the participants are currently on clinical rotation ( $n = 22$ ), 22% are unemployed ( $n = 9$ ), and 9.7% ( $n = 4$ ) are employed full-time, part-time, or have an internship. Most of the participants (44%,  $n = 24$ ) have an annual household income of \$100K or under ( $n = 18$ ). Only 19.5% of participants ( $n = 8$ ) make over \$100K and 22% did not disclose their income ( $n = 9$ ). Participants were primarily white ( $n = 29$ ), then Asian ( $n = 5$ ), Black ( $n = 1$ ), and other ( $n = 2$ ). Of the participants, most of them are native to North America ( $n = 35$ ), the rest having grown up in places such as Africa, Asia, and the Caribbean. Our participants are well travelled, with 40 having travelled outside of their home country.

### Procedure

Before conducting research, IRB approval (#2021-1107) was received to make sure that the study was ethical and would not negatively affect the participants. After receiving IRB approval, the survey was emailed to PA administration contacts at both Bryant University and Tufts University to forward to their PA students. Recruitment occurred from November 22, 2021 to December 10, 2021.

Participants completed a Qualtrics survey that consisted of questions related to the independent variables, their international travel history and study abroad, and questions related to the dependent variables of ICC and empathy. Furthermore, questions were asked about their experiences in their PA programs and with patients. Last, basic demographic questions were asked including the participants gender, age, ethnicity, language fluency, and education status. At the end of the survey, participants were invited to enter a raffle to win a \$25 gift card in a separate survey to record email addresses. Raffle winners were notified on December 10, 2022.

### Data Analysis

Quantitative. After data was collected, SPSS version 26 was used to analyze for missing data and clean the data set. Preliminary analyses included one-way ANOVAs and bivariate correlations to assess potential covariates. Substantive tests to answer the research questions of interest included one-way ANOVAs.

Qualitative. In addition to quantitative analysis, thematic analysis (Mortensen, 2021) was conducted in response to an open-ended question regarding how their international experience has played a role in the participants' experiences and communication with individuals from other cultures. Each response was read through to find themes related to patient-provider communication, ICC, and empathy. Responses were analyzed to identify similar themes and patterns in the data.

### Measurement

#### Independent Variables

International Travel. To understand the participants' international travel experience, the independent variable in this study, one question was asked, "Have you ever travelled outside of your home country?" Responses indicated that the majority of the sample has traveled outside of their home country ( $n = 40$ ).

Study Abroad. To further understand the experiences participants had in studying abroad the question was asked, "Have you ever studied abroad through your university (undergraduate or post-graduate)?" Responses indicated that most participants have not studied abroad through their university ( $n = 25$ ).

Additionally, a variety of questions were asked about where the participants have travelled, the duration of the international experiences, and their reasons for travel. The question, “which of these best characterized your interest in travelling abroad,” was also included regarding the characteristics that influenced their interest in travel. Participants could select all the reasons that applied, which included reasons such as language study, cultural experience, personal experience, personal enrichment, etc. See Appendix B for responses.

### Dependent Variables

ICC. ICC was measured using Arasaratnam’s 10-item ICC instrument (Arasaratnam, 2009) that consisted of items such as, “I feel that people from other cultures have many valuable things to teach me” and, “I feel more comfortable with people from my own culture than with people from other cultures.” Unfortunately, one question was duplicated, thus leaving 9 items for analysis. Participants responded to the statements using a five-point Likert Scale measured from 1=Strongly Disagree to 5=Strongly Agree. The initial scale showed an initial reliability of below .70. A series of procedures of removing an item at a time to improve reliability was performed. A final scale of 4 items with a Cronbach’s alpha = .75 ( $M=4.17$ ;  $SD=.58$ ) was used for analyses. The reduction of the scale from 10-items to 4-5 items is consistent with prior literature (Arasaratnam, 2006).

Empathy. Empathy was measured using the Cultural Empathy (CE) subscale in the Multicultural Personality Questionnaire MPQ, with 8 items (Van der Zee et al., 2013). The CE measures individuals’ ability to empathize with the feelings, thoughts, and behaviors of individuals from different cultural backgrounds. The CE scale consists of statements such as, “I pay attention to the emotions of others,” and, “I sense when others get irritated.” Participants responded to the statements using a five-point Likert Scale measured from 1=Strongly Disagree to 5=Strongly Agree. The CE has good reliability with a Cronbach alpha of .89 ( $M=4.38$ ;  $SD=.53$ ).

### Additional Variables

Healthcare. Additionally, participants were asked questions regarding their experience in their PA program and their experiences with patients from different cultures. The question was asked, “How comfortable would you feel treating a patient from another culture.” Participants



responded to the question using a five-point Likert Scale measured from 1=Extremely Uncomfortable to 5=Extremely Comfortable. Additionally, they were asked, “Do you feel that your education thus far has prepared you to treat patients from cultures other than your own?” Participants responded to the question using a five-point Likert Scale measured from 1=Definitely Not to 5=Definitely Yes.

Participants were also asked to respond to an open-ended question regarding how their international experience has impacted their experience with patients from other cultures. They responded to the question, “If you have had international experience (study abroad, vacations, etc.), how have your experiences impacted you when working with patients? Do you feel that having international experience has helped you better communicate with patients from different cultures?” Responses can be seen in Appendix C.

## **RESULTS**

### Quantitative Findings

RQ1: Are empathy and ICC related? To support previous research (Deardorff, 2006), bivariate correlations were conducted to assess whether empathy and ICC are related. Results of the correlation tests show that empathy and ICC are related and have a moderate relationship ( $r = .610, p = .00$ ).

RQ2: Do those with more international experience have higher ICC and empathy? The study was unable to determine whether participants with more international experience have higher ratings for ICC and empathy because most participants have had extensive international experience. Since most of the sample has international experience and there is no split between experience and no experience, this question cannot be answered definitively.

Overall, the participants have high ratings for both ICC and empathy ( $M=4.17; SD=.58$  for ICC;  $M=4.38; SD=.53$  for empathy). Because most of the sample has had international experience and previous studies have found a relationship between international experience and high levels of ICC (Williams, 2005), we can assume that their international experience may play a role in their

high ICC and empathy ratings. However, this statement cannot be proven from the results of this study.

RQ3: Does study abroad influence ICC and empathy? Two one-way ANOVAs were used, one with ICC as the dependent variable and one with empathy as the dependent variable, to determine whether study abroad influences ICC and empathy. Results from the tests with study abroad as the independent variable and ICC as the dependent variable show no significant relationship with study abroad ( $F(1, 33) = 1.49, p = .70$ ). Likewise, results from the tests with study abroad as the independent variable and empathy as the dependent variable show no significant relationship with study abroad ( $F(1, 33) = 1.10, p = .32$ ).

Post-hoc Findings. Additional questions were asked among participants concerning their education and experience with patients in the workplace. Regarding their education, the following question was asked, “Do you feel that your education thus far has prepared you to treat patients from cultures other than your own?” The majority of participants think that their education has prepared them to treat patients from other cultures with 41.5% answering probably yes and 22% answering definitely yes. However, a relatively large percentage of the participants is either unsure or does not believe that their education has prepared them with 21.9% of participants stating that their education may or may not have prepared them, probably did not prepare them, or definitely did not prepare them.

Concerning the participants experience in the workplace, the question was asked “how comfortable would you feel treating a patient from another culture? Most of the participants responded that they felt somewhat comfortable (46.3%), followed by participants responding that they felt extremely comfortable (29.3%). Still, 9.7% of participants fell neither comfortable or uncomfortable, somewhat uncomfortable, or extremely uncomfortable treating patients from other cultures.

#### Qualitative Findings

RQ4: What has an international experience meant for PA students about their patient-provider communication? To determine how the PA student participants’ international experience has influenced their communication with patients, the open-ended question, “If you have had

international experience (study abroad, vacations, etc.), how have your experiences impacted you when working with patients? Do you feel that having international experience has helped you better communicate with patients from different cultures?” was asked and the responses were analyzed using thematic analysis (Mortensen, 2021). The respondents each had different, but valuable international experiences, from working in healthcare settings abroad to travelling for leisure. Participants found that they were able to learn valuable lessons from their experiences despite their reason for travelling internationally.

The themes, shown in Appendix C, were explored and many commonalities were found within the participants responses. Many of the participants found that their international experience improved their communication with patients from other cultures and helped them to learn and acknowledge cultural differences. These themes were found in the majority of responses, and are present in the following response,

I worked on a mobile medical unit for 2 months in Romania in undergrad. I loved it and I think it helped me understand and emphasize the importance of tone/body language with my patients. It has also better prepared me to communicate with cultures that are not similar to mine and how to acknowledge those differences while providing care.

Additionally, many participants found that their international experience has helped them form better connections and respect for their patients as well as improve their patient care. These themes are shown in the following response,

I gained a better appreciation for and connection with Spanish culture when I went to Costa Rica for volunteer work. Having this experience has made it less challenging to connect with individuals from this culture at a more personal level, which is incredibly important for patient care.

Furthermore, international experience was shown to have improved the participants empathy and helped them to better understand how patients make medical decisions. These themes are communicated in the following response,

I was a global public health minor in undergrad, so I travelled to Barbados for a weeklong service-learning trip and to the DR to volunteer with medical clinics in La Romana and surrounding bateyes for 5 weeks. I definitely feel that my experiences have

allowed me to better empathize with and understand some of the decisions of patients from those cultures I interacted with (Barbados/DR).

Many participants also found that their international experience has been eye-opening and has also helped them to understand the challenges faced when communicating with a language barrier. The following response addresses this theme,

Knowing what it is like to be in a foreign country and have a language barrier helped to open my eyes to how scary or frustrating it can be to not be understood or listened to. I was never in a medical setting while abroad, but I can only image how frustrating and scary that can be. I always make sure my patient is understood and feels as comfortable as possible.

The themes that emerged from the participants responses are consistent with Deardorff's definition of ICC (2006). The attitudes of openness, respect, and tolerating ambiguity are expressed through many of the responses, showing that the participants are culturally competent and are open to improving their cultural competency. Moreover, the participants expressed many of the internal outcomes of ICC, with empathy being the most prominent in their responses. These findings suggest that their international experiences have played a role and have helped to improve their ICC.

## **DISCUSSION**

### ICC & Empathy for PA Students

The purpose of this study was to further explore existing research regarding ICC and empathy. Additionally, this study examined these variables in relation to international experience and study abroad amongst PA students to determine whether time spent internationally influences one's ICC and empathy. Furthermore, the study also aimed to determine whether PA students would benefit from time spent internationally or study abroad programs.

Findings from this study confirmed the relationship between ICC and empathy, remaining consistent with the definition of ICC used by Deardorff (2006). Those with higher ICC scores also had higher empathy scores. In contrast to previous studies (Kitsantas & Meyers' 2001;

Williams, 2005), there was no significant relationship between international experience and ICC and empathy amongst the PA students surveyed. This inconsistency with previous studies likely occurred because almost all the students surveyed had extensive international experience. Since the participants were not split evenly between those that have travelled internationally and those that have not, the relationship between international experience and increased ICC and empathy was unable to be determined. However, because the average ICC and empathy scores of the participants was considerably high, it is likely that their international experience influenced their scores.

Likewise, the study found no significant relationship between study abroad and ICC and empathy amongst the participants. Although there was more of a split between those who had studied abroad and those who had not studied abroad in this study, a relationship was unable to be determined. As previously mentioned, the participants had extensive international experience. Studies have found that many types of travel, including both short-term and long-term travel, influence intercultural communication skills (Billingmeier & Forman, 1975; Fisher & Price, 1991; Moir-Bussy, 2003). Since most of the participants had some sort of international experience and had high scores for both ICC and empathy, it is likely that any international experience, not only study abroad, may improve one's ability to communicate interculturally. However, these assumptions cannot be confirmed from the results of this study.

Regarding PA students' current attitudes towards their education and patient provider communication, a relatively large percentage of students are unsure about whether their education thus far has prepared them to treat patients from other cultures. Although the PA curriculum is supposed to help develop their intercultural communication skills (Huckabee & Matkin, 2012), results show that there is still some hesitation as to their education's effectiveness in preparing them to interact with patients from diverse cultures. These findings suggest that improvements should be made within the PA educational curriculum to help students feel more confident in their ability to communicate interculturally. As previous research has shown, experiential learning through international travel as a means of improving intercultural communication skills is effective (Jacobson, 1996; Kitsantas & Meyers' 2001; Williams, 2005). International study programs, such as study abroad, could potentially be incorporated into the PA

educational experience as a way for them to practice their communication skills as well as apply their PA knowledge to diverse patients.

Results from thematic analysis on the students' open-ended responses also emphasizes the importance of incorporating international experience into the PA curriculum. It was determined that international experience was beneficial for all the PA students who chose to respond.

Through the themes that emerged from their responses, it can be established that their experiences internationally communicating with diverse populations has helped improve their comfortability and ability to communicate interculturality within their practice. Additionally, the themes that emerged, such as increased empathy, openness, and respect, support Deardorff's (2006) definition of ICC, further showing that time spent internationally is beneficial in improving ICC as well as increasing empathy. Furthermore, many of the participants' responses stated that their international experience has helped within their practice, further emphasizing the importance of incorporating it into the PA curriculum.

#### Future Research

To improve or add on to the current research, future studies may want to look at a more split population between those with international experience versus those without international experience to better determine if travel plays a role in improving ICC and empathy. It may also be interesting to look into the reasons an individual chooses to travel internationally, such as for leisure or for education, and whether or not they are traveling short-term or long-term. These factors may play a role in how much their experiences influence their desire and ability to communicate interculturality.

Because this study only examined one type of healthcare professional, PAs, it may be beneficial to conduct a similar study with participants from different professions in the healthcare field, like doctors and nurses. Professions in the healthcare field have different types of curriculums so it may be beneficial to see if one type of healthcare educational curriculum is more effective in preparing students to communicate interculturality than another.

### Limitations

Some limitations should be considered regarding the overall analysis of this study. First, it is important to note that results come from a small sample size of PA students. Many PA schools were asked to participate in this study, yet only two New England Schools sent it out to their students, Bryant University and Tufts University. Additionally, not all of the 41 participants completed the survey to its entirety, which may have influenced some of the findings.

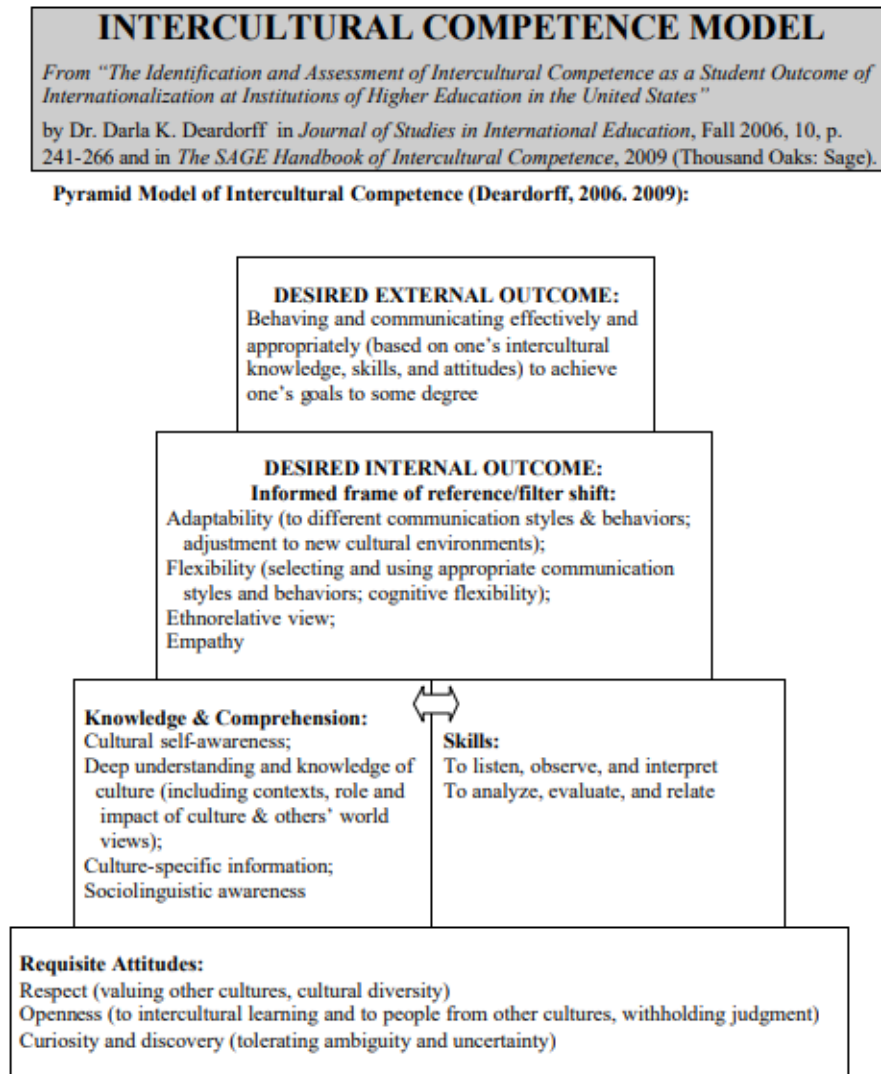
Furthermore, since all but one participant has had international experience, some results remain inconclusive. If the sample had a larger split between students with international experience versus those with no international experience, the role that international experience has on developing ICC and empathy may be more definitive. Moreover, because this study only looked at how the variables affected PA students, the same results may not be applicable to other types of healthcare students with different types of curriculums and experiences, such as those in nursing and medical school.

### **CONCLUSION**

In conclusion, this study confirmed the relationship between ICC and empathy, supporting research on intercultural communication. Additionally, qualitative findings emphasized the importance of international experience regarding patient-provider interactions. These findings support the idea of incorporating experiential learning, like study abroad, within PA programs to help PA students to become more culturally competent so they can feel confident and comfortable interacting with patients from other cultures. Although some results were inconclusive, this study provides a good foundation for future research. Overall, the major takeaway from this research is that it is important for PA students to be interculturally competent and to have empathy when communicating with patients from diverse cultures.

## **APPENDICES**

### Appendix A – Intercultural Competence Model



*NOTES:*

- *Move from personal level (attitude) to interpersonal/interactive level (outcomes)*
- *Degree of intercultural competence depends on acquired degree of underlying elements*

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Appendix B – International Travel Questions

Question	Responses	n, %
Have you ever traveled outside your home country?	Yes No	40, 98% 1, 2%
If yes, what was the single longest time outside your home country?	1-14 days 2-4 weeks 1-3 months 3-6 months 6 months - 1 year 1 year +	10, 27.02% 5, 13.5% 10, 27.02% 5, 13.5% 4, 9.8% 3, .08% (4, missing)
Please select the reasons you have left your home country. Select all that apply.	Fun/vacation/tourism School trip/academic program Family work/live abroad Service project/mission trip Other	35, 43% 20, 24% 13, 16% 12, 15% 2, .02%
What countries have you travelled to?	1-5 countries 6-10 countries	17, 41% 13, 31% (11, missing)
Have you ever studied abroad through your university? (undergraduate or graduate)	Yes No	12, 29% 25, 61% (4, missing)
If yes, please list what countries you studied in.	Denmark Germany France Spain Italy Belize Mexico Costa Rica Morocco	2, 15% 2, 15% 1, 7% 2, 15% 2, 15% 1, 7% 1, 7% 1, 7% 1, 7%

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Which of these best characterized your interest in travelling abroad? Select all that apply.	Language Study	5, 12.2%
	Cultural Experience	10, 24.4%
	Personal Experience	12, 29.3%
	Personal Enrichment	8, 19.5%
	Resume/Employment	2, 4.9%
	Study Academic Subject Abroad	5, 12.2%
	Other	0
	Never Travelled Abroad	0

Appendix C – Open Responses & Themes

Theme	Example Response
Improve Empathy	<ul style="list-style-type: none"> <li>• “I could probably write an essay on the specific ways my experiences abroad have shaped my ability to empathize and connect with others. For now, I’ll say I would not be half the person or practitioner I am if not for my experiences abroad.”</li> <li>• “I was a global public health minor in undergrad, so I travelled to Barbados for a weeklong service-learning trip and to the DR to volunteer with medical clinics in La Romana and surrounding bateyes for 5 weeks. I definitely feel that my experiences have allowed me to better empathize with and understand some of the decisions of patients from those cultures I interacted with (Barbados/DR).”</li> </ul>
Form Connection	<ul style="list-style-type: none"> <li>• “I was able to relate to some patients by discussing travels and form connection”</li> <li>• “I gained a better appreciation for and connection with Spanish culture when I went to Costa Rica for volunteer work. Having this experience has made it less challenging to connect with individuals from this culture at a more personal level, which is incredibly important for patient care.”</li> </ul>
Learn Cultural Differences	<ul style="list-style-type: none"> <li>• “I was able to see the differences in the European health system to compare it to the US health system.”</li> <li>• “Working with patients with different cultural practices has opened my eyes to differences in receiving medical treatment/receiving help. Some patients who needed help bathing would refuse from me and wait until a family member was there to help them due to the exposing nature of hygiene for the older</li> </ul>

	<p>adult. After a few patients, I learned to ask if they wanted me to clean them up or wait for a family member, which put them at ease that they could simply say "no I would prefer to wait" rather than telling them I had to clean them, forcing them to refuse. It diffused an uncomfortable situation for the both of us."</p>
Openness	<ul style="list-style-type: none"> <li>• "I am more open to other cultures."</li> <li>• "I feel more prepared to learn about the intricacies of different cultures, and how to handle missteps when in other cultures"</li> </ul>
Improve Communication	<ul style="list-style-type: none"> <li>• "In Spain, I lived with a Spanish/Basque family who did not speak any English, so right away I worked to integrate myself into their family without overstepping, practiced diligently to learn their language to better communicate with them, and adopt many of their traditions, practices, habits, foods, etc. By the end of my time living in Spain, I really felt like I was one of them because of my open-mindedness and strong desire to better understand their Spanish and Basque culture and to be a part of it. I feel that my international experience as well as extensive travel while abroad has allowed me to directly participate in various cultures firsthand and I have then applied that to my professional life by trying to better understand the background of patients I am interacting with and work harder to ensure communication is the best it can be. I have also been able to use my Spanish language to converse with Spanish-speaking patients in various clinical settings."</li> <li>• "I worked on a mobile medical unit for 2 months in Romania in undergrad. I loved it and I think it helped me understand and emphasize the</li> </ul>

	<p>importance of tone/body language with my patients. It has also better prepared me to communicate with cultures that are not similar to mine and how to acknowledge those differences while providing care.”</p>
<p>Language</p>	<ul style="list-style-type: none"> <li>• “I think my experiences abroad have been incredibly important to my practice and I feel I am a better provider having had them. My ability to speak Spanish has only stuck with me because of the immersion training I did to learn it. Even when my Spanish is not perfect, it is clear to me that people appreciate the knowledge and willingness to interact in a language that is not primary to me. I also learned a great deal about cultural differences while traveling which has been invaluable to treating patients from those cultures.”</li> <li>• “Working with patients abroad has helped me to be more patient with language barriers and recognize that differences in what I may assume is common knowledge vs what is not.”</li> </ul>
<p>Eye opening</p>	<ul style="list-style-type: none"> <li>• “Being surrounded by cultures, customs, habits, and other nuances from which you are not used to is an eye-opening experience that shows you how there is not one "right way". I think it is humbling and allows me to more easily understand patient concerns and other viewpoints.”</li> <li>• It was an extremely eye-opening experience</li> </ul>
<p>Understand patients and their decisions</p>	<ul style="list-style-type: none"> <li>• “I was a global public health minor in undergrad, so I travelled to Barbados for a weeklong service-learning trip and to the DR to volunteer with medical clinics in La Romana and surrounding bateyes for 5 weeks. I definitely feel that my experiences have allowed me to better</li> </ul>

	<p>empathize with and understand some of the decisions of patients from those cultures I interacted with (Barbados/DR).”</p> <ul style="list-style-type: none"> <li>• “Working with patients with different cultural practices has opened my eyes to differences in receiving medical treatment/receiving help. Some patients who needed help bathing would refuse from me and wait until a family member was there to help them due to the exposing nature of hygiene for the older adult. After a few patients, I learned to ask if they wanted me to clean them up or wait for a family member, which put them at ease that they could simply say "no I would prefer to wait" rather than telling them I had to clean them, forcing them to refuse. It diffused an uncomfortable situation for the both of us.”</li> </ul>
Helps patient care	<ul style="list-style-type: none"> <li>• “I gained a better appreciation for and connection with Spanish culture when I went to Costa Rica for volunteer work. Having this experience has made it less challenging to connect with individuals from this culture at a more personal level, which is incredibly important for patient care.”</li> <li>• “I have been to Dominican Republic twice for healthcare related volunteer experiences. Those trips taught me how to different cultures can be and how important things other than language are to communicate. I learned to relate to patients even when communicating verbally was somewhat taken away. I think it has definitely impacted my ability to care for people from other cultures in a positive way.”</li> </ul>
Tolerating Ambiguity	<ul style="list-style-type: none"> <li>• “I worked on a mobile medical unit for 2 months in Romania in undergrad. I loved it and I think it helped me understand and emphasize the importance of tone/body language with</li> </ul>

	<p>my patients. It has also better prepared me to communicate with cultures that are not similar to mine and how to acknowledge those differences while providing care.”</p> <ul style="list-style-type: none"><li>• “Being surrounded by cultures, customs, habits, and other nuances from which you are not used to is an eye-opening experience that shows you how there is not one "right way". I think it is humbling and allows me to more easily understand patient concerns and other viewpoints.”</li></ul>
Respect	<ul style="list-style-type: none"><li>• “Although I wasn't in a clinical/patient-oriented setting while studying abroad, I was able to see 4 different health care settings that helped me recognize everyone's ideas of healthcare access. I also interacted with people from all over the world (including in just my small class) that helped broaden my perspective of every individual's lived experiences.”</li><li>• “I gained a better appreciation for and connection with Spanish culture when I went to Costa Rica for volunteer work. Having this experience has made it less challenging to connect with individuals from this culture at a more personal level, which is incredibly important for patient care.”</li></ul>

## **REFERENCES**

- AAPA. *About*. (2021). Retrieved March 23, 2022, from <https://www.aapa.org/about/>
- Anand, R., & Lahiri, I. (2009). Intercultural competence in health care: Developing skills for interculturally competent care. *Deardorff, KD (2009). The Sage Handbook of Intercultural Competence*.
- Arasaratnam-Smith, L. A. (2016). An exploration of the relationship between intercultural communication competence and bilingualism. *Communication Research Reports, 33*(3), 231-238.
- Arasaratnam, L. A. (2009). The development of a new instrument of intercultural communication competence. *Journal of Intercultural Communication, (20)*.
- Arasaratnam, L. A., & Doerfel, M. L. (2005). Intercultural communication competence: Identifying key components from multicultural perspectives. *International journal of intercultural relations, 29*(2), 137-163.
- Bennett, M. J. (1979). Overcoming the golden rule: Sympathy and empathy. *Annals of the International Communication Association, 3*(1), 407-422.
- Billingmeier, R. T., & Forman, D. (1975). Gottigen in retrospect. *International review of Education, 21*, 217-230.
- Calloway-Thomas, C., Arasaratnam-Smith, L. A., & Deardorff, D. K. (2017). The role of empathy in fostering intercultural competence. *Intercultural competence in higher education: International approaches, assessment and application, 32-42*.
- Chen, C. (2013). Empathy in language learning and its inspiration to the development of intercultural communicative competence. *Theory & Practice in Language Studies, 3*(12).
- Chen, G. M., & Starosta, W. J. (1996). Intercultural communication competence: A synthesis. *Annals of the International Communication Association, 19*(1), 353-383.



- Clarke III, I., Flaherty, T. B., Wright, N. D., & McMillen, R. M. (2009). Student intercultural proficiency from study abroad programs. *Journal of Marketing Education*, 31(2), 173-181.
- Cawley, J. F. (2012, May 1). *Physician assistants and their role in primary care*. Journal of Ethics | American Medical Association. Retrieved March 23, 2022, from <https://journalofethics.ama-assn.org/article/physician-assistants-and-their-role-primary-care/201205#:~:text=They%20have%20been%20shown%20to,the%20U.S.%20health%20care%20workforce.>
- Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of studies in international education*, 10(3), 241-266.
- Deardorff, D. K. (2011). Assessing intercultural competence. *New directions for institutional research*, 2011(149), 65.
- Derksen, F., Bensing, J., & Lagro-Janssen, A. (2013). Effectiveness of empathy in general practice: a systematic review. *British Journal of General Practice*, 63(606), e76-e84.
- Fantini, A. E. (2009). Assessing intercultural competence. *The SAGE handbook of intercultural competence*, 456-476.
- Fisher, R. J., & Price, L. L. (1991). International pleasure travel motivations and post-vacation cultural attitude change. *Journal of Leisure Research*, 23, 193–208.
- Fordham, T. (2006). “Pedagogies of Cultural Change: The Rotary International Youth Exchange Program and Narratives of Travel and Transformation.” *Journal of Tourism and Cultural Change*, 3 (3): 143-59
- Gibson, D., & Zhong, M. (2005). Intercultural communication competence in the healthcare context. *International Journal of Intercultural Relations*, 29(5), 621-634.
- Gudykunst, W. B. (1993). Toward a theory of effective interpersonal and intergroup communication: an anxiety/uncertainty management (AUM) perspective.

- Hajek, C., & Giles, H. (2003). New directions in intercultural communication competence: The process model. *Handbook of communication and social interaction skills*, 935-957.
- Hopkins, J. R. (1999). Studying abroad as a form of experiential education. *Liberal Education*, 85, 36-41
- How to improve cultural competence in health care*. Online Public Health & Healthcare Administration Degrees. (n.d.). Retrieved March 11, 2022, from <https://publichealth.tulane.edu/blog/cultural-competence-in-health-care/>
- Howick, J., & Rees, S. (2017). Overthrowing barriers to empathy in healthcare: empathy in the age of the Internet. *Journal of the Royal Society of Medicine*, 110(9), 352-357.
- Huckabee, M. J., & Matkin, G. S. (2012). Examining intercultural sensitivity and competency of physician assistant students. *Journal of allied health*, 41(3), 55E-61E.
- Ilie, O. A. (2019, June). The intercultural competence. Developing effective intercultural communication skills. In International conference Knowledge-based organization (Vol. 25, No. 2, pp. 264-268).
- Kitsantas, A., & Meyers, J. (2001). Studying Abroad: Does It Enhance College Student Cross-Cultural Awareness?.
- Kupka, B., Everett, A., & Wildermuth, S. (2007). The rainbow model of intercultural communication competence: A review and extension of existing research. *Intercultural Communication Studies*, 16(2), 18.
- Lehman et al. Diversity and cultural competency in health care settings  
(<http://www.matherlifewaysinstituteonaging.com/wp-content/uploads/2012/03/diversity-and-cultural-competency-in-health-care-settings.pdf>)
- Levine, K. J., & Garland, M. E. (2015). Summer study-abroad program as experiential learning: Examining similarities and differences in international communication. *Journal of International Students*, 5(2), 175-187.
- Merlini, R., & Gatti, M. (2015). Empathy in healthcare interpreting: Going beyond the notion of role.

- Moir-Bussy, A. (2003). Travel that leads to wisdom. *International Journal for the Advancement of Counseling*, 25, 5–9.
- Morgan, A. D. (2010). “Journeys into Transformation: Travel to an ‘Other’ Place as a Vehicle for Transformative Learning.” *Journal of Transformative Education*, 8 (4): 246-68.
- Morgan, E.E., Jr. (1975). Study abroad: A process of adaptation and change. *International Review of Education*, 21, 207-215.
- Mortensen, D. H. (2021). How to do a thematic analysis of user interviews. The Interaction Design Foundation. Retrieved March 7, 2022, from <https://www.interaction-design.org/literature/article/how-to-do-a-thematic-analysis-of-user-interviews>
- Mouton, W. (2002). “Experiential Learning in Travel Environments as a Key Factor in Adult Learning.” *Delta Kappa Gamma Bulletin*, 69 (1): 36-42
- Novelli, M., and P. Burns. (2010). “Peer-to-Peer Capacity Building in Tourism: Values and Experiences of Field-Based Education.” *Development Southern Africa*, 27 (5): 741-56.
- Office of Minority Services. (2000). National standards for culturally and linguistically appropriate services (CLAS) in health care. *Federal Register*, 65, 80865–80879
- Okayama, C. M., Furuto, S. B., & Edmondson, J. (2001). Components of cultural competence: Attitudes, knowledge, and skills. In R. Fong & S. B. Furuto (Eds.), *Culturally competent practice: Skills, interventions, and evaluations* (pp. 89-100). Boston: Allyn & Bacon.
- Papadopoulos, I., Shea, S., Taylor, G., Pezzella, A., & Foley, L. (2016). Developing tools to promote culturally competent compassion, courage, and intercultural communication in healthcare. *Journal of Compassionate Health Care*, 3(1), 1-10.
- Ruben, B. D. (1976). Assessing communication competency for intercultural adaptation. *Group & Organization Studies*, 1(3), 334-354.
- Samovar, L. A., Porter, R. E., McDaniel, E. R., & Roy, C. S. (2016). *Communication between cultures*. Cengage Learning.

- Sherer, E. L. (2018). Physician Assistant Students' Perceptions of Cultural Competence in Providing Care to Diverse Populations. Teachers College, Columbia University.
- Stone, M. J., & Petrick, J. F. (2013). The educational benefits of travel experiences: A literature review. *Journal of Travel Research*, 52(6), 731-744.
- Tyner, N. (2013). International cooperation: The study abroad experience. *Michigan Academician*, 41(3), 377-388.
- Van Oudenhoven, J. P., & aZee, K. (2002). Predicting multicultural effectiveness of international students: The multicultural personality questionnaire. *International Journal of Intercultural Relations*, 26, 679–694. doi:10.1016/S0147-1767(02)00041-X
- Woolley, C., J. Weeden and Jo-Anne Lester. (2011). “Cruise and Learn: Reflections on a Cruise Field Trip.” *Journal of Teaching in Travel and Tourism*, 11 (4): 349-66.
- Williams, T. R. (2005). Exploring the impact of study abroad on students’ intercultural communication skills: Adaptability and sensitivity. *Journal of studies in international education*, 9(4), 356-371.
- Yakar, H. K., & Alpar, S. E. (2018). Intercultural communication competence of nurses providing care for patients from different cultures. *International Journal of Caring Sciences*, 11(3), 1743-1755.