“A SECOND HOME:” PEER MENTOR CIRCLES FOR INTERNATIONAL GRADUATE STUDENTS TO EASE TRANSITIONS AND FOSTER SENSE OF BELONGING

by

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A dissertation submitted to the Graduate Council of Texas State University in partial fulfillment of the requirements for the degree of Doctor of Philosophy with a major in Adult, Professional and Community Education

December 2020

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DEDICATION

I dedicate this dissertation to my late father, Michael Eugene Davis who instilled in me a strong work ethic and whose presence I can feel as I move through my professional and academic journey.
ACKNOWLEDGEMENTS

I must first acknowledge and extend my sincerest gratitude to my amazing participants, whom I cannot name, for their dedication to the success of this program and the long-term impact they have had on my life. Without them, their participation, and enthusiasm, this project would have not been possible. In this vein I must thank Immanuel Tan for his valuable insight and support when this study was just an idea.

Thank you all!

My mentor and committee member, Dr. Eric Paulson deserves more thanks than I can put in this document. His unwavering support has been instrumental to my success as a student, scholar, and professional. Thank you to Dr. Joellen Coryell for teaching me about research when I was a master’s student and supporting me throughout my dissertation journey. I could think of no better chair for this study! More thanks to my committee members, Dr. Clarena Larrotta and Dr. Ann Brooks for bringing your international experiences to this study and for your support during my time in the master’s and doctoral program.

I am very fortunate to have a strong support system composed of family and friends. The biggest thanks to my mom Carrie Davis who provided more support and dedication to my research than I deserve. Her made this study stronger than I ever anticipated. My husband, Matthew Hyden, who did not always understand the nuances of academia but supported me, nonetheless. They say your family sacrifices during the doctoral journey as their loved one is pulled away for class, research, and hours on the
computer studying and writing. I am forever grateful that my family was so understanding and supportive throughout my journey. Also included in my wonderful support system are members of my cohort who provided emotional, mental, and physical support when needed. Amy Biedermann, Sierra Sullivan, Dr. Reba Fuggs, and Amanda Young – you all were my rocks! We made it so far together. Without my friends Mallory English, Paloma Gray, Noa Schwarzer, and Jenn Idema I would not have felt continuous support throughout this journey. Finally, deep gratitude to my dogs, Stanley, Lola and Zane who provided the best writing breaks while at home.

Working full time while pursuing a doctoral degree is challenging. I owe many thanks to Dr. Andrea Golato and The Graduate College team for providing flexibility for me to attend class, conduct my research, and write this dissertation. Finally, I must thank Patio Dolcetto for providing the ideal space to unwind and collect my thoughts after work and often before class.
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ABSTRACT

The purpose of this instrumental case study was to examine the experiences of international graduate students as they participated in a peer mentor circle (PMC) program that aimed to ease their transitions and foster sense of belonging. International graduate students provide many financial, educational, and social benefits to American universities. International graduate students encounter many challenges as they pursue higher education in the United States including transitioning to new social norms and community issues (Lee & Rice, 2007), navigating a new higher education system (Hellsten & Prescott, 2004), handling homesickness (Church, 1985), and coping with academic stressors such as writing and communicating in English (Cavusoglu et al., 2016; Hunter-Johnson, 2016). To mitigate these experiences and feelings, Duru (2008) asserted that developing social support systems and increasing social connectedness among students can ease transitions.

In an attempt to ease transitions and foster sense of belonging while also addressing the challenges experienced by international graduate students, I designed and implemented a five week peer mentor circle program in which 14 participants attended during the first five weeks of the spring 2020 semester. Through demographic data forms, observations, interviews, focus groups, and voice memos, I examined the experiences of the international graduate student participants in the PMC to better understand their experiences navigating transitions and developing sense of belonging.
The study found that the PMC did ease their transitions. Analyzed with the use of transition theory (Schlossberg, 2001) and sense of belonging (Anant, 1969), findings indicated participants experienced the *moving in* and beginnings of the *moving through* phases of transitions. Additionally, through sharing feelings and bonding over shared experiences, participants developed a strong social support system and thus a sense of belonging. Insights to the experiences of international graduate students’ transitions and sense of belonging during their first semester are provided through this study.
I. INTRODUCTION

Ameta traveled over 4,000 miles from home to the U.S. to pursue a master’s degree with her two-year old daughter in tow. She lacks confidence speaking English and does not know anyone in the U.S. All her friends and family are back home in Asia. There is limited public transportation, which she relied on heavily back home. In addition to situating herself in a new culture, transportation practices, educational system for her daughter, and living environment, she must now successfully navigate a higher education system with which she is unfamiliar. Ameta is required to teach courses to students who are from a different culture and have spoken English since birth, a language that is second to her native tongue. While she was able to perform well enough on the English language test for admission, Ameta struggles with writing, vocabulary, reading comprehension, and oral communication in English. At times, Ameta faces discrimination and finds it challenging to blend in with the new culture. Making friends is harder than she imagined, and she just misses home. Ameta is not alone. For many international students, navigating the U.S. higher education system presents challenges that domestic students do not face.

I have met many international graduate students that represent Ameta’s story above. In my position as a graduate student development specialist, I witness firsthand the challenges and barriers that international graduate students encounter. I felt compelled to do what I can to encourage international students to feel welcomed and supported in the United States.

The purpose of the study was to examine the experiences of international graduate students as they participate in a peer mentor circle (PMC) program, and to determine
how, if at all, the PMC program contributes to the participants’ sense of belonging within the campus community.

**Positionality Statement and Influence for the Study**

As an American born, native English speaking, first-generation college student, I will never fully understand the experiences and challenges faced by international students. However, I aim to support this student group as I believe they bring a myriad of benefits to the American classroom. Throughout my graduate studies, I have been extremely fortunate to interact with and learn from several international students, and these experiences have shifted my perspective tremendously.

I started my master’s program in summer 2015. The first class included all master’s students, including a woman who also just started in the program; we connected instantly. I learned that she just moved back to the area after spending eight years in Israel where she earned her bachelor’s degree. We saw each other again in our second class, which was stacked with doctoral students since the master’s program and the doctoral program in adult education sometimes took the same classes. The instructor welcomed the class and said, “We have some M.A. students joining us for this course. M.A. students, will you stand up and introduce yourselves?” Having no idea what was meant by “M.A.” student, I remained seated. About five other students stood up, including the woman I met earlier that week in my other class and thought to myself “wow, she must be more intelligent or prestigious than I! Did she win some kind of award? Or, is it because she just came from Israel?” The “M.A.” students started to introduce themselves, and I suddenly realized that “M.A.” was a Masters of Arts student. I was so embarrassed. I stood up while the individual next to me was giving her personal
introduction, and then introduced myself. I felt like I made it to the master’s program on accident and that I did not belong; I thought I would be exposed as a fraud. Imposter syndrome (Clance & Imes, 1978) set in so deeply after that moment. I thought, “if I don’t even know what kind of student I am, why do I deserve to be here?”

Over the two years I was in the master’s program, I had classes with many international students, including one from Egypt, another from Iraq, a doctoral student from Turkey, and a few students from countries other in Africa. In our multicultural perspectives class, we were discussing American friendships and social norms, and the student from Turkey said, “American friendships are so superficial.” I was so surprised she felt that way. I turned to my new friend, the one who recently returned from Israel, and expressed my surprise to find that she actually agreed! She said in Israel, people are much more open about what is going on in their lives and that you could learn a stranger’s life story while sitting on the bus. At this moment, I realized I did not know as much about American culture in comparison to others. I realized how frustrating it must be to try to fit in here while we Americans constantly have a wall up and rarely share ourselves. This is just one of many interactions I had in which an international perspective struck me in such a way I began to question many things about myself and American culture.

As a master’s student, I struggled with many things: writing academically, determining the elements of a literature review, balancing time, adapting to group work, developing presentation skills, learning APA citation style, and much more. However, I overcame these obstacles because of the relationships built with my classmates and the organic formation of great mentor relationships. My assistantship supervisor played an
important role as he gave me sound advice often and opened a new career possibility that has become a great fit for my skillset (before this, I really did not know where my career trajectory was headed). The guidance of my program advisor played an important role as she always gave me candid advice and taught me about conducting research when I was still a master’s student. She guided me through my first big research project which examined the impacts of relationships on learning while on a short-term field study. We took this study to a pre-conference that had an international focus. It was here that I learned in detail about the struggles of international graduate students.

At the conference, one graduate student from a university in Florida shared a study about factors that are associated with international graduate students’ performances. Another woman presented on the socio-cultural influence of nontraditional international learners. Both of these presentations discussed the various challenges international adult students face as they pursued higher education in the United States. I thought back to my first class as a master’s student when I did not even know what an “M.A.” student was and how much I had been struggling with my writing and trying to navigate graduate school. This was a challenge for me in my own home country and where my first language is English. I thought about how difficult it must be to write academically in a language that is not one’s own, regardless of how much they have studied that language. Over time, I became compelled to do what I could to ease the transitions and burden for international graduate students. I felt it was my job to use my place of privilege as an English speaker and American-born individual to serve this student population any way I could.
I thought about all the relationships, friendship and mentorships, that got me through my master’s program and where I might be without them. Suddenly, I realized how important mentorships and social support systems were to my success. About a year into my doctoral program, I had lunch with the woman from the beginning of this story, the woman I met on my first day of class. We are still good friends today. She started a job in learning and development within a corporate company after finishing her master’s degree. She told me about “mentor circles” that companies are using now to bring individuals together within an organization to create a mentor community. This sparked an idea. Why not bring this to my institution to benefit international graduate students? As such, this study combines my personal interests in relationships and socialization in learning and my knowledge and understanding of adult learning, the importance of mentorship, and my desire to work with and support international students. I view learning as a lifelong process that occurs all the time, even when we do not realize it. Learning through socialization and relationships is one of the primary ways we learn subconsciously, and as an adult educator I prefer to draw on social activities such as discussion and role play to facilitate learning. My understanding of adult learning is brought to the forefront of the design of this study as learning through relationships and socialization are the foundation of this research.

**Research Problem**

**International Students in the U.S.**

International graduate students provide many financial, educational, and social benefits to American universities. Most importantly, international students bring a global perspective to the American classroom increasing cultural competence and global
interdependence among domestic students, staff, and faculty (Hunter-Johnson, 2016). Thus, efforts to recruit, transition, retain, and support graduate international students in the U.S. continues for many institutions of higher education.

Prior to 2017, the United States experienced several decades of steady increases in international graduate students coming to the United States to pursue graduate degrees. According to a 2018 Open Doors Report, international students comprised approximately 46% of graduate students in the United States. Unfortunately, the number of international graduate students enrolling in graduate programs here has declined (Council of Southern Graduate Schools, 2019). Some reports indicate the student concerns surrounding the difficult and complex process of obtaining a visa and navigating travel bans deter international students from attending graduate school in the United States (Boxer & Roach, 2018). International students fortunate enough to navigate visa challenges will have additional barriers awaiting them once they arrive to America.

International graduate students encounter many challenges as they pursue higher education in the United States including transitioning to new social norms and community issues (Lee & Rice, 2007), navigating a new higher education system (Hellsten & Prescott, 2004), handling homesickness (Church, 1985), and coping with academic stressors such as writing and communicating in English (Cavusoglu et al., 2016; Hunter-Johnson, 2016). Language and communication barriers are among the most frequent challenges discussed among international graduate students (Hunter-Johnson, 2016). Struggles and fears voiced by international students about challenges they face have raised concern among administrators about adequate support for international graduate students. To mitigate these experiences and feelings, Duru (2008) asserted that
developing social support systems and increasing social connectedness among students can ease transitions. A study by Hechanova-Alampay, et al. (2002) echoed findings from several other studies (Furnham, 1998; Surdam & Collins, 1984; Yang et al., 1994; Zimmerman, 1995) that suggest significant relationships and social interactions assist with international student adjustment to the U.S. However, many international students feel that the lack of opportunity to interact and socialize with American students is the biggest barrier to developing meaningful relationships (Talbot et al., 1999; Yang et al., 1994).

Without adequate support during the transition process to graduate school in the United States, international graduate students could feel depressed, isolated, anxious, or inadequate (Friday, 2018). Boxer and Roach (2018) cited that George Washington University’s “six year graduation rate for international students stood at 75 percent” and attributed the low rate to “a lacking sense of community among international students, leading them to feel isolated” (para 1).

Support for International Students

Institutional support for international graduate students as they transition to the United States for graduate school is paramount for their success. However, international students come to graduate school with an array of challenges and barriers that remain unaddressed by many host institutions. Numerous conference presentations and proceedings published by international graduate students have highlighted the struggles they encounter in graduate school (Boakye, 2017, 2016; Hunter-Johnson, 2016; Pattath, 2016; Muhittin, 2016). Though programs to support international graduate students exist at some institutions, international students continue to express challenges they encounter
indicating that there are missed opportunities to create a community of support that would ease the new international graduate student’s transitions and create a sense of belonging within the campus community.

Pairing current international graduate students with new international graduate students could be a potential solution to address the challenges they encounter as the pair would be able to connect based on their shared experiences coming to the U.S. However, inherent in one-to-one peer mentoring are challenges with personality conflicts and the resources required to create the pairs. Additionally, mentor pairs would limit experiences and relationships to only the pair, as opposed to a group environment wherein multiple experiences could be shared and discussed. There is a need to combine these existing efforts to create a diverse community of learners that can support one another. As such, this study developed and implemented a program in which new and current international graduate students work together to develop a mentor-type relationship and to examine how the program contributes to the transitions and participants’ sense of belonging on campus.

The purpose of the study was to examine the experiences of international graduate students as they participate in a peer mentor circle (PMC) program, and to determine how, if at all, the PMC program contributes to the participants’ sense of belonging within the campus community.

**Research Questions**

The following research questions guide this study:

1. In what ways does the peer mentor circle program influence the transition process?
2. How does the peer mentor circle program contribute to sense of belonging among the participants?

3. What are the experiences of international graduate students in the peer mentor circle program?

**Conceptual Framework**

This study employs a social constructionist paradigm, which Driver et al. (1994) described as knowledge that is constructed when individuals engage socially in talk and activity about shared problems or tasks. Making meaning is thus a dialogic process involving persons-in-conversation, and learning is seen as the process by which individuals are introduced to a culture by more skilled members (p.7)

This paradigm fits as peer groups are utilized in this study to develop meaningful relationships between participants to assist their transitions to the U.S. and overcome barriers. Social constructionism recognizes that knowledge is created within a group setting and “defined interpersonally and intersubjectively by people interacting in a network of relationships” (Patton, 2012, p. 121). Two theories underpin this study: adult development with a focus on transitions (Schlossberg, 2001) and sense of belonging (Anant, 1969). I used an instrumental case study as the methodology to conduct the study.

**Significance of the Study**

As institutions seek to bring more international students to their graduate programs, they must also determine which support systems work best for international graduate students. This study provides insight to the use of PMCs to address the
transitional and social challenges faced by international graduate students. The outcomes from my study provide educational leaders with insight into the international graduate student experiences that aid goals to internationalize their campuses, as well as sustainable programming to support international graduate students since students could run the PMCs without faculty or staff involvement.

Findings from this study could also contribute to the dearth of research focusing on solutions to challenges faced by international graduate students as opposed to international students in general; currently, most literature does not differentiate between graduate and undergraduate student populations and does not discuss solutions to challenges and barriers. While many challenges experienced by undergraduate international students are likely also encountered by international graduate students, graduate students in general are different from traditional undergraduate students. For instance, graduate students are considered to be adult learners and thus tend to be more motivated and mature (Hofinger & Feldmann, 2001; Prusak, 1999), goal-oriented (Hofinger & Feldmann, 2001), and often bring rich professional and personal experiences to the classroom (Knowles, 1980). Additionally, like a few participants in this study, graduate students are often balancing familial and personal responsibilities that undergraduate students are less likely to have (Peters & Daly, 2011). Since this study includes only graduate student participants, the findings and implications are directly applicable to international graduate students. However, international undergraduate students would likely benefit from a program centered around easing transitions and building sense of belonging since they too are experiencing adjustments and challenges as they acclimate to college.
The main goal of the study is to understand the experiences of international graduate students as they participate in PMCs and how the mentor circles contribute to the participants’ sense of belonging within the campus community. Toward this end, the study seeks to identify new experiential opportunities to better support the international graduate student population and provide universities and administrators with a better understanding of the unique transitional challenges of international graduate students at our universities and how to better address them. This study contributes to the growing body of literature centered around international graduate students as well as the PMC model. With a few revisions, the PMC program model could be implemented to meet the needs of other underserved and underrepresented student populations such as men and students of color, LGBTQIA+ students, and veterans.

**Background and Context of the PMC Program**

This section describes the site institution for the study, which is important to provide context and deciding factors about the PMC program as well as the conceptualization and development of the PMC program.

**Site Institution**

The site for this study is a large public university in the Southwest United States serving approximately 38,000 undergraduate and 4,000 graduate students. Over 100 graduate degrees are offered including 15 doctoral programs. The international student population has remained steady at about 1% of the overall student population for the last decade. The majority of international students enrolled at this institution are graduate students. As of 2018, there were 184 undergraduate, 269 master’s, and 77 doctoral students enrolled from a variety of countries. Most international students hail from India,
China, and Nepal, but there is representation from other countries (Figure 1 on page 12 outlines international graduate student enrollment by country). In terms of major or program, 26% of international graduate students were enrolled in the computer science program, 14% in engineering, 6.1% in business administration, and 5.2% in materials science, engineering, and commercialization. Physics, technology management, healthcare administration, geographic information science, music, and software engineering also enrolled international graduate students.

According to their mission, International Student and Scholar Services (ISSS) on campus serves as cultural advisors to international students, assists the university and international students with compliance of government policies and regulations, assists with employment authorization for international distinguished scholars, and promotes global awareness by hosting international programming. On their website, ISSS lists services they provide, including cross-cultural adjustment and social events. Through program collaboration and conversations with the ISSS coordinator, there is no formal
orientation for international students. Aside from the mandatory check-in, which focuses on primarily visa paperwork, the only other opportunity for orientation is a resource fair held in the fall semester. The resource fair consists of various departments on campus setting up a table to answer questions. The expectation is that the new international students will visit the various tables to ask questions and learn about resources over the course of the two hours the fair is open. While this event has good intentions, it is easy to recognize how the resource fair may be insufficient support given what we know about communication and socialization challenges experienced by international students. Additionally, since the resource fair is only held in the fall, students who arrive in the spring, typically 30-50 students, are not provided this opportunity. The Graduate College hosts an orientation for all graduate students, including international students, but this event does not address acculturation or cross-cultural issues and is also only offered in the fall. Thus, international graduate students who begin courses in the spring semester are left to discover resources and adapt to their new environment almost completely alone.

**Peer Institutions**

A review of similar universities indicated that many institutions are implementing a variety of methods to support the transitions into American life and culture for international graduate students. The University of Arkansas offers a variety of events for international students including a “conversation club” in which three to five international students meet for about an hour each week with two domestic students to practice conversational English (https://international-students.uark.edu/events/conversation-club.php). The University of Texas at Arlington provides a comprehensive orientation
specifically for international students at a cost of $60
(https://www.uta.edu/orientation/International/). The University of Oregon provides a peer mentor for new international students and has an international student advisory board which reports directly to the director of International Student and Scholar Services (https://isss.uoregon.edu/international-peer-mentor-program). Likewise, the University of Houston provides a pre-arrival online orientation for international graduate students and an in-person orientation when they arrive. However, not all universities offer such support programs as they require resources that many universities are not equipped to provide. More sustainable methods of support that connect students socially should be implemented and researched for best practice insight and student success outcomes.

**Researcher Positionality in Relation to the Site Institution**

My position at the site institution at the time of the study leveraged an opportunity for unique understanding into international graduate student needs. As a graduate student development specialist, my job was to develop, implement, and evaluate programs that foster success and professional development among all graduate student populations. Throughout my four years in this position, I interacted with several international graduate students and discussed their needs informally during workshops and other events. Additionally, I partnered with the ISSS on various events catering to international graduate students thus developing a partnership with this department and learning more about existing programming and support offered by ISSS as well as gaps in their services. It was my position within the site organization that allowed me insight to information that might otherwise be hard to gather. Witnessing international student success and struggles heightened my interest in supporting this student population.
Needs Assessment

In the summer of 2018, The Graduate College and ISSS collaborated on developing an Academic Success Workshop for International Students with a goal of easing the transition to the United States for new international graduate students. To narrow the needs of our specific international graduate student population, we conducted a needs assessment survey in summer 2018. The brief seven-question, open-ended Qualtrics survey was distributed to international graduate students who were active (either enrolled or between semesters but still active in the system) between Fall 2016 and Summer 2018. Students were invited to participate via email and were reminded to participate if they had not responded after two weeks of the first invitation. Survey questions consisted of the kinds of programming learners felt they needed and what challenges they faced as international students. Ninety-five students started the survey, but only 39 completed all questions. Although the response rate was low the answers shed light on important challenges and needs for this student population. The first question asked which semester the student started graduate school, and the last question allowed the student to opt into a drawing to win a prize by entering a personal email address. Responses to questions as they relate to this study are outlined in Appendix B.

Many of the survey responses mirror what is published in research relating to international graduate student challenges. However, greater insight about the need for social connection and cultural adjustment is clear based on the responses. Using the responses from this needs assessment, the Academic Success Workshop for International Students was implemented in Fall 2018. All new and current international students were invited to attend; 29 international graduate students attended the first workshop. The
workshop included presentations about communication etiquette, peer to peer
interactions, plagiarism and ethics, and syllabi, and featured a panel of current
international students and one domestic faculty member who works with international
graduate students often. It was during the panel session that attendees seemed most
engaged. Evaluations from the workshop included remarks that the workshop should be
mandatory, and those who were not new students, but attended the workshop, remarked
that they wish this were offered when they first started their studies.

As a result of implementing this first workshop, it became evident that PMCs
might be ideal for this group as it would provide continuous support over a period of time
rather than a one-time workshop during the first week of classes. Additionally, the
workshop still did not address one missing piece: social connectivity. It is hard to
imagine friendships developing during a single, two-hour workshop; friendships take
time. Students expressed a desire for more opportunities to make friends. A need for a
ger longer program with a focus on relationship building and social support became clear.
Using the needs assessment data and evaluations from the workshop, I began crafting the
outline of the PMC program.

**Peer Mentor Circle Program**

I employed several steps when developing the PMC program, which are displayed
in Figure 2 and described in this section. Before developing a complete outline of the
program, I met with an international student whom I encountered frequently at various
Graduate College events (pseudonym: Izzy, an international graduate student). I shared
my idea with Izzy, and he was extremely receptive. In fact, Izzy said he wished we had
something like this when he started. Being the only student from his home country on this
Izzy joined several student organizations on campus and attended many events in hopes of making social connections. He felt that the PMC program would provide the space for relationships to develop and for challenges to be discussed with and addressed by peers.

We discussed various aspects of the program including how many meetings to have, what day of the week it should be held, how long the meetings should be, what would be discussed at the meetings, where the meetings would be held, and how to market the program to prospective participants. Most importantly, Izzy emphasized that the first meeting must be impactful otherwise participants would likely not attend subsequent meetings. This initial meeting with Izzy was integral to creating my initial draft of the PMC program. His input was invaluable as I am an outsider to this student population and no amount of research or needs assessment could provide the insight Izzy shared.
The initial draft I created of the PMC program was influenced by foundational adult education principles including discussion-based facilitation (Brookfield, 2004), simulation (Gilley, 2004), and mentorship (Parks Daloz, 2004), as well as the interactive program planning model (Caffarella & Daffron, 2013), which includes 11 components that serve as a blueprint for interactive program planning. The Interactive Model is depicted in figure 3. While each element was included in the design of the PMC, I focused primarily on context, learning transfer, support, and goals and objectives. Additionally, I heavily considered two of the five foundational knowledge areas (cultural difference and relationship building) which Caffarella and Daffron (2013) considered “especially important for program planners to understand in both designing and carrying through programs for adults” (p. 5a) and also vital components of the PMC.

Figure 3. The Interactive Model of Program Planning (Caffarella & Daffron, 2013, p. 5b)
The PMC started as a program that consisted of four meetings over the course of a semester. Each meeting had a different topic and homework assignments, such as to attend an on-campus event or use an on-campus resource, were assigned each meeting. For several months, I thought this was a good idea, until I met with another international graduate student to discuss the program (pseudonym: Sara, an international graduate student). Sara feared that so much time would pass between each meeting that participants would lose interest. She suggested to have all the meetings at the start of the semester then letting the participants decide if they wanted to continue. Her suggestion was similar to the 2014 study implemented with international students in Australia by Smith and Khawaja. In this group mentor program, students met during the first four weeks of the semester. In addition to changing the program to the start of the semester rather than spread across the semester, Sara cautioned me about paying participants. She said that many new international students are warned about scams when they come to the U.S. and might be confused why I would pay them to participate in something that is designed to help them. This was very helpful to know.

After meeting with Sara, I went back to Izzy to discuss the changes I made. He felt that changing to the first few weeks of the semester was a much better structure. Izzy also suggested the meetings have food and occur on a Friday night since many international students are lonely when they first arrive, and the weekends can be the toughest. In terms of incentive, he also agreed that paying participants might deter them from participating. He suggested providing a gift card or promotional items from the university as incentives. Another suggestion Izzy provided was to allow participants to have a say in what topics are discussed in some of the meetings. Both Sara and Izzy
referred to allowing the participants agency in decision making about the structure of the
program. The input and suggestions provided by both of these international students were
vital to the creation of the PMC program as it is now.

**Role of Current Student Mentors**

Mentors served four main functions. First, they provided input on the PMC
program outline. The mentors’ involvement began during the finalization of the program.
They examined the program outline draft and provided input related to suggested changes
(time of day or week, discussion topics, homework assignments, meeting location, etc).
Their input and involvement made the program planning and implementation stronger.
The second function of the mentors involves them acting as participants and co-
facilitators in the peer mentor groups. The goal was for the mentors to feel they had
agency throughout the facilitation of the group meetings with the new international
students to develop the relationships, mentorships, and social connectivity. Third, during
a focus group between week two and three, they provided suggestions for changes to the
final three meetings. Finally, they provided their perspectives on the mentees’
experiences in the PMC, which was important to check my biases and provide alternate
point of view on the meetings.

**Conclusion**

International graduate students need support from their institutions as they
transition to graduate school in the U.S. Based on the needs assessment conducted at the
site institution, international graduate students also seek social connection and support.
As such, this dissertation study sought to examine the experiences of international
graduate students as they participated in a peer mentor circle (PMC) program, and to
determine how, if at all, the PMC program contributed to the participants’ sense of belonging within the campus community.

**Dissertation Overview**

Chapter two of this document will review literature as it relates to international students and mentorship. Chapter three outlines the research methodology including the epistemological and theoretical framework as well as the study design, data collection, and data analysis. Findings are presented in chapter four and discussed in chapter five. Additionally, chapter five discusses implications for practice and theory.
II. LITERATURE REVIEW

A review of literature as it relates to international graduate students, their contributions to American universities, obstacles they encounter, the acculturation stress they experience, and social connection challenges is presented in the first part of this section. The second part of this chapter focuses on mentorship to include peer-to-peer mentoring, group mentoring, and peer mentor circles.

International Graduate Students

Prior to 2017, the U.S. experienced several decades of steady increases in international graduate student enrollment in graduate programs. According to the 2019 Open Doors Report, over one million international students are enrolled in U.S. higher education institutions, and international students comprised approximately 43% of graduate students in the U.S. Most international students hail from China, India, and South Korea and choose to attend institutions in California, New York, or Texas. Unfortunately, the number of international graduate students enrolling in graduate programs in the U.S. is declining, particularly among Middle Eastern and North-African countries (Council of Southern Graduate Schools, 2019). Anecdotal information points to the decline being linked to the tumultuous political climate which ensued after the 2016 U.S. election. Some reports indicate that student concerns involving the difficult and complex process of obtaining a visa as well as travel bans deter international students from attending graduate school in the U.S. (Boxer & Roach, 2018). Though the decline in international graduate student enrollment has continued for the last two years (2017-2018), it is too soon to determine whether this might be a future trend.
International Student Contributions to Universities

Recruiting and retaining international students on U.S. campuses is important for several reasons. Diversity among the college student population is a common goal among higher education institutions as they believe diversity is ideal for providing quality education (Simmons, 2011). International graduate students contribute to the U.S. classroom through their cultural diversity and international perspectives, which can increase awareness and appreciation for other cultures among domestic students and thus create a richer educational environment (Andre de Araujo, 2011; Hunter-Johnson, 2016; McKenna, 2015; Lee & Rice, 2007; Wolanin, 2000). Considering only about three percent of American students study abroad (Open Doors Report, 2019), bringing international students to the U.S. classroom becomes increasingly important to provide domestic students with opportunities to engage with students from other cultures and develop skills related to intercultural interaction (McKenna, 2015). In our increasing global society, cultural competency and experience interacting with students from different backgrounds could provide a competitive advantage on the job market (Calleja, 2000; Montgomery, 2000).

Interaction with international students prompts a process of preparing domestic students to become effective global citizens (NAFSA, 2003). Krislov (2019) stressed that international students in the classroom provide domestic students with a better understanding of international issues, foreign affairs, and immigration issues. NAFSA (2003) believes that “by hosting international students, we generate an appreciation of American political values and institutions, and we lay the foundation for constructive relations based on mutual understanding and goodwill” (p. 5). There is reciprocity
inherent in the broadened perspectives and worldviews influenced by bringing international students to the U.S. classroom.

In a study pairing U.S. host students with new international students, Geelhoed et al. (2003) found that by participating in the program, domestic students experienced cognitive shifts in terms of their cross-cultural awareness and sensitivity. Through their experience, they learned about their “partners’ culture, confronted their cultural stereotypes and became more aware of their cultural biases and perspectives” (Geelhoed et al. 2003, p. 14). Furthermore, their ongoing interactions with international students positively impacted the domestic students’ family and friends’ perceptions toward international students. Cheney (2001) expanded on these findings positing that structured interaction between domestic and international students could increase awareness of language use, both English and the foreign language, as well as develop international friendships. Additionally, Krislov (2019) suggested that international students provide unique opportunities for domestic students to engage in cross-culture experiences, such as celebrating new holidays or trying new cuisine, as they interact with international students.

While immigration opponents argue that domestic students are losing places to international students in graduate programs (Hegarty, 2014), research indicates otherwise. “Since the 1970’s doctoral programs have actually grown to accommodate the demand from international students” (Hegarty, 2014, p. 226). Additionally, international students have not outperformed domestic students in terms of awards and patent applications (Matloff, 2013). NAFSA (2003) contended that international “graduate students make important contributions to teaching and research, particularly in the scientific fields, and
their enrollment in under-enrolled science courses often makes the difference for a school’s ability to offer those courses” (p. 6). They further argued that “graduate education as we know it could not function without international students” (NAFSA, 2003, p. 6). It is evident that international graduate students are an integral part of the graduate education community.

As well, international graduate students also provide monetary contributions since they typically pay higher tuition rates (Habu 2000; Levin, 2002; Rhee & Sagaria, 2004; Slaughter & Rhoades, 2004). Some universities have come to depend on international student enrollment for the financial benefit (Hu, 2011). Hegarty (2014) found that international students contribute almost $22 billion dollars to the U.S. economy each year which surpasses other high revenue industries such as weight loss and entertainment industries (p. 227). Even more broadly, international students also contribute to the U.S. economy and impact international relationships between countries (Bastien et. al, 2018) by creating connections related to international business and trade (NAFSA, 2003) and by promoting foreign policy interest (Schneider, 2000).

International students clearly provide numerous benefits to institutions of higher education, however, “in order to facilitate academic success and ensure continued enrollment of international students, university personnel must better understand and meet the needs of this unique and diverse population” (Bastien et al., 2018, p. 1199). The challenges faced by international students create academic and social barriers throughout their experiences. More insight to the experiences of international graduate students is needed to better support their transitions to the U.S. and success in graduate school.
Current Research Focused on International Students

In 2007, Lee and Rice pointed out that much of what we know about international students is based on enrollment data and other statistics. These authors pushed for more research to be conducted on the experiences of international students. Since then, several studies examining challenges and experiences of international students have been published (Baba & Hosoda, 2014; Bai, 2016; Bang & Montgomery, 2013; Bastien et al., 2018; Byram & Feng, 2006; Campbell, 2015; Duru, 2008; Erichsen & Bollinger, 2011; Friday, 2018; Geary, 2016; Lau et al., 2019; Lee & Rice, 2007). Researchers now better understand the specific obstacles encountered by international students as well as a plethora of knowledge about the acculturation process and need for social connection for international students.

Existing research addresses international students as a whole; few studies differentiate between undergraduate and graduate international students. Thus, for the purposes of this literature review, graduate and undergraduate international student experiences will be conjoined. It is important to note that there are differences between undergraduate and graduate education, including the caliber of writing and research demands. Moreover, graduate students often exhibit stronger motivation, higher levels of maturity (Hofinger & Feldmann, 2001; Prusak, 1999), clearer goals (Hofinger & Feldmann, 2001), and tend to bring more professional and personal experiences to the classroom (Knowles, 1980).

Obstacles Encountered

International graduate students encounter a myriad of obstacles as they pursue graduate degrees in the U.S. Several studies (Baba & Hosoda, 2014; Bai, 2016; Bang &
Montgomery, 2013; Bastien et al., 2018; Byram & Feng, 2006; Campbell, 2015; Duru, 2008; Erichsen & Bollinger, 2011; Friday, 2018; Geary, 2016; Lau et al., 2019; Lee & Rice, 2007; Poyrazli & Kavanaugh, 2006; Robertson et al., 2000) have examined the factors contributing to struggles among international students as they pursue higher education in the U.S. Such challenges include transitioning to new social norms, socializing and community issues, organizing living arrangements, (Lee & Rice, 2007), navigating a new higher education system (Hellsten & Prescott, 2004), coping with homesickness (Church, 1985), and pressure to be accepted and succeed (Robertson, et. al, 2000), acclimating to American culture, and handling academic stressors such as writing and communicating in English (Bai, 2016; Cavusoglu et al., 2016; Hunter-Johnson, 2016).

When unaddressed, these challenges can lead to social, biological, and psychological change as international students adjust to their new environment (Wei et al., 2007). Reynolds and Constantine (2007) argued that international students require unique services and accommodations to meet their needs. Institutions may intentionally or unintentionally fail to adequately accommodate international students with residence life, admissions, registration and other basic needs for academic life (Kher et al., 2003). Some international students may be perceived as needy or problem-oriented because of their unfamiliarity with the academic culture within U.S. institutions (Tran, 2013).

Language barriers seem to the be most common and overwhelming struggle for international students (Constantine et al., 2004; Kuo & Roysircar, 2004, Rienties et al., 2012). Although language proficiency exams are required for admissions, non-native English speakers are often underprepared for the social nuances of communicating in a
new culture. Telbis et al. (2014) stressed the importance of English language proficiency as it impacts a student’s ability to communicate, comprehend, and interact on academic and personal levels. Likewise, Erichsen and Bollinger (2011) discussed how language challenges “can lead to confusion, misunderstandings, struggles with course and program content as well as contribute to great anxiety and stress concerns in class participation and presentations” (p. 311). Language barriers permeate to other aspects of the international student’s life as they make experiences like grocery shopping or making friends very difficult.

In a qualitative study designed to understand international students’ definition of well-being, Tseng and Newton (2002) identified four specific challenges faced by international students. This grounded theory study employed an interpretive method of naturalistic inquiry to understand the two participants’ experiences through interviews. The first challenge Tseng and Newton identified is general living adjustment, which includes being accustomed to American food, environment, and transportation. In a study examining how to encourage international students to interact within their new community, Geary (2016) found that there is a disconnect between international students’ understanding of authentic American culture, such as, potlucks, sporting events, and birthday parties. Academic adjustment is the second challenge Tseng and Newton (2002) identified. Academic adjustment encompasses the new education system for which they must navigate and the skills they need to be successful. International students hail from a variety of educational backgrounds, and many students find it difficult to adjust to aspects of the American education system for which they are unfamiliar. For instance, independent library research, oral presentations, engagement in class discussions, and
“pop” quizzes are not common outside the American classroom setting (Pan et al., 2000). The third and fourth challenges identified in study included sociocultural and personal psychological adjustment, which both fall within the concept of acculturation stress which includes feelings of loneliness, homesickness, isolation, and adjusting to new cultural and social norms (Tseng & Newton, 2002).

**Acculturation Stress**

Transitioning to life in the U.S. is a major stressor for international students, and some researchers argue that intercultural adjustment among international students is one of the biggest problems they encounter (Furnham, 1998; Surdam & Collins, 1984; Yang et al., 1995). This intercultural adjustment is also known as acculturation stress, which is the change in values, beliefs, and behaviors resulting in an extended contact with a new culture (Berry, 1997). The process of navigating changes in values, beliefs, and behaviors incites new ways of thinking and seeing the world (Okorocha, 1996). Lau et al. (2019) emphasized that understanding acculturative stress as well as the ability to assess it is important for the mental health of the students. Unacknowledged acculturation stress can lead to depression, anxiety, identity confusion, feelings of marginalization and isolation, and heightened psychosomatic symptoms (Berry, 1995). Support from the institution is vital for the acculturation process (Bai, 2016). Students must be able to appraise their coping resources (Folkman, 2008), yet, most international students are left with the sole responsibility of attempting to adjust or adapt to American culture rather than institutions working to accommodate the acculturation process (Lee & Rice, 2007).

In a study examining levels and predictors of acculturation stress, Bai (2016) determined that support from the institution is important, and institutions should take
“more responsibility in providing more services to international students” (p. 104). To provide more services and create a community of support within an institution, Bai suggested increasing diversity among staff members and working to provide cultural diversity among staff and mental health services. Support from institutions could also come in nontangible forms, for instance, moral support for the individuals that international students interact with on campus, such as, faculty and classmates. The limitations of Bai’s quantitative study make it difficult to understand the depth of the suggested predictor (lack of institutional support) and how different cultural backgrounds, age, and gender may influence the factors contributing to acculturation stress.

In a similar study, Sullivan and Kashubeck-West (2015) aimed to determine if the amount of acculturative stress was related to social support. This quantitative study utilized an online survey that included questions about acculturative stress, acculturation orientation, and social support in which 139 students participated. Their findings echoed those of many other studies which pointed to social support as an option to address acculturation stress. Sullivan and Kashubeck-West suggested that students develop more “diverse social networks” and “develop ties and connections to the campus and local community” (p. 8). Much like suggestions from similar researchers (Baba & Hosoda, 2014; Bai, 2016; Duru, 2008), these implications could and should be handled by the host institution. It is evident that social support is an important part of alleviating acculturation stress (Poyrazli et al., 2004), and institutions must incorporate social support opportunities for international students to aid in the coping of their acculturation stress.
Social Connectivity

Social connection is a basic need for humans in almost any setting. In a quantitative study utilizing a social connectedness scale employed via survey to 404 university students, Duru (2008) found that social connectedness among new college students indicates a positive relationship between social support and new environment adaptation. For international students, social support and connection can ease the acculturation process and alleviate depression and anxiety symptoms (Dao et al., 2007) consequently leading to better mental health (Han et al., 2007). Lee and Robbins (1998) defined social connectedness as the “internal sense of belonging and… the subjective awareness of being in close” (p. 338). Expanding on this definition, Crockett, et al. (2007) posited that social support “involves the provision of psychological and material resources [that] may serve as a buffer against stress” (p. 348). As such, the opportunity to build social connections is important to assist in mental health issues such as stress, anxiety, and depression.

Social connectedness and relationship development are common threads within research examining international student transitions (Chen, 1999; Sherry et al., 2010; Yan & David, 2011). Baba and Hosoda (2014) distributed a survey that included measures for academic pressure, financial stress, homesickness, perceived discrimination, social connectedness, culture shock, social support, cross-cultural adjustment, and demographic backgrounds to approximately 1,500 international students. The goal of the study was to identify factors that contribute to cross-cultural adjustment. Baba and Hosoda found that social support was positively related to cross-cultural adjustment and that universities should better educate new international students on American norms, specifically social
skills. Summer et al. (2008) also found that perceived social support, social network satisfaction, and needed support positively impacted international students’ adjustment. In fact, students with social support experienced lower levels of acculturative stress.

Palmer (2015) argued that the social nature of learning points to the need for a sense of community within the learning environment. However, language barriers and cultural differences create difficulty for international students to engage in the classroom (Bai, 2016) as well as outside of the classroom (Poyrazli & Graham, 2007). Sadly, many international students spend several years studying in the U.S. without making a single American friend (Yan & David, 2011). In a study aimed to uncover academic and psychological factors that contribute to acculturation among international students, Bastien, et al. (2018) determined that language proficiency is important to the adjustment process. They stated that it is "critical that international students have ample opportunities to practice English in a ‘safe’ environment (e.g., international conversation groups, host family programs, programs that pair international students with an American buddy)” (p. 1215). Bastien et al. further determined that social connection is important to the acculturation process and that university "programs and/or workshops be available to assist international students in establishing a sense of connection to the greater university community." (p. 1215). Cultural differences also hinder the development of meaningful relationships (Pritchard & Skinner, 2002). For example, differences in food tastes, views about sexual openness, perceptions of time, and gender roles can make it harder to identify commonalities and develop social connections.

Developing social connection can be extremely challenging for international students, and research suggests that international learners have limited resources at their
disposal to create social support systems often leading to loneliness and homesickness, including missing friends from home (Chen, 1999; Duru, 2008). Frey and Roysircar (2006) determined that lack of opportunity is a main reason for deficiency in friendship development among international students. Fortunately, institutions are beginning to recognize the need for programs and experiences that foster social support development to assist in the acculturation and transition processes for international students. Mentor programs, support groups, and workshops designed for international students are increasing as the international student population grows.

**Mentorship**

Mentorships occur in a myriad of settings ranging from the workplace, to higher education, to personal life. Traditionally, a mentorship is a dyadic relationship in which one person learns from the wisdom and experiences of another person (Dansky, 1996). Mentoring is an evidence-based social support strategy that can positively impact the academic, social, and personal aspects of an individual’s life (MacCallum & Beltman, 2003) and can be described as a “process of influencing and fostering the intellectual development of students” (Darwin & Palmer, 2009, p. 125). Roberts (2000) maintained that helping, teaching, learning, reflecting, supporting, coaching, and sponsoring are the essential components of mentoring.

**Peer-to-Peer Mentorships**

In higher education settings, peer mentorships are often used to assist first-year students as they transition to academic life, gain a sense of belonging, and develop study skills (Glaser et al., 2006). Peer mentorships can enhance personal growth among students (Yomotov et al., 2015) as well as enhance students’ academic performance, self-
efficacy, and well-being (Chester et al., 2012; Husband & Jacobs, 2009; Terrion & Leonard, 2007). A peer mentorship can be defined as “a helping relationship in which two individuals of similar age and/or experiences come together, either informally or through formal mentoring schemes, in the pursuit of fulfilling some combination of functions” (Terrion & Leonard, 2007, p. 50). Within a peer mentorship, the mentor and mentee exhibit a reciprocal relationship wherein both parties contribute and benefit from the relationship (Haggard et al., 2011).

Examples of peer mentorships in higher education abound (Beltman & Schaeben, 2012; Curtin et al., 2016; Dennison, 2010; Gunn et al., 2017). Dennison (2010) argued that peer mentoring is a potential solution to many challenges faced by nursing students and found that mutual benefits were gained from a peer mentor program. Mentors had an opportunity to remain current with their skills and knowledge, participate in a rewarding experience assisting other students, network with faculty, and gain respect from their peers and faculty. On the other hand, mentees who participated felt less intimidated, more comfortable, and gained perspective from their mentor who had similar experiences in the nursing program. Reinforcing these findings, Gunn, Lee, and Steed (2017) conducted a study examining student perceptions of benefits and challenges of a peer-to-peer mentorship program with undergraduate business students. Participants included 107 first-year mentees and 16 fourth-year mentors. An inductive, exploratory method known as Critical Incident Technique was employed to obtain qualitative responses that pertain to the participants’ experiences in the mentor program. Participants expressed a variety of benefits gained from the experience, such as better communication skills, enhanced leadership skills, and social connections. However, they also found that participants had
challenges as well, such as difficulty making a personal connection, lack of prolonged relationship, and communications between the mentor and mentee not being easy.

Peer mentor programs geared toward international students exist as well; however, research about these programs is scant. A public university in the Midwest implemented a semester-long peer-mentor program that paired 36 incoming international students with returning domestic students (Abe et al., 1998). The domestic host student’s role was to have regular interactions with the international students to assist them in becoming more familiar with the university. The international student’s role was to increase the knowledge and appreciation for foreign cultures, customs, and languages among the domestic hosts. Communication between the host and new international students began before leaving their home country. The peer mentor relationship included regular meetings and communication, and attendance at events on campus. Through their study, Abe et al. found that international student participants in the peer mentor program developed stronger interpersonal skills and left the program better socially adjusted to their environment. The authors of this study failed to acknowledge any negative perceptions of the peer mentor program. Surely challenges similar to the Gunn et al. (2017) study, such as establishing personal connections, existed between the international and domestic students. Such challenges are common among peer mentor programs that match mentor partners. Not everyone is fit to be a competent mentor partner, and “arranged relationships are not always ideal” (Darwin & Palmer, 2009). Pairing challenges showcase why mentor groups might be more beneficial as they could allow for organic relationships with a group to occur rather than a predetermined pairing.
**Group Mentorships**

In addition to traditional mentorships and peer-to-peer mentorships, group mentorships are another programming option. Group mentorships come in a variety of forms: peer group mentoring, one-to-many mentoring, many-to-one mentoring, and many-to-many mentoring (Huizing, 2012). Peer group mentoring fits well within higher education for the same reasons peer-to-peer mentorships do experienced students share their wisdom and knowledge while also creating social networks. Group mentorships are slowly becoming more common since individuals are now more likely to engage in mentorships with multiple individuals (Darwin, 2004). Primarily, the benefit of a peer mentor group is a “broader network of collaborative input into personal and professional needs” (Huizing, 2012, p. 44). Group mentorships provide broader opportunities for learning, growth, and development as compared to peer-to-peer mentorships.

In a study by Hadjioannou et al. (2007), mentoring groups formed within a doctoral program were examined. The group consisted of four graduate students and a professor, although, the professor was not always present creating an environment that was more peer-driven. After the self-regulating groups concluded, the researchers gathered written reflections and found that the group encouraged instructional support, participation within the academic community, engagement in academic discussions, improved writing, fostered emotional support, and assisted students in dealing with practical aspects of being a graduate student.

Not quite a peer mentor group, but similar, Smith et al. (1999) outlined details about a support group for international students which included various topics of discussion facilitated by counselors from the on-campus counseling center. Over a two-
year period, 100% of participants rated the groups highly, and about 75% of initial attendees were retained (Smith et al., 1999). This outreach initiative proved successful but did not address major concerns among international graduate students specifically as it only supported undergraduate international students.

Smith and Khawaja (2014) conducted a group psychological intervention pilot program for international students at a university in Australia. Focusing on strengths, transitions, adjustments, and resilience, the program aimed to “enhance coping in international students”, and in-turn [increase] psychological and sociological adaption, an important acculturation outcome” (p. 112). The program consisted of four sessions each lasting two hours scheduled during the first four weeks of the semester. Each session was interactive utilizing case studies and group discussion and concluded with each student receiving a homework assignment, such as talking to local community members. Results from the mixed-methods study indicated that the groups positively impacted the participants’ psychological adaptation and self-efficacy. Feedback from the participants included more time during the sessions be spent on social interactions, inclusion of domestic students, and longer meeting times.

**Mentor Circles**

Recently, mentoring circles have surfaced as an innovative approach to group mentoring. Commonly used in the workplace, mentoring circles are groups comprised of individuals from various levels and backgrounds who meet regularly to discuss a self-determined topic of interest (Schnieders, 2017). These circles are designed to motivate individuals and provide an opportunity to grow within the organization through collaboration with others. The social aspect of this concept increases accountability
among all involved and fosters meaningful relationships among members, which is an integral part of the concept.

Mentoring circles (MCs) involve a mentor, or multiple mentors, working with a group of mentees who mentor one another. During the meetings, MCs will typically have a facilitator whose job is to keep the conversations productive and focused (Darwin & Palmer, 2009). Ambrose (2003) shared that MCs generate different perspectives as the group members combine energies and share experiences with one another thus expanding the knowledgebase of the group members. Darwin and Palmer (2009) similarly noted that MC group members “share experiences, challenges, and opportunities for the purpose of creating solutions” (p. 126), and peers in the group support one another. Darwin (2004) reported advantages of MCs to include gaining access to networks, reducing feelings of isolation, developing greater connectivity, enhancing confidence and commitment, improving career progression, acquiring new knowledge, increasing understandings of the culture, and demystifying the nuances of academia. Most of these benefits could be significantly impactful to international students as they describe many of the challenges they face. However, while studies examining MCs among faculty in higher education (Darwin & Palmer, 2009) as well as post-doctoral graduates (Kuhn & Castano, 2016) do exist, MCs have not yet been researched with the international student population.

**Gap in the Literature**

International students face a variety of challenges as they pursue their undergraduate or graduate study in the U.S., and since Lee and Rice (2007) called for more focus on international students, ample research explores obstacles faced by international students. The underlying challenge is acculturation stress (Furnham, 1998;
which encompasses language barriers, navigating a new culture, and establishing social connections (Berry, 1997). While many studies examine factors contributing to acculturation, most of these studies were conducted with quantitative research methods. More qualitative studies should be conducted to understand the depth of acculturation stress, and new, innovative programs should be created and researched to attempt to assist in the acculturation process.

Peer mentorships are a viable solution, but also present challenges as arranged relationships leave much room for failure. Mentor circles provide the structure and broad network to potentially create a social support system that would aid international students in their acculturation process. We know that mentor circles provide many benefits that a peer-to-peer relationships cannot, such as, a broad social network, organic mentorship development, and reduced feelings of isolation (Darwin, 2004).

Conclusion

As budgets continue to shrink in higher education, institutions must be creative with resources and find a balance to support international students more efficiently. The current study implemented and investigated the benefits, challenges, and outcomes of a PMC program for international graduate students was executed as a component of this dissertation with the intention of addressing issues raised by the literature discussed in this chapter.
III. METHODOLOGY

This chapter discusses the research methodology including the epistemological and theoretical perspectives as well as the participant recruitment strategy, participant biographies and information, and data collection and analysis method. Details related to researcher biases, trustworthiness, and confidentiality are also discussed in this chapter.

Epistemological and Theoretical Perspective

Knowledge is constructed by the individual and such ability is best fostered in a group or collaborative setting. Hence, the epistemological perspective of this study is constructionism, which focuses on “the collective generation and transmission of meaning” (Crotty, 1998, p. 58). The nature of the PMC experience involves participant engagement in a support group comprised of peers, thus, a social constructionist paradigm aligns well with this study. Within the social constructionism lens, I will employ adult transition theory to examine the initial phase of moving in (Anderson et al. 2011) of the international graduate students’ transitions to graduate school in the U.S. Additionally, the study uses sense of belonging (Anant, 1969) to examine how the PMC influences sense of belonging among participants.

Constructionism

The epistemological frame of constructionism postulates that meaning is created, not discovered, and “there is no true or valid interpretation” (Crotty, 1998, p. 47). Constructionist perspectives assume that individuals are continually creating their realities instead of being objective or interdependent knowers of the world (White, 1996), and truth is not correlated with objective reality (Guba & Lincoln, 1989). Researchers with a constructionist view “seek to capture diverse understandings and multiple realities
about peoples’ definitions and experiences of the situation” (Patton, 2015, p. 122). Using interactions with other humans and their worlds, individuals create their own ways of knowing and creating knowledge (Crotty, 1998). Most importantly, this perspective acknowledges that everyone’s “way of making sense of the world is as valid and worthy of respect as any other” (Crotty, 1998, p. 58). Constructionism is compatible with studies examining non-Eurocentric worldviews (Brott, 2001) and exploring narratives among individuals to examine meaning making and personal development (White, 1996). Furthermore, a constructionist perspective has proved useful in understanding how individual’s make sense of their experience and the world (Savickas, 2003), thus providing a paradigm ideal for examining experiences of international graduate students as they make sense of a new societal and academic life and norms.

Social Construction

Using basic tenets of constructionism, social constructionism includes an additional layer of interpersonal connection and interactions to create meaning. Patton (2015) noted that social constructionism does not and “cannot have essence because [it is] defined interpersonally an intersubjectively by people interacting in a network of relationships” (p. 121). Driver et al. (1994) asserted that “making meaning is thus a dialogic process involving persons-in-conversation” and can be “stimulated by peer interaction” (p. 7). Bringing culture to the forefront of this concept, Crotty (1998) described that social constructionism is a response to the way humans have evolved, and that we rely on culture to guide our experiences and the way we make sense of them. Ultimately, within social constructionism, the understanding of reality is mutually created without any exceptions (Crotty, 1998). A social constructionist perspective is thus an
appropriate lens for which to examine the transitional experiences of international graduate students as socialization and peer interactions develop.

**Adult Development: Transition**

Examining the development of individuals as they progress through adulthood encompasses many theories. For this study I am drawing on the transition perspective of adult development. Adjusting to daily and academic life in the U.S. presents a period of transition for international graduate students. A transition is any event or nonevent that creates a change in relationships, routines, assumptions, and roles (Levinson, 1986). Merriam (2005) described transitions as “periods of change in our lives that seem to alternate with periods of stability” (p. 3). Similarly, Anderson, et al. (2001) maintained that transitions focus on “live events entailing change” (p. 29). Though transitions can be frightening (Anderson et al., 2001), transitions are natural and can create turning points in an individual’s life which can incite personal growth (Bridges, 1980). Aslanian and Brickell (1980) posited that transitions can serve as catalysts for adult learning and that much of learning in adulthood occurs in response to life changes.

**Types of Transitions**

Schlossberg (1991) presented a model of transition that posits three types of transitions: anticipated, unanticipated, or nonevent. *Anticipated* transitions are those that come expectedly or are scheduled, such as the birth of a first child, starting a job, or retirement. *Unanticipated* transitions, on the other hand, are unscheduled or unpredictable events that usually involve crisis (Pearlin, 1980). Events such as being fired, death of a loved one, or an unexpected pregnancy are examples of unanticipated transitions.
Nonevent transitions are those transitions which are expected but do not occur, for instance, a child who was never born or the promotion that never occurred.

Since international graduate students typically spend months applying to graduate school and plan to eventually move to the U.S., their transitions are anticipated. To better understand their transitions through this theoretical lens, several factors must be considered. First, the individual’s perspective of the transition is vital. Recognizing if the transition is viewed as positive, negative, or neither, or if they feel this transition will influence their future is important as it will determine “the impact of the transition, the perceived challenges and meaning this holds, and the specific needs for coping” (Anderson et al., 2011, p. 44). The second factor to consider is the context that influences the individual’s life, such as gender, ethnicity, and geographical location (Fouad & Bynner, 2008). Contextual factors related to the transition may influence the perceived choices of the individual (Anderson et al., 2011). Finally, the impact the transition has on the daily life of the individual must be considered. Transitions can impact “relationships, routines, assumptions, and roles” (Anderson et al., 2011, p. 47). Thus, determining which of the above, or similar elements of an individual’s life the transition impacts can be helpful in better understanding the transition and overcoming their challenges.

**Transition Phases**

The integrative model of the transition process outlines three phases: *moving in*, *moving through*, and *moving out* (figure 4). The first phase can be either *moving in* or *moving out*, but is typically viewed as *moving in*. Anderson, et al. (2011) explained that individuals move into a new situation (i.e. marriage, job, educational environment), they
must “become familiar with the rules, regulations, norms, and expectations of the new system” (p. 57). To assist the individual through the first phase, institutions must orient the individual in a way that provides support and guidance indicating what is expected of them in the new environment. Once an individual becomes familiar with his or her new situation, he or she will enter the moving through period. The moving through phase can be a long transition and may require assisting the individual with energy and commitment endurance. The moving out phase comes next and is often viewed as the ending of the transition phase. While here, individuals may wonder what steps are next and may grieve the end of the transition process.

**The 4 S System.** International graduate students face a period of anticipated or expected transition as they experience the moving in phase. The 4 S system of transition theory (Anderson et al., 2011) provides a way to assist individuals as they cope with transitions. Situation, self, support, and strategies make up the 4 S system (Anderson et al., 2011). Elements of the situation component include triggers, timing, control, role change, duration, previous experience with a similar transition, concurrent stress, and
assessment. International graduate students could be experiencing several of these at once but are conceivably experiencing role change and concurrent stress as the transition to full-time student and potential instructor along with the stress of moving, learning a new environment, and navigating foreign social norms. The self component includes personal characteristics such as gender, socioeconomic status, age, culture, or state of health, and psychological resources (ego development, spirituality, resiliency, commitment).

Anderson et al. noted that social support is often considered the key to handling stress. Individuals experiencing transition need acceptance, self-esteem boosting, personal connections, role models, guidance, comfort, and assistance through networks of friends, communities, and other relationships. The final S of the four S system is strategy. In the context of transitions, strategy refers to the coping approach for working through a transition. Anderson et al. asserted that there are three types of strategies for coping: modifying the situation (hope and optimism), controlling the meaning (reframing), and managing stress after transition (denial).

In this study, the elements of transition theory were used to examine the period of change and provide a social support system for international graduate students to cope with their transition. The mentors shared their perspectives of the context and impact of the transition creating a practice in which solutions to problems and stories overcoming obstacles were shared. Through this process, and in the peer mentoring circle, I sought to create a sense of belonging among the international graduate students.

**Sense of Belonging**

Maslow (1970) proposed a hierarchy of needs to explain human motivation, which is displayed in a triangle. At the bottom of the hierarchy are basic needs such as
hunger and thirst followed by safety needs. The third level is belonging and love, which comes before self-esteem and self-actualization. Maslow argued that the goal of learning is self-actualization and that educators should aim to assist their learners in achieving it (Maslow, 1970). The need to belong or fit in with a group is part of human desire (Yao, 2015). Though belonging and love are a part of this theory, the details of this component are not explored thoroughly (Anant, 1969). Anant (1966, 1967, 1969) is a major proponent of belonging and has suggested that there is a relationship between belonging and anxiety and theorized that belonging could be the missing link between understanding the relational aspect of mental health and illness.

Building on Anant’s research, Hagerty et al. (1992) proposed that belonging is a “unique, relational phenomenon” and define sense of belonging as “the experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment” (p. 173). Through an extensive concept analysis, they determined that sense of belonging has two defining attributes: “(1) the experience of being valued, needed, or important with respect to other people, groups, or environments, and (2) the experience of fitting in or being congruent with other people, groups, or environments through shared or complementary characteristics” (Hagerty et al., 1996, p. 236). Hagerty et al. further proposed a model of belonging that includes precursors and consequences to sense of belonging. The precursors are “energy for involvement, potential and desire for meaningful involvement, and potential for shared or complementary characteristics” (p. 236). Consequences of belonging include “psychological, social, spiritual, or physical involvement, attribution of meaningfulness to that involvement, and establishment or fortification of fundamental foundation for
emotional, cognitive, and behavioral responses” (p. 236). The model posits that sense of belonging includes cognitive and affective components as part of the psychological experience.

In terms of sense of belonging in higher education, researchers including Astin (1993) and Tinto (1993) argued that the more involved and socially connected students are in college, the more likely they are to be successful. Specifically, Tinto (1993) asserted that students must interact with individuals within the campus community to be better socially integrated, which would affect the student’s success and likelihood of persisting through graduation. Yao (2015) maintained that sense of belonging in a college setting includes the “students’ perceptions of institutional support and relationships with others, all of which combine to elicit feelings of connectedness and affiliation with the campus community” (p. 8). Due to the relational nature of sense of belonging, peers play a critical role in achieving belongingness (Yao, 2015). Feelings of belonging can positively impact a student’s academic achievement and persistence through a degree program (Hausmann et al., 2009). Furthermore, sense of belonging has been found especially impactful for students from underrepresented populations (e.g., Hausmann, et al. 2009; Strayhorn, 2012; Tovar & Simon, 2010).

Yao (2015) argued that institutions should assist international students in achieving a sense of belonging rather than attempting to integrate students to U.S. campuses as belonging is a more sustainable way to ease the transition. Thus, Yao emphasized that international students should feel like members of the community rather than be forced to integrate with the dominant culture. Sense of belonging, therefore, becomes a suitable theory for this study because of the focus on relationship development.
inherent in the PMC program. Additionally, sense of belonging allows me to identify the impact of the study on a student’s feeling part of the community.

**Method**

Using an instrumental case study approach, six current and eight new international graduate students were invited to participate in a five-week peer mentor circle program consisting of five group meetings. Data were collected through observations, interviews, focus groups, and voice memos.

**Instrumental Case Study**

Stake (1995) described a case study as an investigation and analysis of a single or collective case. An instrumental case study, on the other hand, focuses on one specific, bounded case rather than to understand a general problem through multiple cases (Creswell, 2013; Stake, 1995). Moreover, by focusing on a case that is instrumental in accomplishing something rather than understanding the case, the design is an instrumental case study (Stake, 1995). An instrumental case study focuses on a group of individuals rather than understanding a particular person.

In this research, the case under investigation is the PMC with an interest in learning about the experiences of new international students as they participated in the PMC. The use of this case was to understand how the PMC influenced transitions and sense of belonging among international graduate students. Instrumental case studies help to understand the how and why of a complex case (Yin, 2009), which made it an ideal design for this particular study since it aimed to determine how and why the PMC may have influenced transitions and sense of belonging among international graduate students.
Participants

I obtained participant recruitment lists through The Graduate College’s list of current graduate students and a list shared between International Student and Scholar Services and The Graduate College tracking admitted students and their visa status. Through participant observations, interviews, focus groups, voice memos, and collaboration with the mentors, I collected and analyzed data using qualitative coding methods. This section outlines the participant selection, participant profiles, data collection, and data analysis process.

For this study, I employed purposive, or intentional, sampling as well as a snowball sampling method. I chose participants “on purpose” because they meet a “defined criteria” (Terrell, 2016, p. 77). The criteria included nine new international students with no earned credit hours and six current international student mentors with at least 18 earned credit hours enrolled at the university where the study takes place.

Mentor Recruitment

International students currently enrolled at the university with a minimum of 18 graduate hours received an email (see Appendix C) from me in November 2019 inviting them to apply for the program. Initially, I planned to recruit four mentors but received 18 emails from interested students and many of those students were those I was familiar with and felt I could rely on for the study. I selected six current international students to serve as mentors for the program.

Selection of the mentors was more careful than the selection of the mentees as these participants took part in the study in a more collaborative manner; they contributed
to the study through co-design, co-facilitation, and co-decision making. To apply for the program, interested mentors were asked to write a short cover letter discussing:

- How long he/she has been enrolled in your graduate program at Texas State?
- Why he/she wishes to mentor new international graduate students?
- What he/she thinks they can offer new international graduate students?
- What on-campus organizations he/she currently participates in?
- What events/programs held by the university he/she has attended?
- What were the challenges he/she faced as a new international graduate student? How did he/she overcome these challenges?
- Since he/she has started graduate school, what has changed in his/her life in terms of responsibilities, relationships, routines, and knowledge about American culture and your own culture?

After I reviewed the responses, I selected students who I felt had a genuine interest in mentoring new international students, who have participated in on-campus events and programs, and who have clearly made a successful transition to academic and social life in the United States. Current students who agreed to participate signed a “contract of intent to participate” to ensure commitment throughout the entire program. Current international student participants received a $200 gift card to a local grocery store at the conclusion of the study. Table 1 outlines the demographic information about the mentors. I chose not to include “race/ethnicity” in this table because most participants indicated their country of birth as their race/ethnicity. The section following the table provides brief biographies of the participants from the researcher’s perspective. Many of the mentors were known to the researcher prior to the study.
Table 1: Mentors

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Program</th>
<th>Level</th>
<th>Country of Birth</th>
<th>Last country lived</th>
<th>Age</th>
<th>Gender</th>
<th>Marital Status</th>
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</tr>
<tr>
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<td>Engineering</td>
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<td>Bangladesh</td>
<td>27</td>
<td>Male</td>
<td>Single</td>
</tr>
<tr>
<td>Teji</td>
<td>Material Science, Engineering, and Commercialization</td>
<td>Doctoral</td>
<td>Nepal</td>
<td>Nepal</td>
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<td>Female</td>
<td>Single</td>
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<td>Bangladesh</td>
<td>Bangladesh</td>
<td>30</td>
<td>Female</td>
<td>Married</td>
</tr>
</tbody>
</table>

**Mentor Profiles**

Natalia was an English teacher in her home county and in the fourth year of an education doctoral program. Natalia worked on campus as a doctoral research assistant and lived in a town about 25 miles north of where the university is situated. Hailing from Uruguay, Natalia was in the U.S. without family and friends from home. She was the oldest member of the group and provided a very emotional and empathetic feeling to the group dynamic.

Bayo was from Nigeria but earned his master’s degree in the United States. He was involved in many organizations and committees on campus. He lived in the town where the university is located and worked on campus as a doctoral research assistant. Bayo received many scholarships and awards and took advantage of the resources on campus.

Tala was born in Iran but lived in Italy for several years before moving to the U.S. to pursue her masters and now doctoral degree. She lived with her husband who was also from Iran and pursuing a doctoral degree in Geography. Tala always sought ways to
assist fellow international students and was heavily involved in organizations and activities on campus.

Sur was an intelligent, soft-spoken man from Bangladesh. He was completing his master’s degree in engineering and worked on campus as a graduate assistant. I met Sur one year before the program began at a workshop where he gave a presentation about social norms and peer-to-peer interactions in the U.S. I knew right away he would be a great fit as a mentor in this study; I was thrilled when he applied.

Teji was a doctoral student from Nepal. She was a beam of light and made everyone in the room smile when she walked in. Teji helped to create the PMC program over a year ago when this study was just an idea. A constant supporter to me and her peers in the PMC, Teji always had advice for fellow students based on her years as a master’s and now doctoral student at the university.

Guneet arrived in the U.S. in 2018 with her two-year-old daughter in pursuit of her master’s degree in engineering. A year later her husband arrived from their home country of Bangladesh to pursue his master’s degree as well. At our last group meeting, Guneet announced that she had been accepted to a doctoral program at the university. She was a graduate assistant on campus and lived in the area. She was a strong woman who cares about her peers. She and Sur were very close friends.

**New International Student Recruitment**

All international graduate students who had been admitted and received paperwork regarding visa processing from ISSS as of December 29, 2020 received an email (see appendix C) from me providing information about the program and inviting them to participate. This initial email was sent to 116 students and I was able to secure
four participants right away. Instead of sending another mass email, I opted to attend the Immigration Check-ins hosted by ISSS, which is a required meeting for all new international students. Two more participants were recruited during these meetings.

After the immigration check-in meetings, I was still seeking three additional participants. I decided to be a bit more selective about the last few to ensure that a variety of backgrounds and programs were represented. Also, the decision about the last three students was based on potential connections between mentors and mentees based on discipline and country of origin. After reviewing the list of newly admitted international students, I emailed two students using the same recruitment email: one exercise science student from India and one geographic information science student from Russia. I chose the exercise science student because there were no other participants from the College of Education and one mentor from that college had been secured. I chose the student from Russia because no other participants hailed from that country and I secured one mentor from the GIS program. Both students agreed to participate. The final participant was a recommendation from one of the mentors; she referred a fellow Nepalese student to participate. I reached out to this student using the recruitment email and he agreed to participate.

All students who agreed to participate in the program were asked to sign a “contract of intent to participate,” (see appendix D). New student participants received a $50 gift card to a local grocery store and swag bag filled with promotional items from the university where the study took place.
Table 2 outlines the demographic information about the mentors. The section following the table provides brief biographies of the participants from the researcher’s perspective. None of the mentees were known to the researcher prior to the study.

Table 2: Mentees

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Program</th>
<th>Level</th>
<th>Country of Birth</th>
<th>Last country lived</th>
<th>Age</th>
<th>Gender</th>
<th>Marital Status</th>
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<td>Bangladesh</td>
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<td>India</td>
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<td>Iran</td>
<td>24</td>
<td>Male</td>
<td>Single</td>
</tr>
</tbody>
</table>

**Mentee Profiles**

Ilan arrived in the U.S. from Bangladesh with his wife and six-year-old son in pursuit of his doctoral degree. Formerly a manager of a large team at a prestigious company in Bangladesh and his wife a dentist, Ilan mentioned the struggle he and his family experienced as they adjusted to life in America. In particular, his son had a hard time integrating into American elementary school. Ilan worked as a doctoral assistant on campus.

Mila was a master’s student in the geography program from Russia. She left behind her fiancé in pursuit of her graduate degree. Working as an instructor, Mila taught several geography classes.

Oili waited over one year for her visa approval to come to the U.S. from Iran. During that time, she lost her assistantship and scholarships. She lived close to campus.
and worked as a student employee in the political science department. Her degree program is legal studies, which is quite a shift from her Literature masters that she received back home.

Bommi is among the youngest of the participants and came to the U.S. to earn her master’s in exercise science. She is a yoga teacher and followed her childhood friend, who was also pursuing an exercise science master’s degree, to this university. Although they were roommates, their relationship was far from supportive of one another.

Obi had sisters in the state upon whom she could rely. However, she struggled deeply with the weather and food changes from her home country, Nigeria. She came to the university to earn her master’s degree in geographic information science and worked as a graduate assistant in the International Studies office.

Upwan came to the U.S. to pursue his master’s in computer science following the footsteps of his friend who already lived here and was in the program. Though he did know someone here, he found he was lonely. Upwan was a young man who loved to travel and stay up late with his friends. He worked full time in a global bank in India before coming to the U.S. for graduate school.

Hareesh was a principal in his home country of Nepal where he left his wife and young daughter in pursuit of his master’s degree in physics. He was a quiet, yet expressive participant in the group. Hareesh planned to stay in the U.S. to pursue his doctoral degree.

Naveed was an outgoing man from Iran. He arrived in the U.S to pursue his master’s in engineering. He lived near campus with three domestic student roommates.
Naveed worked on campus as a graduate research assistant and planned to stay in the U.S. to earn his doctorate degree.

**Global Grad Group**

The PMC was marketed to mentors and mentees as a Global Grad Group wherein participants met weekly for five weeks to learn about resources on campus, acclimate to the culture of graduate school in the U.S., meet other international students and make friends, and assist with overcoming challenges they encounter. Meetings took place on the first five Fridays of the Spring 2020 semester (January 24, January 31, February 7, February 14, and February 21) from 5:30 p.m. to 7:30 p.m. I provided pizza at the first meeting and a home cooked meal at each subsequent meeting. After serving food, the meeting began with a check-in from each participant in which they shared their “high” or a positive event and “low” or not positive event, from the week. Then as a group, participants engaged in an activity. If time permitted, we would conclude the meeting with participants sharing something they were looking forward to during the coming week. Since this was a group mentoring experience, mentors were not partnered with mentees, rather multiple dyads and triads of mentorships developed naturally during check-ins as well as before and after the group meetings.

**Data Collection**

Data were collected in several ways (see figure 5). First, participants who opted into the program were asked to complete a demographic data form during the first meeting. Second, between weeks two and three, one-on-one interviews were conducted to collect data from the new student participants. Also, during week two and three, a 60-minute focus group with mentors was conducted. At the conclusion of the program, four
focus groups were held with each participant attending one focus group. Throughout the PMC meetings I conducted observations. Finally, I used voice memos to engage in self-reflexivity throughout the data collection process. Each of the data collection methods play a key role in understanding the impact of the program on the participants’ transition and sense of belonging.

![Figure 5. Data Collection Methods](image)

**Demographic Data Form**

To collect demographic data, I asked all participants complete the form (appendix E for demographic data form) requesting data about their age, sex, race and ethnicity, country of birth, and marital status. The demographic information provides insight to the cultures from which the participants hailed and allows me to further investigate the role of intersecting aspects of international student positionality, other participant identities, and my theories of transition and sense of belonging.
**Interviews**

One semi-structured, individual interview with the new student participants was conducted between meetings two and three on Monday, Tuesday, and Wednesday to accommodate the participants’ schedule. The goal of interview was to gain focused insight into individuals’ lived experiences; understand how participants make sense of and construct reality in relation to the phenomenon, events, engagement, or experience; and explore how individuals’ experiences and perspectives relate to other study participants and perhaps prior research on similar topics. (Ravitch & Carl, 2016, p. 146)

Semi-structured interviews followed a predetermined guide or protocol (see Appendix F for interview protocol) with interview questions but allow the researcher to probe by asking additional follow-up questions that are not listed on the protocol (Ravitch & Carl, 2016). The interviews ranged from 20 to 50 minutes and aimed to understand how the students were perceiving the program thus far, the challenges they were encountering in their academic and personal lives and how the program was assisting with the transition, and to learn about their sense of belonging. All interviews were audio-recorded, transcribed, and uploaded to NVivo for analysis.

**Focus Groups**

Two iterations of focus groups were conducted. The first was a 60-minute session with mentors between week two and three. The second iteration of focus groups presented four time slots for participants to choose from to participate in a focus group at the conclusion of the program. The four additional sessions ranged from 60-90 minutes. On the Wednesday between meetings two and three, mentors participated in a 60-minute
focus group to discuss their experiences in the program thus far and to make suggestions for changes to the last three meetings (see Appendix G for focus group protocol). This focus group was conducted over Zoom video conferencing software and was recorded and transcribed for analysis. After all meetings concluded, I assigned two mentors to three focus groups and asked the mentees to sign up for a 90-minute focus group that fit in their schedule. Two mentees were unable to attend the scheduled focus group, so a fourth, 60-minute focus group was created for the two of them to participate. The focus groups allowed for “collective narratives… that go beyond individual perspectives to generate a group perspective” about participants’ learning and development (Hennik, 2014, p. 3). Morgan (2010) cited that focus groups are useful for studies which seek to understand questions related to social interaction, which fits well with this study as it examines sense of belonging among the participants. Focus groups are also well suited to generate ideas, which were helpful in determining improvements and future directions of the program.

During the first hour of the focus group, all participants (mentees and mentors) were present. The last thirty minutes included only the mentors. The focus groups were audio recorded, transcribed, and uploaded to NVivo for analysis. Appendix H outlines the focus group protocol.

**Voice Memos**

After each meeting, I recorded voice memos to serve as my researcher’s journal. The purpose of the voice memos was to record actions taken and reflections throughout the research process. Content of memos included my observations and reflections about various aspects of the group meetings in the form of memos. Memo topics included
participant interactions, data collection instruments, and what I thought might be influencing the data (Ravitch & Carl, 2016). The memos served as “check ins” about myself and various aspects of the study as well as my reflection of my positionality (Ravitch & Carl, 2016). Per Ravitch and Carl’s (2016) suggestion, memos are a “regular and systematic aspect of the research process” (p. 117). Reflexivity questions outlined in Appendix I were used to guide the voice memos. Voice memos were reviewed and turned into notes for analysis.

**Observations**

Throughout the PMC meetings I observed the interactions and growth of the students in the group. Participant observation is a type of observation in which the researcher establishes “a presence or role in the setting” that is “negotiated and renegotiated ongoingly through gatekeepers as well as with other participants” (Ravitch & Carl, 2016, p. 164). Through constant interaction with the participants, I worked to build rapport and endeavored to act in such a way that made participants feel comfortable acting as they normally would, whether I were there or not, which is key to successful participant observation (Bernard & Ryan, 2010). Facilitating the mentor circles placed me in the program as a facilitator thus providing unique access into the development of the program but also as witness to the students’ experiences while participating in the program. I used an observation protocol to guide my observation notes (see Appendix J).

**Data Analysis**

The two underpinning theories, transitions (Schlossberg, 2001) and sense of belonging (Anant, 1969), framed my data analysis process. Before collecting and analyzing data, I created a table composed of literature from the theories to guide my
analysis (table listed in Appendix K). I began data analysis by transcribing all interview and focus group recordings. Then, all transcripts were imported to NVivo for multi-step coding analysis. Saldaña (2016) suggested various stages of coding including a first cycle, which is initial coding of the data, and second cycle coding, which involves deeper analysis of the data. I conducted a series of first cycle coding, then member checks and peer debriefs, and finally second cycle coding analysis (see figure 6 for data analysis process).

First Cycle Coding

According to Saldaña (2016), first cycle coding can be broken down into seven categories: grammatical, elemental, affective, literary and language methods, exploratory methods, procedural methods, and theming the data. Within each of these categories are several coding methods. For this study, two coding methods were used: holistic coding (exploratory method) and emotion coding (affective method).

The first cycle coding was heavily influenced by transition (Schlossberg, 2001) and sense of belonging (Anant, 1969) theories. For transition theory, I looked at instances where participants exhibited characteristics of the moving in or moving through phase of transition. The moving in phase is characterized by role changes, which tend to be more
holistic, and initial feelings of fear and anxiety, which are emotional. To identify instances in which participants exhibited the moving through phase of their transitions, I looked for personal growth, or participants describing development or change in oneself (holistic), and a shift in their viewpoint of the transition to be one of positivity and hope (emotion). Sense of belonging guided my first cycle analysis as well as I searched for instances where participants expressed feeling that they fit in or belonged within a group (emotion) and demonstrated interest in being involved on and off campus (holistic). In the following sections I describe more detail about each of the first cycle coding methods I used and how theory influenced my analysis.

**Holistic Coding.** I chose to engage in holistic coding during the first cycle analysis because it is an excellent coding method for exploring what themes may exist within these data. Holistic coding is sometimes referred to as “macro-level coding” since it aims to uncover themes or categories from the data as a whole (Saldaña, 2016). Furthermore, holistic coding is applicable when multiple sources of data are involved and “when the researcher has a general idea of what to investigate in the data” (Saldaña, 2016, p. 166). Dey (1993) suggested spending time reading through these data multiple times to become “thoroughly absorbed in the data early… as problems are less likely to arise later on from unexpected observations or sudden changes in track” (p. 110). Using this macro, or “big picture” approach for first cycle data analysis was helpful considering the large amount of data that were analyzed.

The process of holistic coding involved reading these data to get an idea of the bigger picture and then to assign a word or phrase to that chunk of data. This helped me to prepare for more detailed coding. Using the table composed of literature from
transition (Schlossberg, 2001) and sense of belonging (Anant, 1969) theories, I asked myself questions stemming from the literature to code these data. For example, one transition-related question that guided my analysis during this phase was “what learning has come from their transition or change?” This question pulls from Aslanian and Brickell (1980) noting that transitions can be a catalyst for learning in adulthood. Then, for sense of belonging, one guiding question came from Yao’s (2015) assertion that peers play a critical role in belonging. Thus, I asked myself “in what ways have other participants in the PMC influenced belonging” or in other words “do I see sense of belonging developing due to interaction with peers in the PMC?” These are two examples of several questions that were developed from the literature and that I asked myself as I engaged in holistic coding.

Using my guiding questions, I was looking for moments in which participants discussed feeling more supported, confident, at ease, and part of the campus community. Additionally, I noted parts of the transcripts where participants discussed mentorships, peer support and relationships, community involvement, and belonging broadly. Overall, during this part of the first-cycle coding, I was looking for areas where students discussed their experiences with transition by referencing challenges and changes they were experiencing, as well as sense of belonging or relationship development, including making friends and expressing that they felt they fit in.

**Emotion Coding.** Saldaña (2016) described emotion coding as labeling “emotions recalled and/or experienced by the participant or inferred by the researcher about the participant” (p. 125). While emotion coding is applicable to almost any qualitative study, it is ideal for studies that explore “interpersonal participant experiences
and actions, especially in matters of social relationships” (Saldaña, 2016, p. 125).

Emotion coding involves reading these data as a story and identifying the overall emotion from components of these data. In this study, in which I examined the sense of belonging as a result of the PMC's, I needed to examine the emotional aspect of the participants’ experiences. I read through all transcripts and coded for emotions then collapsed similar emotion codes into broader themes. Throughout all methods of coding, I asked myself the reflexive questions posed by Ravitch and Carl (2016) listed in the trustworthiness section.

Using NVivo, I created nodes (NVivo’s term for a collection of data codes) that represented the holistic codes and emotion codes that emerged. To better organize and categorize the nodes, I followed a table that I created which outlined literature related to transitions and sense of belonging. This table included questions I developed based on the literature. For example, Bridges (1980) noted that transitions are turning points in an individual’s life, which incite personal growth, and I created a question that asked, “how do the students feel they have changed or grown over the first five weeks” to guide my coding that related to transitions. Some questions were addressed during both aspects of coding, holistic and emotion, while other questions were only addressed during one aspect of coding. By using this table as a guide, I was able to hone in on specific aspects of transition such as the emotions participants felt (e.g. homesick, lonely, depressed) and to uncover aspects of the PMC that contributed to sense of belonging, such as sharing highs and lows.

The first cycle coding was guided by the two underpinning theories of transitions and sense of belonging. As I moved toward the second cycle coding, I shifted from a focus on holistic and emotional codes to patterns or themes that aligned with the theories
as well as the three research questions.

**Second Cycle Coding**

Saldaña (2016) explained that second cycle coding is a way of reorganizing data in a more advanced manner. “The primary goal during second cycle coding is to develop a sense of categorical, thematical, conceptual, and/or theoretical organization from your array of first cycle codes” (Saldaña, 2016, p. 234). There are six methods for second cycle coding. I used pattern coding for the second cycle coding method because it is ideal for summarizing categories from first cycle coding to identify emergent themes and explanations. The process of pattern coding involves a review of first cycle coding and assessing the codes’ commonalities. Then, the researcher assigns pattern codes based on the commonalities and develops “a statement that describes a major theme, a pattern of action, a network of interrelationships, or a theoretical construct from the data” (Saldaña, 2016, p. 238). Pattern coding was ideal for this study because it allowed me to identify themes in the data based on the research questions and study goals.

Using preliminary codes from the first cycle analysis, I identified patterns and collapsed the preliminary codes to develop themes. To do this I relied on the research questions to guide the patterns. Research question one and two focused on each of the two theories used for the study. The third research question revolved around the participants’ overall experience in the PMC, therefore, themes that did not specifically relate to the theories but to the experience were included in the third category.

**Member Checking and Debriefing**

Throughout the analysis process, I consulted with my debrief partner. We discussed my interpretations of the findings and the meeting also served as a reflection
opportunity for myself. I also met with some of the participants to ensure my interpretation of the codes based on their experiences are accurate.

**Debrief Partner.** The process of dialogic engagement occurs with a debrief partner who is a trusted and knowledgeable individual that a researcher uses as a sounding board (Lincoln & Guba, 1985). Lincoln and Guba (1985) noted that a debrief partner can be used to discuss ethical or political dilemmas, sharing ideas about the study, consulting on ways to proceed, and sharing evolving ideas about these data. Ravitch and Carl (2016) referred to this process as dialogic engagement, maintained that this process should be structured, and that researchers should seek out people who will challenge you in a variety of ways, including specifically challenging your assumptions, biases, preconceived notions, and how each and all of these shape the ways that you think about the data and the people in your study. (p. 231)

They continue on the topic of choosing a debrief partner by explaining that researchers may choose an individual who has experiences related to the research or simply because they are comfortable with this person challenging their assumptions and biases. Meetings with a debrief partner can consist of discussion, reviewing transcripts, looking at multiple data sources, considering how theory relates to these data. “The goal of dialogic engagement is to structure into your analytic processes a systematic engagement with alternative perspectives about your data and your analysis of those data early on and ongoingly” (Ravitch & Carl, 2016, p. 231). Engaging in such dialogue also helped to ensure my biases were checked and to remain reflexive throughout the analysis process.
I used two debrief partners. The first is a woman whom I have known for many years and have used as a sounding board for several other projects. She has provided very valuable insight and perspective for past projects. Although she is not in the realm of academia, her ability to read energy and her intuition (likely developed through her years as a massage therapist) have become invaluable to me. My second debrief partner is my dissertation advisor. The first debrief partner had access to transcripts that contained pseudonyms and no identifiable data.

I met with my first debrief partner three times to discuss my findings. We discussed what patterns I had noticed thus far and the impact the program seemed to have on the participants up to that point. The second debrief partner, my dissertation chair, was consulted after I finished both coding cycles.

**Data Management and Ethics**

All data were stored on a password protected computer. I discussed paraphrased quotes and observations from the group meetings with mentors and debrief partners; these individuals did not have direct access to any data with identifying information. Data analysis was also discussed with my chair. All those who participated in the study were clearly informed, both verbally and in the written consent, of who had access to these data and how these data would be used. The participants’ identities were de-identified in the written components of the study, including transcriptions and data analyses, through the use of pseudonyms.

**Trustworthiness**

Lincoln and Guba (1985) emphasized that a study’s trustworthiness involves researchers demonstrating that their interpretations of these data are credible or “ring
true” to those who provided these data. To do this, Guba (1981) argued that four characteristics should be addressed: credibility, transferability, dependability, and confirmability.

**Credibility.** Studies which are deemed credible refer to those where the researcher accounts for “the complexities that present themselves in a study and to deal with patterns that are not easily explained” (Mills, 2016, p. 154). Guba (1981) suggested several strategies to achieve credibility, including persistent observation, peer debriefing, triangulation, and member checks, all of which I utilized for this study. For *participant observation*, I observed participants consistently over a period of time to identify patterns in development. *Peer debriefing* involved the identification of a critical friend or colleague with whom I could test my insights and could rely on for reflection. My debriefing partner served in this role for this study.

*Triangulation* is a common technique used by qualitative researchers to enhance the validity of a study (Ravitch & Carl, 2016). Essentially, triangulation involves “taking different perspectives” (Flick, 2007, p. 41) to seek “convergence among multiple and different sources of information to form themes or categories in a study” (Creswell & Miller, 2000, p. 126). Triangulation can be presented in many forms, including methodological, investigator, or theoretical. However, for this study, I used data triangulation by including different sources of data (i.e. data from the participant’s perspective, from their peers’ perspective, from my perspective) and then triangulating these sources according to time, space, and person (Denzin, 2009). Ravitch and Carl (2016) emphasized that this type of triangulation enables the researcher “to collect data using different sampling strategies and examine data at varying times and places as well
as with different individuals” (p. 195). Through interviews with participants, my own observations, and discussing data with contributors and debrief partners, I was able to gain perspectives beyond my own to better interpret these data from different perspectives.

After developing preliminary findings and before the final interview, I followed up with participants to ensure their experiences were reflected accurately in the study. This is known as a member check. Ravitch and Carl (2016) explained that member checks allow researchers to “explore and ascertain if [they] are or are not understanding participants’ responses, how [they] are understanding them, and to be challenged on [their] data collection processes and [their] interpretations of the data” (p. 197). I summarized key analysis points from each individual’s interviews and my own observations and solicit additional thoughts from each participant.

**Transferability.** The second criteria proposed by Guba (1981), transferability, refers to the idea that the study is context bound, and the researcher must not aim to develop truth statements to be generalized to larger groups. Strategies for transferability include collecting detailed data and developing detailed descriptions of the context (Mills, 2016). To ensure that transferability of this study to others is plausible, I collected detailed descriptions of the context, including, but not limited to, institution data, program development and implementation data, stakeholder involvement, program environment, and budget information.

**Dependability.** Guba (1981) described dependability as these data’s stability. Overlapping methods is one way to ensure dependability. Similar to triangulation, *overlapping methods* involves using two or more methods to ensure that the strength of
one method compensates for the possible weakness of the other method. An example in this study were the interviews which contributed to my understanding of the observations during mentor circle meetings.

**Confirmability.** The confirmability of these data is viewed as the neutrality or objectivity of data collected. Guba (1981) suggested practicing triangulation and reflexivity to address confirmability. I employed *triangulation* for credibility, as described above, and practiced *reflexivity*, which is the systematic review of my identity, positionality, and subjectivities (Ravitch & Carl, 2016, p. 15). To ensure proper reflexivity throughout the study, I referred to a series of questions posed by Ravitch and Carl (2016) designed to generate reflexive data (see Appendix I). Reflexivity must and will occur at several stages of this study and will be more robust than self-reflection. Reflexivity was documented in my researcher journal in the form of voice memos.

**Conclusion**

In this chapter I discussed the research methodology. Included were the epistemological and theoretical perspectives as well as the participant recruitment strategy, participant biographies and information, and data collection and analysis method. Details related to researcher biases, trustworthiness, and confidentiality were also discussed in this chapter.
IV. FINDINGS

The purpose of the study was to examine the experiences of international graduate students as they participated in a PMC program and to determine how, if at all, the PMC program contributed to the participants’ transition and sense of belonging within the campus community. This chapter presents the findings related to both new and continuing international student participants’ experiences in the PMC program. The findings are organized by the process and progress of the participants’ experiences. The first section of this chapter describes the *moving in* phase of the new international students’ or mentees’ transition (Anderson, et al., 2011). Section two outlines all participants’ experiences in the PMC. These include the bonding with and learning from one another through sharing feelings and problems. The third section addresses growth among the new international students as they experienced the beginning of the *moving through* phase of their transitions as well as among the mentors’ personal growth from engaging in the PMC. The final section discusses the participants’ perspectives on the most meaningful aspects of the PMC as well as their reflections on areas for improvement.

**New International Students Experiences of the Moving In Phase**

Arriving in the U.S. brings about an array of emotions and challenges among new international graduate students as they encounter the start of their transitions, or *moving in* phase (Schlossberg, 1991). The PMC was designed to mitigate stress and address challenges, while also building community and sense of belonging. To understand how the PMC influenced their transitions and sense of belonging, it is first important to understand their mindsets, feelings, and mental spaces during the start of the transition.
process. This section sets the tone and context of the participants’ feelings, thoughts, and experiences during the moving in phase at which point they were experiencing new roles and relationships, and becoming familiar with norms and expectations of a new system (Anderson, et al., 2011).

**New Roles and Social Adjustments**

Many participants experienced role changes as they adjusted to their new daily routine as graduate students in the United States. Participants left behind family, friends, and, for many, full-time jobs to pursue their graduate degrees in America where they knew few to no people, and for many, had no employment arranged. This was quite an adjustment. Reflecting on this change, Oili shared,

> I was a girl who had a lot of friends, and every weekend or other weekend I met friends and would come home and have coffee with them. So, I used to be very busy the whole day. But here it is like I have to be home with my laptop to study.

Mila too struggled with the social role changes as she discussed missing her family and friends and being around people she knew. Her sentiments describe the lonely feeling many participants shared during group meetings and interviews,

> sometimes I feel lonely because I grew up in an environment where there were a lot of friends around me all the time, even during my job. The biggest change is that which is connected with my [fiancé] because now he's in Russia and he misses me very much, and he calls me a lot, and we have a big difference in time. We have only two times a day to call each other and the second period of time is when I am in class.
Another example of role adjustment is from Naveed who lived with his family before moving here. At home, his mother would take care of many household duties leaving him ample time to focus on academics. During the first two weeks, he became increasingly concerned with time management and course expectations. He shared his adjustment,

you know back at home I was just like a nerd, waking up at five am studying and then going to sleep because I didn't really care about anything. But here I have to cook, I have to wash clothes, I have to do a lot of things.

A few participants (Hareesh, Upwan, and Ilan) left full-time jobs where they held leadership roles to pursue their graduate degrees. Shifting from a full-time job to a full-time student is quite an adjustment, but worth the degree in the long run. Upwan discussed this shift,

the adjustment from the office back to school is the one thing I will say is challenging, because that's a different life, and this is totally different. I used to have money, I could get everything, anything I wanted, and every weekend I used to roam around and go by bike to the office and on the weekends I'd take my car go long drives in India. So, I'm leaving that and I'm coming here. It was fair enough at that company, but my ambition is to pursue a masters.

Upwan’s sentiments provided a glimpse into the professional sacrifices many international student participants made as they pursue their graduate studies and the adjustment required to student life when they arrived here. Hareesh left his wife and daughter back in Nepal to pursue his degree, and Mila left a fiancé back home. Obi and Bommi, two of the youngest participants, left close family and friends behind. Arriving
here alone triggered feelings of loneliness and homesickness among the participants as they experienced culture shock and adjusted to American social norms.

**Culture Shock**

For these participants, culture shock referred to changes in food, transportation, academic expectations and processes, language, academic challenges, and feelings of inadequacy. Although many participants had traveled and experienced other cultures before, the prospect of living full-time in a new culture for two or more years forced them to adjust to American culture and social nuances differently. Upwan, for example, described his many travels in Europe and Asia, and how adjusting here is different for him,

I had culture shock especially. I mean the new places, I'm used to it, I used to travel a lot every year. I used to go to places; I have been to Europe, I have been to Singapore, I've been to so many countries before. I mean actual culture did not affect me. But the thing is, this is like long-term for me. Two complete years I will be staying away from home. This is the first time I will be staying away from home to be honest.

The culture shock was mentioned by several participants and was experienced differently by many of them. For instance, Bommi and Obi struggled with navigating the grocery store to meet their dietary needs; they both struggled with food. Obi was overwhelmed with the large grocery store and the many options available. Almost anything she ate for the first three weeks made her sick. Bommi’s culture adopts a strict vegan diet including no potatoes or garlic. She too found it difficult to find food at restaurants and the grocery store. Mila also mentioned her struggles with food and transportation. She shared, “it was
very difficult for me to understand where to go and what to eat. Also, I used to cook for a week, [but here] I did not have an oven and plates... I didn't know what to do.” Not only did she not have a driver’s license or car to buy groceries, but she also did not know where to buy food, and once she finally did make it to the grocery store, thanks to a mentor, she was overwhelmed with options. Upwan and Ilan, however, enjoyed the new food and orienting themselves to American cuisine.

Transportation was also a key adjustment. In the countries from which most participants hailed (Nepal, India, Russia, Nigeria), public transportation is abundant, but here in the United States, especially in the small town where these students lived, it was almost nonexistent. Obi shared her initial surprise related to transportation when she arrived here,

the first thing that shocked me when I got here, was the fact that there wasn't real public transportation. Everybody has to have a car, and I was like ‘I don't understand, how don't you have other means of transportation?’ So, me as a foreign student the last thing on my mind is getting a car.

The need for a driver’s license and the car was paramount for Ilan who came here with his wife and son. His son was having a hard time adjusting to kindergarten in the U.S. which was vastly different than his schooling experiences back in Bangladesh, so he did not like taking the bus. Without a driver’s license or adequate transportation, taking his son to school was a challenge. “I am still waiting for my driver’s license. I have the car, but I cannot drive so I pay like 10 dollars every day, for my kid. There are school buses, but he doesn't like getting on the school bus.” Upwan and Hareesh also experienced transportation issues but shared that they relied on friends or roommates to give them a
ride, or they used the local bicycle rentals that were available around campus and in the
community.

Unlike other participants, Naveed did not mention food or transportation as a
cultural adjustment. Instead, he struggled with getting to know his American roommates.
He shared,

there is a problem I guess for international students getting along with Americans.
I mean, getting to know new people. People want to have their own space. They
don't really get to know people over one week or two weeks.

Being from Iran, Naveed seemed self-conscious about how his roommates and other
Americans perceived him. He occasionally made comments about people learning where
he is from and labeling him as “a terrorist” or “trouble.” Oili was also from Iran but did
not share the same experience. In fact, she often refuted Naveed during group meetings
when he would make such comments. Oili felt that Americans were very nice,
welcoming, and helpful. She shared an interaction at the bank that was positive as the
teller assisted her with a wire transfer from her home country.

**Academic Shock**

In addition to culture shock, all participants discussed struggles with the
American classroom and social nuances related to the new educational environment.
Primarily, they were concerned with the expectations. Obi described feeling unprepared
for her graduate program,

when I was at the University of Nigeria, we never did stuff like case studies or
peer reviews. We had zero exposure to software. So I'm coming here, and my first
week I'm hearing you need a business plan, you need to write a proposal, you
need a peer-review, you need to do a case study, and it was a lot for me. It's still a lot for me, but I mean I don't have a choice.

Bommi shared similar sentiments describing her struggles with reading the research articles. She shared that “methods of study” were the biggest challenge so far. “Like the way we have studied is absolutely different from the way things are taught here. Here everything is based on research and articles, and I have never ever read a single research or article.” Another participant shared that they started feeling they lacked certain knowledge they should have attained during their undergraduate studies. “The teachers or the lecturers, since it's a masters' program, expect that you have knowledge of a lot of stuff even though you might not have it.” Understanding academic processes in the United States proved a struggle for many participants since the methods of instruction were different in their home country. Communication barriers perhaps contributed to the struggle understanding academic processes and expectations.

One of the biggest challenges in the classroom was the communication barrier. Although participants passed the required English language exam to be accepted to their graduate program, they often felt self-conscious about their English and struggled with slang and other aspects of the language that are not taught in formal English classes. Mila shared her struggles trying to communicate in class and to teach students in English, “I started feeling confused because I had to speak really good in English.” Participants described feeling unsure about their English, and even intimidated by other international students who they felt spoke better English than they did. Feeling unsure about English coupled with culture shock and feelings of inadequacy related to academics led to
negative and disconcerting feelings among the participants, including loneliness and homesickness.

**Negative Feelings: Loneliness and Homesickness**

Such feelings of being lonely and homesick were extremely common and openly shared among the participants. In the first few group sessions, homesickness was often discussed. “Sometimes I feel lonely,” “I was lonely before coming to these meetings,” and “adjusting to being alone, to living alone or sometimes [feeling] emotionally unstable” are examples of the initial lonely feelings shared by participants. Bommi shared her struggle on the flight here, “I cried too on the flight. I was missing home. In fact, after coming here I cried a lot. I had the culture shocks very often, very often” and once here, she continued feeling homesick, “I miss home a lot more than I expected. I miss food and I miss my people, my friends.” Upwan also felt homesick and noticed his weight dropped from 74.5 kgs (164 pounds) when he left home to 70.4 kgs (155 pounds) after being in the U.S. for four days. Hareesh mentioned being lonely for the first few weeks he was here as did Naveed. He shared

> when you come to this new place, some of us do not have anybody here, for instance like me. I don't have any of my family members here. My sister and brother are in Europe, so I try to get to know as many people as possible but it's going to be tough the first few weeks.

Only Ilan seemed unshaken by the homesickness and loneliness. This is likely because he brought his wife and son with him to the United States. Ilan was more focused on adjustments for his family including enrolling his son in school, getting social security
paperwork sorted out, and finding a vocational program for his wife who was a dentist in their home country.

Although the participants acknowledged that they knew their feelings of loneliness and homesickness would be naturally relieved after a few weeks, a couple of participants mentioned thoughts of quitting their program and going back home, and others described the mental toll their feelings had on their adjustment. One participant shared that there are “mental, mental problems with it, connected with it.” Bommi was the most open about her feelings of depression and desire to leave sharing, “I could not survive; I literally didn’t want to stay here. I made up my mind that I wanted to go back. I felt very depressed to be very honest.” Upwan had similar feelings when he first arrived, sharing “I didn't want to come out of my room.” These feelings persisted for both Bommi and Upwan even though they were roommates with friends from their home country. Not all participants referenced mental wellbeing issues related to their homesickness and loneliness, but those that did became more open about their feelings over our five weeks together.

New international student participants experienced role changes, culture shock, academic adjustments, and feelings of loneliness during their first few weeks in the U.S. Most arrived just one or two weeks before our first group meeting. The goal of the PMC program was to identify these experiences and address them through a group mentoring process. The participants’ experiences in the PMC provided insight into how their initial feelings were addressed in this unique program.
Participants’ Experiences in the PMC

The PMC program was designed to support the transition process among new international graduate students. As such, this section describes the participants’ learning and development experiences in the PMC, which indicated contribution toward progressing through their adult development transitions and sense of belonging by offering a friendly and safe atmosphere where participants could share their feelings and experiences. The PMC also incited learning and personal growth, while addressing mental wellness. The word cloud displayed in figure 7 is composed of the terms participants shared when asked to describe their experiences in the PMC in only three words. Family, fun, and emotion-laden were the most common perspectives.

The Friendly Atmosphere Created Space for Participants to Share Feelings and Experiences

Key to the influence on the sense of belonging and transitions among the new international graduate students was the friendly atmosphere that allowed participants to feel comfortable enough to share their feelings and experiences. Creating this atmosphere required thoughtful planning from myself, as well as participation and engagement from the mentors. The ability to share feelings and experiences offered participants the opportunity to bond and build a support system.
A Feeling of Home

“A second home” and “friendly atmosphere” were the most common phrases used to describe the PMC environment. Ilan shared that the PMC felt like a “semi-home, before going home it's another home.” Bommi echoed Ilan’s sentiments sharing that she “felt home.” She continued, “home, a family is what the program is. A family away from family. That kind of thing.” The friendly atmosphere was achieved in part by the physical space where the meetings were held, as well as through the interactions of the researcher and mentors.

When choosing a location, I was mindful to select a space on campus that was central to most participants’ colleges and frequently visited buildings. The first PMC meeting was held in the engineering building, but the room was sterile with white walls and tile floors and was not set up in a way where participants could sit in a circle and see one another. Thus, for the second and subsequent meetings, we moved to another building where the tables were set up in a circle and there was a view of the city. Several students commented that the room change made a difference because they were able to see one another and felt more “homey” in the new space.

Aside from the location, I aimed to create a comfortable environment during each meeting, starting by providing nameplates for each participant and asking about their dietary restrictions. Mentor Natalia chose music to play as participants arrived at each meeting, served their food, and chatted with one another before the meetings began. Providing food was also key to creating a friendly atmosphere. Bommi described her pleasant surprise when she arrived at the first meeting: “it’s important the way there were pizzas and so many foods, I was like are you sure this is for us? This is for us?”
Many participants described my demeanor, as the host, as making them feel welcome. Bommi described her impression of me during the first meeting: “her energy was high and her way of treating, her way of approaching people, asking about dietary conditions, and I never thought that people would ask me about my food here. It was helpful; it was amazing.” Naveed said that if someone else were assigned to coordinate the program, “the quality would go down.” He continued, “it’s because you were very much motivated to do this, and this was something new and important to you.” Ilan explained that I had been “more helpful than any resource.”

Mentors also contributed to an open, friendly atmosphere. Between meetings two and three, I met with the mentors and they provided suggestions about food options and activities for subsequent meetings. Their suggestions were integral to the continued success of the program. Furthermore, their commitment and active participation were also important to the PMC. Participants felt a strong peer support system within the PMC. New international students felt they could rely on their peer mentors for support and guidance. Bommi mentioned how Teji and Natalia made her feel welcome right away. Obi said that all the mentors were “so nice” and “ready to help.” Oili shared, everyone has been very helpful and sharing their opinions, ideas. There are a lot of things that we don’t know about the campus, the website, the city, living in the US -- a lot of regulations. So, it’s good that we can ask each other. Ilan found the PMC to be a place where “you are allowed to cry or if you feel like crying, cry it out; there is no shame.” Bommi shared that she felt comfortable coming to the meeting and sharing her issues then ask for a solution because “everyone sitting there is able to help.” She also shared that she felt motivated by her peers, “I was fine and you
know special thanks to her (Teji). Anything I faced... she motivated me. Basically, there were a lot of people in the group who made me feel motivated.” From the mentor perspective, Tala thought the PMC provided support by way of hope and confidence.

This group actually has become a hope I guess, you know for them. Hope group or just they become more confident because they know “okay I'm actually allowed to have these lows because I heard from other people this is very normal. It's not only me and I have a place to go and ask them.” So, I think all of it is a support, very strong support which kind of helps their confidence.

Observations and interviews indicated the various ways in which mentors provided support. Tala gave Mila a ride home after the first meeting, then took Obi, Oili, and Mila to the grocery store after the second meeting. Teji stayed late after the meetings to chat with the mentees and help them with the challenges they were experiencing. Guneet provided an important supporting role to Ilan since they both were here with spouses and children and thus encountered different challenges and needs compared to other participants (such as enrolling children in school). Bayo listened to Obi’s struggles being the only Black person in her class and complaints about finding Nigerian food and the weather. Natalia supported each student in emotional ways that no other mentor could; she listened to each participant’s check-in and responded with empathetic advice. These gestures showed the mentees how dedicated the mentors were to helping them and contributed to the overall support system that was beginning to develop.

“They’ve Already Had Experiences Living in Our Bodies”

Participants valued sharing their feelings and experiences at group meetings and felt that the PMC was the one place where they could be “open and honest” (Bommi).
After formal introductions, participants became more comfortable with the group as they noticed the diverse cultural backgrounds of the members. Participants quickly realized they were not the only new international student from their country, and others in the group were experiencing similar feelings as they shared updates from their first week in classes. Once participants shared their feelings and experiences, they quickly realized that others in the room could relate to them, which provided space to feel more comfortable sharing and bonds to form.

Bommi said that the PMC was a place where she could “share things openly, things which you cannot share with the person from the same culture, even if it is the roommate from a young age, it’s a place where you can open up.” Oili shared similar sentiments,

I like the part where we share our thoughts and feelings. That was really helpful because once we shared that, someone else probably had a suggestion or an idea how we can improve our experiences. So, I think those pieces of advice were really helpful for us.

Likewise, Ilan enjoyed sharing thoughts and updates from his life with the group. Mentor Natalia said, “I think they felt it was a very safe space for them to speak, and nobody was going to laugh at them.” Because all of the participants were international, they immediately found a common ground to build their friendships. Oili felt that the PMC made “international students feel welcome” and “created the space for them to not be afraid of talking.” Teji described the power of sharing feelings,

I like sharing out with other people because sometimes even in our personal life if you keep it to yourself it hurts you more, so you just throw out. Like Obi had been
struggling with the weather so she just showed that there, and it help her to relax later.

Another mentor described the atmosphere similarly, “it’s a safe space for everyone to talk and ask their questions, talk about their feelings. So, I think that was the most important aspect of this because that's the key.” As new students in a foreign country, there are not many opportunities to discuss feelings outside of a formal setting. The relaxed environment provided by the PMC set the tone for participants to discharge stressful experiences and recharge mentally in a setting surrounded by other students who could relate and provide empathy and advice. Opening up without the fear of judgement consequently led to the awareness of common struggles several of the students were experiencing. The ability to share feelings provided an opportunity to unload mental and emotional stress experienced by the participants in a setting where others could relate and provide empathy and advice.

Shared experiences contributed to the comfortable, open atmosphere, and developed bonds between members of the PMC. Participants bonded over unique, mutual experiences related to pursuing graduate school in a foreign country. Bommi reflected “I felt that there is somebody like me. I felt that, yes, there are people who feel that same as which I feel. It was pretty comfortable you know to get out of [my] comfort zone in here.” Mila too found the mentors to be helpful and appreciated their recommendations. She shared, “I like that they make recommendations to us because they've already had an experience living in our bodies. They're very friendly, and they are ready to help.” Mila enjoyed the “psychological interactive conversation” with the group and said that it
“helped [her] a lot with mental problems.” Guneet said that the participants “gained mental support” for the graduate school journey by listening to each other’s stories.

The mentors felt that it was important to create a space where the mentees could share their feelings openly and honestly because this is not easy to do with their family members back home, and the PMC provided that space. Guneet explained, “they just talk to their relatives or family, and they don't want to disclose how much they are struggling. They want to seem like ‘okay I'm good. You don't worry about it.’” The PMC served as an outlet to share feelings, relax, and relieve mental stress. Calling home and communicating with loved ones was another outlet, but participants did not want to burden their loved ones with their negative feelings, thus, they used the PMC as an opportunity to share their feelings, experiences, fears, confusions, and possible solutions from members of the PMC who had similar experiences.

Participants preferred sharing thoughts with peers who were experiencing similar feelings rather than sharing with family back home or counselors at the University Counseling Center, who were unable to relate well to their experiences. For example, Bommi was open about her mental health and depression struggles when she arrived in the United States. She shared,

I decided. I called my mom and told her I’m going to come back, I’m not going to stay here. It helped me open up, that’s the best thing about this program. I would not be able to share things with other people or didn’t have a place to share, I would have gone back. I would have dropped my classes, literally I would have done that. I am surviving because of this program.
Though Bommi did eventually use the university counseling center services, she felt that participating in the PMC was more impactful because it helped her “in a different way.” She said that counselors cannot understand her struggles and that she is “looked at as a patient and not as a person.” The PMC provided her with people who had been through the same problems and could advise her accordingly. In a sense, it was as if the mentees felt like the mentors already knew them because they had already experienced this transition. Thus, sharing common feelings led to participants identifying shared problems and experiences. Naveed said, “coming together and knowing that there are other people who also might suffer the same problems, may have the same issues, is something really important for a person who just comes to a new space.” Sharing feelings, problems, and experiences with one another resulted in positive mental wellbeing. In terms of the impact on mentees, Guneet noted that the PMC seemed to relieve the mental stress after each week filled with a lot of different adjusting, study, culture. So it brings some positive energy to you. It prepares you for the next week, and you are like ‘okay I can do that week.’

Tala also found the PMC to be positively impactful to the mentee’s mental health, particularly because of the stigma against mental health in most foreign countries and among genders. She said,

for international students’ mental health in a lot of countries, even in the U.S. mental health I think is a pretty recent thing. In a lot of countries, especially for example the gender, you know they [connect it to gender]. Men shouldn't talk about their problems or men should act like they can do everything. Or even women, you are so strong you should be able to solve your problems. Asking
questions sometimes is not a very good thing because you are showing your weakness sometimes. So, I think just creating the space and talking is not a very common thing here. I think that's really important.

Other participants in Tala’s focus group agreed with her points related to gendered emotions and stigmas against discussing mental health in their respective cultures. Though mental health is still stigmatized in the United States, participants noted that the stigma is much stronger in their home countries especially with men. Throughout their experience in the PMC, however, male and female participants felt comfortable sharing feelings and emotions including sadness, depression, and fear without stigma or judgement. Though one mentor and one mentee mentioned utilizing the counseling center, many mentors emphasized the importance seeking professional help when these feelings were shared. The need and ability to share strong feelings with the group was likely because they knew others in the group could relate to them since they had the similar stress and problems as one another. Additionally, participants felt comfortable sharing because they knew that other participants would have suggestions to mitigate or address their feelings. The PMC was characterized by participants as a judgement-free, supportive space where members could share deep thoughts and feelings they appeared not to be sharing in other settings. Most notably, participants felt comfortable communicating their feelings and thoughts in English, even if they did not feel comfortable communicating in English in other settings. Their experiences in the PMC provide insight into the ways participants understood and appreciated the importance of safety and support within the PMC meetings.
The group bonded over their shared experiences and began to rely on each other to address their issues. Mostly, the new international graduate students relied on the experiences of the mentors, but there was no hierarchy with problem-solving. Participants described it as a “collective fight toward problems” and the PMC as a “place where you bring all these struggling people together, and everybody knows we are going through the same stress.” Hareesh shared, “[the group members] … most of them have the same problem as me, I noticed they also have a difficulty while thinking in English, while speaking in English.” New international student participants appreciated the advice given by the mentors. Ilan remarked that he “didn’t have to ask for help” he just told his story and peers would share advice and offer help. Another participant echoed this notion discussing how useful it was to get to know other international students and to “share information with each other. Because some of the problems that I might have, they might have had it as well.”

After five weeks of meetings together, the mentors appreciated the comradery and support as much as the mentees. They found the PMC to be therapeutic, relaxing, and a means to bond over shared experiences. Teji said “it felt like a therapy session for me too” and described it as a “support group” and said that after the conclusion of the formal meetings, “there’s no mentees and no mentors. After this it’s just friends being in a group so we can celebrate together; we can do things together; we can ask each other questions.” Sur expressed his fondness of sharing his feelings during the meetings. The belief that the PMC felt like a support group among the participants was a common discussion thread throughout the interviews and focus groups. The peer support provided
by the PMC created a sense of belonging and enabled the participants to be themselves, fit in, and feel valued and needed.

**Feelings of Belonging**

The ability to be oneself, fit in, and feel valued and needed contributes to a feeling of belonging (Hagerty, et al. 1992). Mentees described these feelings as they participated in the PMC and the sense of belonging developed through the support they felt from their peers.

“I can share my true experience and the true picture of my real life.” Ilan’s quote provides a powerful glimpse into a participant expressing how the PMC provided space to be himself. He also shared that he felt participants in the group could introduce themselves and share things in a “more natural way” and there was no “need to pretend.” Outside of the PMC meetings, Ilan was focused on school and caring for his wife and young son who moved here with him. The PMC created a space where he could relax and be himself. He said, “with this program, I lived my life for the two hours… there is always something you need to learn to fit in, but, these two hours I am on my own but with friends.” Bommi echoed his thoughts stating that in the group, there is “no judgment.”

Likewise, Obi felt she could be herself in the PMC. In fact, she said the PMC was the first group where she “felt at ease” and “didn’t have to put up this wall that says ‘I’m strong’ or ‘I can do this by myself,’ I could just be myself.” Obi mentioned on several occasions that she felt she had to maintain a façade that everything was okay so that her family would not worry about her. The tough exterior she maintained outside the group
disappeared during our group meetings as she was able to share her true feelings. Other participants, like Mila, Bommi, and Upwan asserted that they felt the same.

During the last meeting, Bommi wore her traditional Indian dress from her culture. Mentor Sur pointed out how this action was an indicator of “how much she loved the program” and how comfortable she was being herself with the group. He described his memory,

I know she felt really at home when she came in wearing her traditional dress. That’s how much she loved these things, she wanted to show more of her culture and because it’s really intimidating especially as a guy to wear something traditional here and go out because we have different dress where I come from, I do not usually dress up that way unless it’s for an occasion. But for her to dress up in her cultural dress it is really bold and I’d say she felt like it so that’s the reason – nobody forced her to do that she did it on her own.

The sense of belonging participants felt within the PMC permeated into other aspects, such as fitting in on campus and in class. When participants were asked if they felt like they fit in with their peers and on-campus and were making friends, most said yes. Only a few were hesitant, mostly because of the way they determine and define “friendship.” For example, Mila said that she had not made friends, but instead had made “colleagues,” and Ilan said that you “can’t instantly ask someone to be your friend,” but with time he is confident friendships will develop.

Oili felt strongly that she was fitting in with the campus community. She shared, “Yeah, I feel that I'm fitting in, yeah on campus. I don't feel like I'm not living here, or I haven't been here. I feel like it's my university, my school, my campus. Yeah, I feel that.”
She continued her thoughts sharing that the meetings made her “feel like [she’s] part of this big group. Part of this school.” Similarly, Hareesh and Upwan discussed the friends they made through their classes over the first few weeks of the semester. The ability to be themselves created space for participants to find places where they fit in beyond the PMC. As Ilan said, “there is always a space that fits you.” Thisproved true as participants began finding their place within the community, places where they felt valued and needed.

Being part of the PMC program invoked feelings of value among the participants. The bonds and friendships they built created a space for deep care for one another. If one student was running late or not present during a meeting, participants would ask me where they were. For instance, Guneet recalled, “when I came back from San Diego, on the third meeting Oili said ‘hey where are you? ‘We missed you’ or ‘I missed you, or we missed you.’ That really melted my heart.”

When asked if participants planned to keep in touch with one another after the formal group meetings ended, they all answered “yes.” Oili remarked, “I like that we are doing this in a group. Being in a group, makes you feel that you have attachments, or you are important.” During the final focus group, Ilan and Bommi discussed how being in the PMC taught them about their value. Ilan said, “you have your own value, your own value that is worth showing, really” and Bommi added, “everything is good in its own way, which was something I learned here. Everything is good in its own way.” They described feeling comfortable in the group and contributing to it because they knew what they shared was valuable to the group. Participants defined belonging in many ways including finding spaces in which they felt needed and valued and allowed them to share their true
selves including their feelings and experiences. Moreover, belonging was characterized as ownership of a space in which they felt agency and control, and could interact with other individuals in that space naturally. Belonging meant being themselves, allowing for experiences of vulnerability without fear or being judged.

**Learning within the PMC**

In the final focus groups, participants were asked to share two things they learned from their experiences in the PMC. Across all responses, the themes that arose were resources and academic development, communication, and cultural awareness. These themes reflect those which arose in the moving in phase of their transitions, providing evidence that participants were learning how to progress into the early phase of their transitions.

**Resources**

Though new international students attend an immigration check-in process where they learn about policy and resources available to them, mentees expressed feeling overwhelmed with information. Participants shared how much they learned in the PMC about “the school and the campus” and “how to use many different things in the university and outside the city.” Bommi mentioned that she learned about the university counseling center through the PMC, and Naveed shared his excitement about learning that there was an immigration attorney available to him free of charge. During the meetings, participants exchanged advice and information related to the campus bus system, dining halls, library services, and career services. Oili and Ilan mentioned their appreciation for the various contests and events held by the Graduate College as they felt it kept them motivated. During each meeting, the topic of obtaining a social security card
and driver’s license was mentioned, and participants exchanged updates and
recommendations to speed up the process. Through conversation and sharing updates
during the group check-ins, participants learned about and took advantage of various
resources, services, and initiatives that they were not aware of before the meeting.

One of the most important resources shared was scholarships. After the first
meeting, mentor Bayo shared a link to a scholarship in the group WhatsApp and after
that, mentors began sharing various funding opportunities and resources with the
mentees. Oili described her appreciation learning about the opportunities and the success
her peers had receiving a scholarship,

you learn from the positive points of others’ lives. Like they apply for
scholarships. I really didn't know how to exactly apply for some scholarships for
international students and I really didn't have the time. I was really disappointed
that I really didn't try prior to this semester, but it gives you some motivation that
you can apply yourself later.

Obi also shared her appreciation for the mentors mentioning funding opportunities.
Listening to the mentors’ experiences applying for and receiving scholarships provided
hope that they could too be awarded scholarships. Additionally, hearing the mentors’
experiences and endorsements about resources and services on campus was crucial for
the new students because it showed them what they can use to ease their stressors.

Knowing that other international students have received scholarships provides hope for
them to also receive a scholarship and thus alleviate financial burdens. Hearing the
mentors’ experiences using the writing center or attending events proves to the mentees
that these services are useful to them.
**Academic Development**

Between weeks two and three of the program, I asked new international student participants what their biggest challenge was up to that point, and almost all of them mentioned academics. Some shared that they were nervous about the workload or expectations, and others described feeling overwhelmed with the types of reading (e.g. research articles) and assignments (e.g. literature reviews, research, and proposals) since they differed greatly from what they were accustomed to in their home country. Though they struggled with academic shock and transitioning to American classroom norms, participants mentioned how helpful the mentors were in easing their transitions. Naveed discussed the advice related to a class he was taking that Bayo completed a few semesters before, “he told me what to expect, how to approach the questions and the quizzes.” Obi and Bommi took Teji’s advice to visit their instructors during office hours to share their struggles in class with their professor and both found that advice to be incredibly useful. Bommi shared, “the way [she] said I can go one-on-one to the professors and tell them about how it is my first semester helped me a lot. I did that, and yes, it helped me.” Obi mentioned a noticeable difference from her professors after visiting them during office hours to share her struggles, “in-between classes if we have breaks, they come to meet me. They ask me okay ‘do you have this’ or ‘do you understand that?’”

Other academic development advice from mentors included time management and study skills. Hareesh shared how the mentors suggested “how to study” and take advantage of the library for academic success. Participants were fortunate to have an English teacher in their group. Natalia became a source of English writing assistance, even among the mentors. Teji shared, “I was struggling with my writing so I’m like okay,
‘Natalia can you please help me?’ And she helped me; she corrected me like a teacher.”

Participants used each other as resources but also shared resources within the group. All participants explained that they walked away with more knowledge about the university and how to be successful in their classes, which is important since academic expectations were a major stressor and area of uncertainty for the mentees.

**Communicating in English**

Though all international graduate students must pass a language test to be accepted to graduate school in the United States, communicating in English is still a struggle for most, even for mentors who have been in the U.S. for several years. Through sharing feelings, thoughts, experiences, and speaking in front of the group, many participants said that the PMC aided in their English language skills. Mentor Tala explained the struggle of speaking English,

international students, when we come here, we are afraid of our English. We are afraid that “maybe I don't know something.” When I came here I was always thinking you know criticizing myself that “oh my god maybe I don't know how to tell this?” Or “what's the good way or respectful way to ask this?”

She continued by endorsing the communication benefits of the group sharing that the PMC allowed the new international students to practice speaking and asking questions, “even though your English may not be good but you know that you can find a way, even help from other international students to phrase your question.”

Mentor Natalia stressed the importance of practicing English among international students as it suspends judgment about accents and provides a space where international
students know their peers are also struggling to communicate thoughts and ideas. She explained,

we should remember or take into account that people who speak more than one language develop different skills to communicate. I am saying this because in the group all of us are second English language speakers, so we develop a kind of patience or tolerance to the other. For example, for me, it was difficult to understand Hareesh when he spoke English. But I used my skill of understanding, flexibility, tuning, I mean this is something that when you are bilingual or trilingual you develop.

Sur agreed with Natalia’s comments and felt that communication, especially with domestic students, is one of the biggest challenges for new international students. He remembered when he first arrived and how hard it was to communicate in English. Particularly, he was self-conscious about his accent and felt that the meetings allowed participants “to communicate with each other” and provided “a platform to practice our speaking skills with others so that when we are in the real world we are more confident.” Though communication was not an explicit goal of the PMC, participants were “subconsciously practicing their speaking.” Sur felt that “the communication skills the mentees developed in these meetings was the most crucial part.” Mentors noticed the communication growth occurring among the mentees during the group meetings, and the mentees felt it too.

Oili shared that she wanted to “gain the confidence to talk to people” and the practice doing so in the group helped her. Upwan remembered that when he first arrived, he was “not even comfortable with anyone, not even Indians, even my own group people.
I was not even comfortable to speak with them, and this program really helped me.”
Likewise, Hareesh shared that by participating in the PMC he “learned how to socialize in this country” and “got lots of confidence to speak in front of other people too.” Mentor Tala mentioned that the group meetings increased her confidence “talking in front of people” even though she had been living in the U.S. for six years.

In addition to confidence speaking in English to a group, participants shared how much they learned about “understanding people” and “interacting with people.” Mentor Bayo said, “I think the main thing [the mentees] learned was like interaction, talking, communication.” These skills were particularly important for participants because they were expected to conduct research, give presentations, teach classes, and navigate jobs within English and American culture.

*Exposure to Other Cultures*

Participants hailed from seven different countries (Nigeria, India, Russia, Uruguay, Bangladesh, Nepal, Iran) each with their own culture. Learning about other cultures was an exciting experience for the group. Participants found commonalities among their cultures and other participants’ cultures. Teji explained, us Nepalese, most of us think in the similar way and it’s like normal talking between us. From being in a Nepalese group only, then being around this variety I realized “wow we are all the same!” I feel like I have been to the world, I feel like I’ve been to Iran, I’ve been to India…

Obi echoed Teji’s thoughts, “I found out that there are a lot of similarities between my culture and other places. That was cool.” Ilan described the experience as a “gateway to entering a new culture” and Natalia shared that “the privilege of exchanging of different
cultures is something that I appreciate so much.” Naveed too shared that he enjoyed learning about “different people’s cultures.” Bommi felt that “it was the one language that united us” and allowed them to find commonality among their respective cultures.

After the third meeting, Bommi and Oili began writing their names and other participants’ names on the board in their own languages. Mila perceived this as “expressing their culture,” which she enjoyed and was excited to take part in. Many participants started writing words or phrases important to their culture on the board and explained them to the rest of the group. This was powerful to watch; participants bonded over commonalities and learned more about each other and their cultures. Mentor Sur said that “the opportunity to make new friends was the best part of this program, especially from different cultures because I usually hang out with people from my culture.” At our last meeting, we had an optional potluck. Participants brought a dish from their home country. Sharing food from their home country opened the opportunity to learn more about each other’s cultures. Teji shared, “I learned about so many different foods and cultures.” The potluck sparked discussion about how their cultures share similar dishes and cuisines. Cross-cultural learning and awareness were surprising findings as the program was not designed to teach participants about different cultures. This aspect, however, was important to create the community, sense of belonging, and foster friendships among the participants. By sharing certain aspects of one’s culture, such as food, music, or gestures, participants uncovered commonalities between one another’s cultures that they did not know existed. Identifying similarities between each other’s cultures showed participants that they were more alike than they thought and
provided hope that commonalities could be found with other students, including Americans.

**Perspectives on the Beginnings of Moving Through**

Participants were asked to reflect on their time in the program and consider how the PMC impacted their first five weeks of graduate school in the U.S. One area of growth was finding their voice. New international student participants were not comfortable sharing their feelings right away. It took time for mentees to feel comfortable and mentors noticed this. Additionally, toward the end of the PMC program, many indicated that they were feeling more comfortable in their new environment, thus exhibiting the start of the *moving through* phase of the transition process. Mentors too indicated they grew from participating in the program, though their experiences were a bit different. They identified personal development and reflection as benefits from participating in the PMC as mentors.

**Mentor Perceptions: New International Students Find their Voice**

As the weeks progressed, new international student participants began feeling more comfortable with the group. Mentors noticed changes among the new international student participants as they found their voices and identified individuals within the PMC which they connected with the most. As such, this section presents findings from data collected through interviews and focus groups that gathered reflective perceptions from the mentors.

Guneet noticed a change in participation among the group over time, “I think the meetings had been very empowering. I appreciate the change from the very first meeting - all attendees very shy - to a growing powerful atmosphere of participation and
chatting.” Guneet recalled Bommi being “kind of down” at the beginning of the program, but over time she had “the courage to share with us. And she was so happy. That's the change.” Bayo echoed Guneet’s observations about Bommi. He said, “she gradually progressed, and I think this [program] is pretty much what is holding her down here and not going back to her country like she previously thought she was going to. This program was really helpful for her.” Like the other mentors, Natalia and Teji witnessed personal growth within Bommi as she travelled through the moving in component of her transition. Mentors Sur and Natalia discussed Bommi’s growth in comparison to Upwan whom they believed also exhibited increasing openness over time. For both of them, mentors felt that the ability to practice speaking in front of the group developed their confidence. Mentors noticed how quiet, yet attentive Upwan was during each meeting, however, with time he opened up and made connections with some members of the group. Tala observed Upwan and Sur speaking frequently after the group meetings were over.

Similarly, mentors watched Mila progress from not sharing much during group meetings and focusing heavily only on her studies to developing a “sense of humor” that she shared with the group. Tala noticed a shift in her mindset during week two or three perceiving that her “stress was relieved” and she started to enjoy herself a bit. Sur also noticed this shift. He recalled a moment during the check-in,

I remember in one of the sessions she was sitting right next to Bommi who was talking about how she got all this food from her parents sent from India. Then Mila was the next person to share and she started off by saying “I don’t have parents to send me goodies so that makes me sad.” I like the way she started that conversation, like she developed. I mean she already has a good sense of humor I
know, but she wasn’t able to express that to the group. I felt like she felt more comfortable later.

The formality and seriousness within Mila witnessed by the mentors shifted to an engaged, humorous group member.

Mentors described the progression in Hareesh as well. Guneet noticed how shy he was speaking in front of the group during the first two meetings. She said, “I am sure that he was feeling that his English was not that good. Because of the stopping repeatedly.” However, with time Guneet noticed that “[Hareesh] came out of that cocoon, even though he knows that his English doesn't sound like the Americans, but he knows he can explain so that others can understand” and his confidence grew. Likewise, Ilan’s personality unfolded with each meeting. Sur noted, “I mean the first week he wasn’t as expressive, but he soon became comfortable to express his personality.”

Mentors believed Naveed demonstrated progression as well. When he joined the group, mentors noticed his negativity and various problems related to his advisor, roommates, and social security paperwork. Natalia described her thoughts about his progression,

at the beginning it was the typical conversation of complaining about all the documents and how heavy the process was for him, but after that, he started to communicate more humorous things. It was not so pessimistic. He started communicating but very funny and very nice.

Teji too noticed the change in Naveed over time. She noted that “he had so much of that negative thing in the mind” but later noticed that “he was not making too many negative
comments. He was saying ‘hi’ and talking to everyone. He also changed a little bit, so I think his perception changed.”

Obi was another participant that mentors noticed distinct progress in terms of opening up over the five weeks. Tala and Guneet noticed significant progress that occurred during the games. Guneet shared, “especially the Pictionary game day. She was like ‘Oh how do you do that? How do you do... show me that...’ So she was like involved. Then she started talking about her problems her personal life the health problems.” Tala mentioned that she also noticed Obi’s communication increase after she took her to the grocery store following the second meeting,

Obi was stressed and she enjoyed the game. Right after that, we went to the grocery store together with Mila and Naveed. She told me a lot of things and she said this is all overwhelming.

Natalia also noticed Obi opening up each week. She said, “I have seen Obi challenging herself and becoming better and better as meetings went by.”

Although it took time, mentors noticed that each of the mentees became more comfortable with the group and with communicating their thoughts and feelings. An ability to communicate more comfortably indicates that the mentees were learning how to socialize and move past the moving in phase wherein they are exploring their new roles and relationships, and begin to identify where they fit in with the group. Listening to other international students in the PMC struggle to formulate thoughts and speak in English likely contributed to the perceived increase in comfort communicating over time. This communication growth extended to other aspects of their lives, such as in the
classroom, and contributed to their sense of belonging and transition toward the *moving through* phase.

**New International Students Begin the *Moving Through* Phase of their Transition**

Reflecting on their time in the program during the focus groups, many participants shared evidence of their perceptions of their own personal growth, or developmental change within themselves. Bommi discussed how her participation “opened [her] up to different kinds of thoughts.” She continued, “I've opened myself to accept the people where they are. That has helped me a lot. It's all different cultures all together on one table. So, it helped me.” Hareesh shared that each week his self-confidence grew, and Ilan described his experience as “mirroring yourself” or seeing himself in others as they shared thoughts and experiences. Naveed shared that his perspective about Americans broadened. He remarked, “one thing that changed is I had an ideal... quote unquote..."ideal thinking" about American people. But that changed to the fact that they're just like me.”

Toward the end of our five weeks together, many new international graduate student participants exhibited signs of progression toward the *moving through* stage of their transitions as they exhibited exploring and feeling new roles, relationships, routines, and assumptions. Remarks like “I feel more comfortable now” or “I am getting used to the classes” were common during the last group meeting. When reflecting on acclimating to her classes, Obi said, “I think it’s stage by stage, I know I'll get there eventually.”

Upwan shared that he began playing cricket with other Indian students every Saturday and felt that he was adjusting to his classes well. He spent evenings in the student center playing pool and took advantage of the activities sponsored by the
International Student and Scholar Services office on campus. This differed greatly from his initial feelings when he first arrived. Mila too indicated that she found a routine with her classes, teaching, and personal life. She discussed getting to know her colleagues and even signed up for an off-campus expedition to a local park with students from her department.

During the last focus group, Oili mentioned she had signed up for several student organizations and events, which suggested that she was feeling comfortable enough in her routine and academics to take on additional commitments and to reach out to other students and communities. Naveed also expressed interest in joining a student organization but was hesitant because of losing focus on his work. Overall, the participants indicated that they had passed through the initial moving in phase where they were unsure about new roles and relationships and lacked confidence and surety in their ability to stay and be successful, to begin the moving through phase of the transition process where one begins to learn the ropes and feel supported during their journey (Anderson, et. al, 2011).

**Mentors’ Experience Professional Development and Personal Reflection**

Findings related to the mentors’ personal growth and experiences within the PMC were pleasantly surprising since the focus of the PMC was on their transitions and sense of belonging for new international student participants. Mentors described the experience as “an inner journey” and “reflective.” They also felt they gained professional development skills related to being a good mentor and how to organize recommendations based on their experiences.
**Professional Development**

Tala shared that the experience gave her an opportunity to organize the knowledge collected over her years of experience as an international student in a way that she could share with new international students. She said that process helped her professionally because it taught her to organize her thoughts and also gave her a glimpse into a career path she had been considering, one where she is helping people. Tala felt that she “learned a lot about how things are done and some things you should keep in mind when working with international students or vulnerable populations.”

Guneet also indicated she had benefited professionally. She said the PMC program helped with her “speaking, presenting, and socializing” skills. Furthermore, Guneet shared how the PMC program forced her into a non-leadership role, which she often found herself in other group settings. She shared,

> in my academic experience mostly I have been in leadership positions. Like if in a small group or in the lab group, wherever I go I have been in the leadership position, mostly. I'm pretty much used to talking to others while they listen. Now I was the part of the group that was listening. It's like being on the other side of this big group, so this was a new experience for me. You know it requires patience; it requires some helpfulness to each other. The group setting and PMC program design required Guneet to learn to actively listen to the group members as they shared so she could offer individualized feedback on the group’s discussion. She experienced a new “mutually beneficial process” where she did not have to be in a “leadership position to express feedback.” Bayo and Natalia both shared that serving as mentors in the group reinforced knowledge and skills needed for
their career path; they both want to work as teachers and serve students so that they are successful, and the PMC reassured them that they are on the right path. Natalia said that her time as a mentor was “proof once more for myself that I love interacting with people, this is one of my strong features,” and Bayo said being a mentor “reassured what I want to do for my career.”

Participating in the PMC provided an opportunity for mentors to gain skills that they believe will help their professional futures as well as to solidify career plans in a field where they can help students. Their experiences and abilities in facilitating the PMC meetings in a flexible, individualized, and supportive manner resulted in an experience that may have been as beneficial to them as it was for the mentees.

**Personal Growth and Reflection**

Several mentors expressed that being part of the PMC incited reflection to the time when they were new international students. Natalia described it as an “inner journey.” She reflected,

\[\text{I was thinking about my first steps at [this university]. I was alone. I didn't know anything about all the academic stuff. I did not know anything. It was brand new for me. So, what I'm gaining is like revisiting my previous steps and to see how I could have done them better or what I did good. Even though I didn't have this opportunity as this group has with you to share and to exchange ideas and to be with other more advanced students in their careers, I gained learning from myself and revisiting my life-- my academic life in [the state], and it’s nice.}\]
She continued this thought sharing that she learned about herself through the experiences of others in the group. She gained self-confidence by helping others. Tala shared similar sentiments as she reminisced on her time and experiences when she first arrived. Participating in the PMC allowed her to help new students in ways that she wished she had been helped.

Teji explained that she was a bit nervous to be a mentor at first but quickly realized how much she had to offer to her peers. “I realized that I can help, and I can be a resource to someone just by sharing my experience and being there for them.” Guneet agreed and said that she received a lot of self-satisfaction from “helping them, giving them information and seeing that they do not have to be stressed” because she was there to help.

For Bayo who spent most of his time in the lab, focused on studies, and participating in professional student organizations, he realized that he enjoyed the social aspect of helping the new students and sharing his experiences. He appreciated the new friends he made from the PMC. Sur agreed. He stated that being a mentor allowed him to get out of his “comfort zone and approach the new international students.” By the end of the five weeks, Sur shared that his communication skills improved greatly. All mentors agreed that helping the students was more satisfying than they expected it to be and they are leaving the program with new friends.

**Conclusion**

Participants were deeply grateful for the opportunity to participate in the PMC program. Bommi said, “meeting the global grad mentor group was the best decision I [made],” and Oili expressed, “I was so lucky that this semester there is such a thing
because it wasn’t before because it’s for your study.” Obi shared Bommi and Oili’s sentiments, “I think that this was the very first best decision I could have made, coming here.” Mentors also appreciated the groups. Natalia said that she wished she had this kind of program when she started at the university, and other mentors (Sur, Tala, Bayo, and Teji) were grateful for the program and being invited to participate.

Though the new international graduate students encountered negative affect and challenges when they first arrived here, the atmosphere of the PMC enabled them to share their struggles with a group of strangers who, over time, became dear friends. The ability to share thoughts, feelings and problems with a group of students who shared similar experiences created a bond among the group members as they learned how to overcome challenges, navigate the new learning environment, and enhance their English communication skills. Along the way, they learned about other cultures and addressed mental wellness issues. Since the program was new, there are several ways in which future iterations can be improved.
V. DISCUSSION AND CONCLUSION

Participants exhibited progress through the moving in and beginnings of the moving through phase of their transitions and connected socially with their peers thus experiencing a sense of belonging. This section will discuss answers to the three research questions based on the study’s findings juxtaposed to existing literature. I then discuss the study’s contributions to practice and policy in higher education and theory. The conclusion of this chapter will include recommendations for future research and a personal reflection about the study.

It is important to remember that all participants in the study were international graduate students and therefore the implications from this study are directly applicable to international graduate learners. International undergraduate students may also benefit from a PMC program, but the findings, discussion, and implications focus on international graduate students’ particular experiences.

RQ1: In What Ways does the Peer Mentor Circle Program Influence the Transition Process?

Levinson (1986) describes a transition as an event or nonevent that creates change in relationships, routines, assumptions, and roles. Transitions can be frightening (Anderson et al., 2001), but are natural and can be turning points in an individual’s life, thus inciting personal growth (Bridges, 1980). Anderson, et al. (2011) outline three phases of transition: moving in, moving through, and moving out. During the moving in phase, individuals are learning new roles, relationships, routines, and assumptions, familiarizing themselves with socialization norms, and learning the ropes of their new environment or situation. Moving through occurs when the individual is grasping for new
roles, relationships, routines, and assumptions.

In this study, the new international graduate students moved from phase one, *moving in*, to phase two, *moving through*, of the transition process. Several aspects of the PMC influenced their ability to transition and adjust. The PMC was designed for participants to have a space to speak freely, share ideas and experiences, and mentor one another. Through sharing experiences and feelings each week, mentees explained they were better able to cope with their changes and move through the transition process. Mentors helped mentees adapt to general living, academics, sociocultural and psychological adjustments, and the PMC itself aided in developing communication skills, which pushed mentees toward the *moving through* phase of the transition process.

Tseng and Newton (2002) conducted a qualitative study designed to understand international students’ definition of well-being and identified four specific challenges faced by international students: general living adjustment, academic adjustment, sociocultural adjustment, and psychological adjustments. Each of these challenges were experienced by the new international students in the current study as they *moved in* to their transition.

**Sociocultural and Psychological Adjustments**

Regarding sociocultural and psychological adjustments of participants, these were their initial feelings when they arrived, and these aspects of wellbeing create the context for which the *moving in* phase occurred. Sociocultural and personal psychological adjustment includes feelings of loneliness, homesickness, isolation, and adjusting to new cultural and social norms (Tseng & Newton, 2002). When the new international graduate students, or mentees, first arrived they were overwhelmed with emotion, stress, and
change. As participants experienced the *moving in* phase, they engaged in the organized PMC program to sort through their new roles, routines, relationships, and assumptions, and to learn the ropes. Mentors played a critical role in this process. Mentees felt lonely, depressed, isolated, and concerned about academic expectations. These feelings could not be easily shared with loved ones back home so as not to worry them. Although the University Counseling center is available to serve students with feelings of depression and other psychological concerns, the new international students felt that they needed to confide in someone who already experienced what they were going through. The PMC provided a friendly, welcome, and safe space for the mentees to share their problems, feelings of depression, and to learn from other members about addressing these emotions. Ultimately, the mentees learned that their feelings were normal compared to other international graduate student who had been at the university for a while; many international students experience the same feelings of loneliness, homesickness, and academic concerns. Mentors in the PMC reassured mentees that their feelings would pass and provided solutions for them to manage their feelings and cope with their transition.

**General Living Adjustments**

General living adjustment includes being accustomed to American food, environment, and transportation. In terms of transition, this encompasses new routines and assumptions; all the participants experienced shifts in their routines. As other studies have found (Cavusoglu et al., 2016; Hunter-Johnson, 2016), transportation is a major adjustment for most international students since they often hail from countries with far superior public transportation than what is found in the U.S. The PMC participants too found it cumbersome to find transportation to get to the grocery store or to plan their day.
around finding something to eat because options were limited, or the grocery store was so far away. During PMC meetings, there were often questions about how to perform an action, such as request a bank account, or ask a question while abiding by American social norms. Providing a space to address these concerns, with other international students who were either also new to the university or had been in their programs for longer, proved essential in assisting participants in their transition processes.

Food was mentioned as a major adjustment for several participants, especially those with specific dietary restrictions. Obi suffered from illness related to a change in her diet until one of the mentors took her to the grocery store so she could cook food that aligned with her regular diet.

**Adjusting to New Roles**

Adjusting to new roles was a transition for many of the participants who had been working full time in leadership roles in their home country. Graduate international students often have to adjust from work roles to full-time graduate students in a new country. Sometimes these adjustments also include becoming caretaker of dependents in a foreign country. Others left behind significant others and/or close and supportive friends in their home country, which forced them to adjust to a new single/independent life as they lived alone in the U.S. The PMC created a space where these learners could reflect and reclaim new and nuanced identities that incorporated previous and novel understandings of self. Participants were encouraged to be themselves as they worked through these adjustments of roles and identities. The PMC played a major part in helping to develop participants’ adjustment to new social roles by providing new friends and socialization opportunities. During the first few weeks of the PMC, much of the
conversation revolved around general living and academic adjustments. Mentors provided ample suggestions and tips to manage the mentees’ adjustments in both areas.

**Academic Adjustments**

Academic adjustment is the second challenge Tseng and Newton (2002) identified. Academic adjustment includes the novel education system for which the new international students must navigate, and the skills they need to be successful. Academic expectations and feelings of inadequacy were prevalent among mentees in the PMC. Some felt they were unprepared for their graduate studies while others were simply concerned with the workload and instructional methods. Mentors recommended mentees visit faculty during office hours and shared suggestions about which resources they should use to help them academically. By the end of the five weeks, mentees shared that the academic expectations were still a concern, but not as much as before. They had all taken tests or quizzes and received high scores, which boosted their confidence. Additionally, they were adjusting to their new routines and making friends, which pushed them to or toward the *moving through* phase of their transition.

**English Communication Skill Development**

Finally, the PMC provided an opportunity for new international students to develop their English communication skills. This was important because language barriers tend to be the most common and overwhelming struggle for international students (Constantine et al., 2004; Kuo & Roysircar, 2004, Rientes et al., 2012). Telbis et al (2014) stressed the importance of English language proficiency as it impacts a student’s ability to communicate, comprehend, and interact on academic and personal levels. Likewise, Erichsen and Bollinger (2011) discussed how language challenges “can
lead to confusion, misunderstandings, struggles with course and program content as well as contribute to great anxiety and stress concerning in class participation and presentations” (p. 311). Many of the new international students struggled sharing thoughts and ideas in English and felt unsure and nervous about speaking in front of the group during the first week. After everyone began speaking and more games were incorporated, participants began to share more openly and frequently. Mentors acknowledged a noticeable difference in the English-speaking skills of several of the mentees. The PMC was also characterized by participants as a judgement-free space for international students to share anything that was on their minds. Through games and sharing highs and lows, mentees developed confidence speaking English and communicating with peers. Analysis identified participants’ communication development as necessary to solidify mentees’ progression to the moving through phase and ultimately contributed to their increased sense of belonging.

**Mentors’ Role in the Transitions**

Mentors played a vital role within the PMC to assist the mentees as they transitioned into the moving in, and then, to the moving through phase. Toward the end of the program, mentees mentioned feeling hopeful about their future in graduate school as opposed to the depression, loneliness, and turmoil they felt while experiencing the moving in phase. The PMC influenced the transition process for the mentees positively by offering mentees an opportunity to share feelings and experiences and learning about resources about how to cope during their time of change.
RQ2: How does the Peer Mentor Circle Program Contribute to Sense of Belonging Among the Participants?

The need to belong or fit in with a group is part of human desire (Yao, 2015) and the PMC participants, especially the mentees, yearned to belong in their new community. Participating in the PMC contributed to the participants’ sense of belonging. They expressed their understandings of belonging through their feelings of being valued and important within a social and academic support system. Hagerty et al., 1996, defined sense of belonging using two attributes: “(1) the experience of being valued, needed, or important with respect to other people, groups, or environments, and (2) the experience of fitting in or being congruent with other people, groups, or environments through shared or complementary characteristics” (p. 236).

Feelings of Belonging within the PMC

Feeling valued, needed, or important with respect to the PMC participants was a prominent theme throughout the findings. When a participant was late to a meeting or absent, others were concerned and asked about the whereabouts of their colleague. Participants valued, needed, and respected the suggestions, advice, and opinions of others in the group. Listening to one another share experiences and suggestions or advice based on those experiences developed trust and community within the group, which eventually led to a place in which everyone felt they belonged, and their thoughts and opinions were valued.

Sense of belonging among the participants became abundantly clear as participants expressed that the PMC was a place where they could be their true selves and felt they could share anything. Over time, group members’ relationships became deeper
and participants indicated they knew they could share any feeling, thought, or experience without judgment or fear. Participants described the PMC as a place where they did not have to put up walls and the one place they could truly be themselves for two hours. Another participant felt comfortable enough to wear her traditional Indian dress, which an Indian mentor pointed out was a bold move and showed how comfortable she was with the group to share that part of her culture. These sentiments are powerful indicators of sense of belonging within the PMC community.

Hagerty et al. (1996) discussed the second element of sense of belonging as revolving around individuals fitting in with others through shared or complementary characteristics. During group meetings, part of the routine was a check in where participants shared their high and low experiences of the week. It was during these conversations that participants began making connections with one another and identifying commonalities. Mentees quickly realized that not so long ago, mentors were experiencing the same thing as the mentees and could share how they overcame obstacles and negative feelings. Over the five weeks together, through sharing feelings and experiences and discussing food and culture, participants made strong connections with one another. Yao (2015) maintained that the relational nature of sense of belonging puts emphasis on the role of peers to achieve belonging. In the PMC, participants’ relationships developed over time and sense of belonging grew simultaneously.

Feelings of Belonging Outside the PMC

In addition to feeling as though they belong within the PMC community, participants also expressed that they began to feel like they belonged on campus and in the community. This was likely due in part to the mentors taking mentees to places within
the community and our walking tour of the city, as these activities familiarized
participants with their physical surroundings. Furthermore, once participants felt safe and
belonging within the PMC, they began to focus on developing similar feelings of
belonging with others in their classrooms, on campus, and within the local community.
This extended feeling of belonging was supported through learning about various
opportunities available to them from the mentors in the PMC, such as volunteering or
events.

Social Connection

With sense of belonging comes social connection, or what we often see as a basic
need for humans in almost any setting. Social connectedness has proven to be positively
linked to adapting to a new environment (Duru, 2008). For international students, social
support and connection can ease the acculturation process and alleviate depression and
anxiety symptoms (Dao et al., 2007) consequently leading to better mental health (Han et
al., 2007). Several participants said that without the PMC they were sure their depression
or negative mental state would have become worse. The mental health support provided
by the PMC was an unexpected, yet significant, finding of the program experience. It
appeared that the ability to share one’s emotions to individuals within a group, who had
already experienced similar feelings, was therapeutic, and not only to the mentees but
also the mentors. One mentee visited the University Counseling center but felt that the
support provided by her peers in the PMC was superior because they had or were
currently having similar, shared experiences. The PMC was not designed for mental
health or counseling services nor was it facilitated by a professional counselor. Thus, it is
important that, although participants explained their feelings of depression and anxiety
were relieved, they continue to seek professional help from the university counseling center.

The PMC contributed to social connectedness and sense of belonging among the mentees as they grew to feel like members of the campus community and found a social support system within the PMC that alleviated their homesickness, anxiety, and other negative feelings. All participants agreed that they planned to keep in touch with members of the PMC after the formal meetings conclude. Since the meetings ended in late February 2020, the worldwide COVID-19 pandemic struck causing mandatory stay at home and quarantine orders. Since then, the group met over Zoom video conferencing software for informal virtual meetings unrelated to the study to touch base with and support one another through this trying time. Though the program had concluded, participants continued to communicate through group texts and Zoom video conferencing software which illustrates the strong connection and belonging they felt with one another.

Through sharing experiences and feelings within the PMC, participants developed strong, deep relationships with one another that allowed them to feel safe, valued, and comfortable in the group meetings. These feelings of fitting in and feeling as though they belonged in the group later expanded to other facets of their academic and personal life as they began making friends from their classes or joining activities on campus.

**RQ3: What are the Experiences of International Graduate Students in the Peer Mentor Circle Program?**

The PMC program provided a space for international students to feel comfortable or serve as a “second home.” International graduate students’ experiences in the PMC program were vast but can be characterized as supporting the acculturation and transition
process, learning, and personal growth. Considering the goal of the PMC was to assist with the transition process and to contribute to sense of belonging, the experiences of the participants in the PMC complement the program’s goals.

**International Graduate Students Encounter Specific Challenges**

Although American culture and social nuances were not specifically part of the discussion, culture shock as students adjusted to norms in the U.S. was prevalent in group meeting conversations. Research indicates a myriad of challenges international graduate students encounter as they pursue studies in the U.S., to include transitioning to new social norms, socializing and community issues, organizing living arrangements, (Lee & Rice, 2007), navigating a new higher education system (Hellsten & Prescott, 2004), coping with homesickness (Church, 1985) and pressure to be accepted and succeed (Robertson, et. al, 2000). Additionally, research indicates that international students struggle acclimating to American culture and handling academic stressors such as writing and communicating in English (Bai, 2016; Cavusoglu et al., 2016; Hunter-Johnson, 2016). This research is what initially prompted the development of the PMC; I wanted to explore a method that could address these obstacles.

**Participants’ Experiences within the PMC: Addressing Challenges**

The PMC program addressed the majority of these challenges through the group meetings, including socialization, food, transportation, academics and communication, which composed a major part of the participants’ experiences in the PMC. Through discussion, students learned how to meet friends, approach faculty, and leverage office hours to enhance their academics. Moreover, they learned strategies to manage academic stress and enhanced their English-speaking skills. Pressure to succeed was mentioned as
participants discussed the sacrifices they made leaving family in their home country and their desire to not let their family down as they pursued graduate school in the United States. During group meetings, participants discussed the challenges they were facing and formed solutions to those challenges using one another’s experiences. These findings reiterate Darwin and Palmer’s (2009) work investigating the mentor circle study wherein participants shared experiences and challenges for the purposes of creating solutions.

Participants’ Experiences within the PMC: Learning

PMC participants highlighted the importance of learning about academic resources, communication skills, and cross-cultural awareness through group discussions. This finding is supported by Palmer (2015) who argued that the social nature of learning emphasizes the need for a sense of community within the learning environment. The PMC provided a sense of community and encouraged members to make connections with one another because there were others who had similar, or the same, experiences. From learning about communication in higher education in the United States to scholarship information and on-campus resources, participants walked away from the PMC program with a wealth of knowledge to support them personally and academically.

Participants’ Experiences within the PMC: Personal Growth

Personal growth, or developmental change within oneself, was also a characteristic of the learning within PMC program. Mentors discussed how much they learned about themselves and felt that the program allowed them to reflect on their journeys as new international students. Traditionally, a mentorship is a dyadic relationship in which one person learns from the wisdom and experience of another person (Dansky, 1996). However, peer mentorships exhibit a reciprocal relationship
wherein both parties contribute and benefit from the relationship (Haggard et al., 2011), which is what mentors in the PMC experienced. They all agreed that they learned about how to be a good mentor and that mentorship does not necessarily have to be one-on-one but can also be successful in a group setting. One mentor said that the experience was like mirroring himself; he saw his experiences through those of his peers. Mentees also experienced personal growth as they moved to the moving through phase of their transition. They discussed their transition from fear, negative feelings, stress, and homesickness to hope and optimism about their future at the university.

The PMC provided a rich learning and social experience for all participants. Deep relationships and support systems were established, and participants learned from one another about important aspects of academia that supported them personally and professionally. The experiences and learning that occurred in the PMC buttressed the mentees’ need to progress out of the moving in stage and toward the moving through stage as the mentors modelled what it looked and felt like to be in the moving through stage. This progression was facilitated through open and supportive discussions and listening, empathy, knowledge of resources, and integration into the local community.

**Implications for Practice and Policy**

Findings from this study point to cross-cultural, cross-discipline peer mentor group programming as a solution to address the needs of new international graduate students. Learning which occurred during the PMC meetings reinforces adult education practices that emphasize social construction through group learning, discussion, and interactive activities. Programs designed for international student transitions need not be overly detailed or overly planned. Participants in this study appreciated the flexibility,
loose structure, and participant input of the program. Including international students from various backgrounds and disciplines proved impactful for personal growth and development and provided a variety of insight for the participants as they worked through challenges. Because current international graduate students understand the inherent struggles of beginning studies abroad, it was not challenging to find willing mentors; they wanted to give back to the international student community.

**Adult Higher Education**

Adult educators who are interested in supporting their new international graduate students’ transitions and belonging should encourage students to make connections with other international students. If personal check-ins are part of a classroom routine (which is common in cohort-based programs), allowing international students to share their struggles will provide insight to domestic students as to what international students experience and could spark discussion similar to those in the PMC which resulted in suggestions or advice for solving problems. Finally, participants in this study expressed a deep appreciation for the professors who took a moment to check on them either before, during, or after class. Since international graduate students do not fully understand the academic culture and norms between faculty and student, it is helpful when the faculty member makes the extra effort to follow up with their international graduate students.

**Universities**

As higher education institutions consider programming to aid in transitions and a sense of belonging, they should consider a simple approach that focuses on building community and engaging in activities. Furthermore, they should be thoughtful about who they choose as a facilitator. Someone who is experienced in hosting and facilitating
programs as well as teaching diverse student groups is key to create an open, comfortable environment needed for a successful PMC. I agree with Yao’s (2015) argument that institutions should assist international students in achieving a sense of belonging rather than attempting to integrate students to U.S. campuses, as belonging is a more sustainable way to ease the transition. Based on the findings from the PMC, it is evident that following Yao’s suggestion to embrace international students’ culture and norms rather than force them abruptly into American norms can foster belonging. Institutions of higher education should create more social engagement opportunities revolving around culture so that international students can make connections with one another before feeling forced to integrate with domestic students. Furthermore, Yao maintained that international students should feel like members of the community rather than forced to integrate with the dominant culture, and in the PMC international graduate students could feel like members of a community, albeit a small community, before feeling comfortable and confident enough to integrate to the larger, domestic campus community.

The PMC provided a space for international graduate students to process their transitions and develop a sense of belonging without forcing them into American culture before they may be ready. Higher education institutions should strongly consider creating PMCs or similar programs that allow international students from all cultures and disciplines to develop community and thus a sense of belonging by connecting them with students who are experiencing the same things as they are. Participants in the study connected deeply with other international students as opposed to me or their domestic peers due to the shared experiences of transitioning to graduate school in the U.S. Essentially, belonging felt among participants within the PMC eased students’ transitions
so that they could ultimately begin to integrate more comfortably with domestic students and their new academic environment. Including domestic students in the second half of an elongated iteration of the PMC program could provide more insight to sense of belonging as international students continue their progression through the *moving through* phase of the transition process.

Ultimately, educators and institutions of higher education must acknowledge the challenges encountered by international graduate students and make a concerted effort to ease the transition process and promote a sense of belonging through programs like the PMC. Such programs could be run completely by students and be successful. Additionally, programs can be flexible and fluid while adhering to a low budget. If higher education institutions want to continue bringing international graduate students to their campuses and to support them while they are in graduate school, they must employ additional support measures that address their transition, mental wellbeing, and social connectivity. The PMC program is a viable solution.

**Implications for Theory**

This study sheds light on new aspects of both transition and sense of belonging theories. An important understanding gleaned from this study includes how foreign culture background influences adults’ experiences in the transition process and sense of belonging.

**Transitions**

Adult transitions (Schlossberg, 1991) a theory housed within adult development, have typically focused on life events in adulthood that trigger personal growth within an individual. Such life events include marriage, death of a loved one, or retirement; events
we sometimes think of as “life milestones.” In terms of international students transitioning to graduate school and personal life in a new country, this is a new territory for the theory. This study indicates that international graduate students do experience and can be supported in the first two phases of transition, moving in and moving through, as they participate in the PMC program. Furthermore, the study reveals that transition theory could be applied to many other aspects of one’s life, such as, freshman transitioning to college life or working professions transitioning to remote work. Until now, transition theory was focused on specific life events, such as marriage or retirement, as opposed to events that every person may not experience, such moving to a new country.

This study provides research related to the intersection of culture, academic expectations and contexts, and location as components of a life change that initiatives a transition. Transitions involving cultural changes include socialization challenges and culture shock and can be mitigated by involvement in a program that aims to foster a sense of belonging. Most importantly, findings from this study showed that the PMC was successful in assisting the transition of international graduate students during their first semester and in creating a support system that extends beyond the duration of the program.

Culture was a defining characteristic of the moving in phase. As students adjusted to new ways of living and seeing the world based on their culture and the new culture, they were experiencing the moving in phase of their transition. Learning how to socialize with individuals from the host culture in English strongly impacted their moving in transition. In addition to adjusting to the new academic system, culture was a major part of their transition. Furthermore, as participants progressed to the moving through phase,
culture again played a role. Part of the growth participants experienced related to the English-speaking skills, ability to navigate the new culture on their own, and feel more hopeful about their ability to thrive in the new culture.

Based on the findings, we know that for international graduate students, the *moving in* and *moving through* stages are certainly a period of learning and growth that are a result of the change of learning and living abroad. Furthermore, the results from this study expand the theory beyond what we think of as traditional transitions (birth, marriage, starting a new job) into contextual and cultural applications. Furthermore, findings provide detailed insight to the first and second phase of the transition process for international graduate students. Outcomes from this study should prompt researchers to think more broadly about transitions while also considering contextual and cultural factors related to the individual or individuals experiencing transitions.

**Sense of Belonging**

Sense of belonging (Anant, 1969) has been explored in several contexts, but not within the framework of a peer mentor circle program. In higher education, belonging has been linked to academic success (Astin, 1996; Tinto 1993), and other research shows that belonging is a key component to acculturation for international students (Baba & Hosoda, 2014; Bai, 2016; Duru, 2008; Poyrazli et al., 2004). Results from this study indicate that a PMC program positively contributes to sense of belonging among international graduate students and thus provides a new perspective on how to develop and support sense of belonging through programming designed for specific student populations. The PMC design could be replicated and applied to other underserved and underrepresented student populations such as LGBTQIA students, veteran and military-connected students, women
and men of color, first-generation and foster students, and women in STEM.

Sense of belonging in this context was influenced by culture because the participants hailed from different cultural and religious backgrounds. The ability to feel as though they fit in or belong was shaped by their ability to connect with others in the PMC based on shared experiences that stemmed from experiencing and navigating a new culture. Learning how to make friends in a different language and culture, asking faculty questions in ways that were not the same in the home country, figuring out how to join organizations, learning how to communicate effectively with roommates, and developing an understanding about nuances of interaction and living in American society contributed to the patricians’ sense of belonging and were addressed through sharing experiences and feelings during the PMC meetings. Additionally, learning about one another’s culture allowed for participants to find commonalities and thus develop belonging. Most importantly, sharing experiences acclimating to and navigating a new culture created strong bonds and trust between participants and in turn influenced their belonging.

Theory was prominent in designing the PMC as well as collecting and analyzing these data. Findings contribute a new, cultural perspective to both transitions (Schlossberg, 1991) and sense of belonging (Anant, 1969) by providing insight to how an individual from a different culture may experience transitions and develops and benefits from sense of belonging. Reflection, interaction, and co-construction of knowledge helps us to understand the experiences of international graduate students better, in the context of both transitions and sense of belonging theories. Through interviews and focus groups, all participants developed metacognition, or “active control over the cognitive processes engaged in learning” (Livingston, 2003, p. 2) as they reflected on their experiences in the
context of transitions and belonging. They thought deeply about what they learned in the PMC, how that learning helped them move through a difficult transition, and how they had grown over the five weeks in terms of their sense of belonging at the university and in the community.

**Conclusion and Future Research**

This study considered the obstacles encountered by international graduate students and aimed to address those challenges through a peer mentor circle program using transition theory and sense of belonging as guiding frameworks. With hundreds of thousands of new international graduate students pursuing graduate degrees in the United States each year, it is now clear, due to the findings in this study, that a PMC program can successfully assist the transition of international students and contribute to their sense of belonging thus alleviating mental health issues and negative feelings as well as potentially contributing to academic success.

Future research should focus on including domestic students in such a program design to further introduce elements of American culture and foster relationships with American students. Additionally, a similar study examining sense of belonging and transitions among international students from a gender perspective would also be valuable, especially since some sense of belonging research posits different emphasis on belonging based on gender (Hagerty et al, 1993). Additionally, as previously mentioned, I strongly encourage other researchers to replicate the PMC model for other underrepresented and underserved student populations. Another avenue of future research would be to replicate the PMC model in the workplace for international employees or groups of employees from different cultures or backgrounds, LGBTQIA+ employees,
women, as well as other underrepresented individuals in the workplace.

**Researcher Reflection**

When I decided on this study for my dissertation topic, my greatest fear was that no students would participate. Not only was I overwhelmed with students interested in participating, but I was shocked by the number of students who stayed in the program and how many of their friends wanted to participate. When the first meeting concluded at 7:30 p.m. and several students stayed after to chat, I knew I did something right. When the program concluded and I saw participants making plans with one another, constant chat in our WhatsApp group text mobile application, and Zoom video conferencing software meetings being conducted, I really knew that I did something right. Finally, conducting the final focus groups was so powerful for me as I listened to the impact this program had on each and every participant. They all thanked me tremendously for putting the program together and felt so grateful that they started during the spring 2020 semester so that they could participate.

As a researcher, I felt like I was really making an impact on people’s lives and knew that sharing these findings will make a difference in other students’ lives as long as institutions believe in support for their students. Conducting this study changed me as a human. I saw the struggles and triumphs of several students as they shared their raw feelings and emotions. I made lifelong friends and forged strong bonds with the participants. I doubt I will ever conduct another study that is as personally transformational and meaningful as this one. Each participant made this the best dissertation process I ever could have asked for.
To provide a guide for this study, I have defined key terms below. The definitions will provide clarity to terms that are used frequently.

**Acculturation**

The change in values, beliefs, and behaviors resulting in an extended contact with a new culture (Berry, 1997).

**Belonging**

The point at which an individual feels himself or herself to be an integral part of a social system or environment. (Hagerty et al., 1992)

**Cross-cultural Adjustment**

Similar to acculturation, but focusing on the process of adjusting to a new culture.

**International student**

“International students are defined as non-immigrant postsecondary students at accredited higher education institutions in the U.S. who are on a temporary visa that allows academic coursework” (Chow, 2012, p. 5).

**International Graduate Students**

Postsecondary students who are non-immigrants on temporary visas ages 25 and above, currently pursuing a master’s, doctoral, or professional degree at an institution of adult and higher education in the U.S.

**Meaningful**

Something that is important, serious, or of useful purpose.

**Native Language**
A language a person first acquires or has been exposed to since birth.

**New International Graduate Student**

An international graduate student who has never studied in the U.S. and is currently in their first semester in a master’s, doctoral, or professional program.

**Peer Mentor Circle**

A group of peers (new and current international graduate students in the current study) who meet regularly as a group to discuss various predetermined topics and daily life and assist one another in overcoming any challenges or barriers they are currently encountering (Ambrose, 2003; Darwin & Palmer, 2009; Schneiders, 2017).

**Transition**

“Any event or nonevent that results in changed relationships, routines, assumptions, and roles” (Anderson, Goodman, & Schlossberg, 2011, p. 39) occurring either as planned (anticipated) or unplanned (unanticipated). For the purposes of this study, transitions are a period of academic, personal, and environmental change experienced by the student.
Appendix B: Needs Assessment Survey Questions and Brief Analysis

We are interested in which events, if any, that you have attended and found useful.
Can you tell us which events or workshops held on campus have been useful to you as a graduate student?

The most common response to this question included graduate student orientation, the Graduate College’s on campus professional development workshop series, the ISSS’s OPT workshop, and the ISSS’s welcome social event. One student remarked,

I have learned and grown so much through various events and social interactions organized by the Graduate College. For instance, my first research poster presentation was literally at one of the [graduate college research conference events] and that was a big step for me. The [professional development workshop series] were very useful for me to expand my knowledge and skills in research. Also, the social events were great to be able to interact with professors and fellow friends.

The sentiments above indicate the positive impact a student can experience if engaged in support services created for graduate students. Other students mentioned tax and career-related workshops as helpful.

We're also interested in what other kinds of workshops, events, or resources offered by the university that would be useful to you as a graduate student. (Think about workshops, events, and resources that could be offered by your advisor, your department, The Graduate College, Career Services, the University Library, the International Office, and other departments on campus)
Responses to this question varied greatly. Some students indicated they needed more guidance from their program in terms of thesis or dissertation chairs, committees, and development, while others responded with suggestions related to career services and career fairs. One respondent suggested a career fair specifically for international students or specialized career advisors for international students.

One student referred to the large scale of the graduate orientation, which typically serves 400-500 students. They recommended that each department host “a group for international students” as it is “so overwhelming to be part of orientation with so many people and [they] didn’t feel like it reaches out to individual needs.” Other suggestions included “professional talks by experts,” “living in the US,” “an introduction to living and studying in America,” “cultural grooming,” and “how to find a job after graduating.”

When you first started graduate school at [the site], what, if anything, do you feel was missing from your orientation or check-in?

Surprisingly, many students felt that the orientation and check-in covered most of the information they needed. Some students suggested more cultural information as they responded with, “an introduction to studying and living in America” and “a workshop on American culture and how should an international student behave with colleagues and teachers.” Another student remarked “getting friends” was missing from their orientation or check-in.

Describe your biggest challenges in graduate school so far.

Responses to this question were the most enlightening. Challenges outlined in international student literature were reflected in the responses: homesickness, communication misunderstanding, cultural difference, fitting in, stress, adapting to a new
culture/environment, English, and making friends. Other challenges mentioned are those which are experienced by most graduate students whether they are international or domestic, such as, time management; balancing teaching, work, and research; public speaking; finding a job; and funding.

Please add any suggestions or thoughts you have about your expectations, desires, and/or needs for support during graduate school as well as post-graduation.

This question garnered the least amount of responses. One student suggested “a mentor or guide within the department for international students would be helpful to bridge the gap if there is any.” Another student commented that he or she “didn’t find any platform (social/educational) where [one] could meet other graduate students from another department.” Other responses included providing more attention to international students and assisting them with more information when they initially come to the United States.
Appendix C: Recruitment Emails

For new international students:
This email message is an approved request for participation in research that has been approved or declared exempt by the Texas State Institutional Review Board (IRB).

Greetings!
Welcome to your first semester at Texas State University. You are receiving this email because you are a new international graduate student and are invited to participate in a peer mentor group program. The program will consist of new and current international graduate students at Texas State and will meet once a week over five weeks.

The goal of the program is to introduce you to resources on campus, work through challenges you are experiencing by discussing them with your peers and mentors, and to create a space for you to meet other international graduate students on campus.

The program is a dissertation project and will provide valuable information about the experiences of international graduate students transitioning to graduate school in the U.S. If you choose to participate you will receive a gift card at the conclusion of the program.

To participate in this research or ask questions about this research please contact Brittany Davis at bmd35@txstate.edu.

Sincerely,
Brittany Davis

This project [insert IRB Reference Number or Exemption Number] was approved by the Texas State IRB on [insert IRB approval date or date of Exemption]. Pertinent questions or concerns about the research, research participants' rights, and/or research-related injuries to participants should be directed to the IRB chair, Dr. Denise Gobert 512-245-8351 – (dgobert@txstate.edu) or to Monica Gonzales, IRB Regulatory Manager 512-245-2334 - (meg201@txstate.edu)

For current international students:
This email message is an approved request for participation in research that has been approved or declared exempt by the Texas State Institutional Review Board (IRB).

Greetings!
By way of introduction, my name is Brittany Davis and I am a doctoral student here at Texas State University. I am emailing you to invite you to participate in a peer mentor group program with new international students. The program will meet once a week over five weeks and your input as a current student will be sought throughout the time of the program and at the conclusion.
The program is a dissertation project and will provide valuable information about the experiences of international graduate students transitioning to graduate school in the U.S. If you choose to participate you will receive a gift card at the conclusion of the program.

To participate in this research or ask questions about this research please contact Brittany Davis at bmd35@txstate.edu.

Sincerely,
Brittany Davis

This project [insert IRB Reference Number or Exemption Number] was approved by the Texas State IRB on [insert IRB approval date or date of Exemption]. Pertinent questions or concerns about the research, research participants' rights, and/or research-related injuries to participants should be directed to the IRB chair, Dr. Denise Gobert 512-245-8351 – (d gobert@txstate.edu) or to Monica Gonzales, IRB Regulatory Manager 512-245-2334 - (meg201@txstate.edu)
Appendix D: Contract of Intent to Participate

For all participants

I, ________________________, agree to participate in five group meetings lasting two-hours each (total of 10 hours of meetings) over the period of five weeks. I understand that this is part of a dissertation study designed to examine the experiences of international graduate students as they participate in a peer mentor circle program and that my absence in one or more of the meetings will negatively impact the results of the study. I agree to provide at least 24-hour notice to the facilitator, Brittany Davis bmd35@txstate.edu, if I am unable to attend a meeting.

________________________________________________________________________
Participant Signature

________________________________________________________________________
Participant Signature
Appendix E: Demographic Data Form

<table>
<thead>
<tr>
<th>Name &amp; Pseudonym</th>
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</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Gender identity</td>
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<tr>
<td>Race/ethnicity</td>
<td></td>
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<tr>
<td>Country of birth</td>
<td></td>
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<tr>
<td>Last country lived (if different from country of birth)</td>
<td></td>
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<tr>
<td>Marital status</td>
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<tr>
<td>Employment history</td>
<td></td>
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<tr>
<td>Educational history</td>
<td></td>
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<tr>
<td>Program enrolled</td>
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<tr>
<td>Other notes as deemed important to researcher (i.e. working an assistantship or other job, has children, pursuing multiple degrees, commuting more than 30 miles)</td>
<td></td>
</tr>
</tbody>
</table>
Appendix F: Interview Protocol

30-45-minute, semi-structured interview with all new student participants between meeting two and three to serve as a check-in

Participant name & pseudonym:
Date of interview:

Tell me about your time here so far.
What is a typical day like for you now that you are here?
   Tell me about your biggest challenges. (probe)
   Tell me about your biggest triumphs. (probe)
   What has been your biggest change or adjustment so far? (probe)
Have you made friends in class? Tell me about this experience.
How are you feeling in your classes? Talk with me about your relationships/interactions with your instructors? (probe)
   How comfortable do you feel approaching your instructors with questions and concerns about the course?
   Do you feel comfortable speaking up in class? Sharing your thoughts? (why, or why not?)
   Which on-campus resources have you used? Which have been most useful? (probe)

Tell me about your experiences in the peer mentor group meetings. (probe: What aspects of the meetings have been most useful so far? Which aspects of the meetings have not been useful?)

What would you like to see added or changed o the PMCs? (probe) Why do you think these changes would be useful for you and your peers?

What other thoughts would you like to share about the PMC program or your time here so far?
Appendix G: Mentor Focus Group Protocol

Date of interview: [between meeting 2-3]

Warm up:
Let’s each go around and talk about how our semester is going so far. What are the highlights/positives and what are the challenges/negatives?

Content:
Now, please each of you tell me what you think about the PMCs so far? (probe: what have been most useful? What needs improvement?

What, if anything, do you think the new students are gaining from participating in the program? Please explain.

What, if anything, do you think you are gaining from participating in the program? Please explain.

Have you made personal connections outside the group meetings with any of the participants? If so, please explain.

Have you observed any changes among the new student participants in terms of making friends, sharing more in the group meetings, overcoming challenges, or similar? Please explain.

What other thoughts do you have about the program (both the new students and your own) so far?

Closing:
What do you think is missing from the program?

What changes do you suggest to future meetings? (probe)

What other thoughts would you like to share about the PMC program or your time here so far?
Appendix H: Final Focus Group Protocol

Three focus groups at the conclusion of the PMC program

Participant-advisors:
New Student Participants:
Date:

Warm up:
Let’s each go around and talk about how our semester is going so far. What are the highlights/positives and what are the challenges/negatives?

Have you made friends in class? Tell me about this experience.

How are you feeling in your classes? Talk with me about your relationships/interactions with your instructors? (probe) How comfortable do you feel approaching your instructors with questions and concerns about the course?

Which on-campus resources have you used? Which have been most useful? (probe)
   Do you feel comfortable speaking up in class? Sharing your thoughts?

Content:
Now that we are done with the official group meetings, tell me what you think about the peer mentor group meetings. (probe: What aspects of the meetings have been most useful? Which aspects of the meetings have not been useful?)

Tell me about what you were hoping would be included in the meetings. (probe)

Tell me what was missing that you would have found useful. (probe)

Compared to your first week here, how do you feel now? What has been most useful over the first six or seven weeks of living here?

Do you think you will keep in touch with any of the other participants after this? Why or why not?

Using three words, how would you describe your experience with the peer mentor groups?

If you had the option, would you participate in the peer mentor groups again?

Closing:
Do you feel you belong as a member of this campus community? Why or why not?

What other thoughts would you like to share about the PMC experience or your time here?
In what ways, if any, has participating in the PMC group assisted you with working toward academic success?

What do you like to do when you’re not in class? (to see how integrated they are on campus/in the community)

Do you feel like you fit in with your peers, program, on campus? Please explain why or why not.

What are 3 most important learnings you can identify by participating in the PMC experience?

What other thoughts do you have about the PMC experience?

For current international students (PAs) only:

What do you think the new students gained from the experience? Why do you think this? Can you give me an example to help explain?

What might you have gained from the experience of being a part of the PMC group?

Have you made personal connections outside the group meetings with any of the participants? Will you continue these connections?

What do you think was missing from the experience?

What changes, if any, have you witnessed among new students?

What changes, if any, have you noticed about yourself during this program?

What changes should be implemented to future iterations of this experience?

What other thoughts do you have about the experience (both for the new students and for yourself)?

Knowing what we know now after the conclusion of the experience, what should we do for future new, incoming international graduate students? (other programing or tangible recommendations?)
Appendix I: Researcher Self-reflexivity Questions

Some of these questions include:

- How do I present myself? The research topic and goals? What informs these choices?
- What influences the choices I make around communication with participants within and beyond the interviews and other forms of data collection?
- What influences the kinds of communication I value from and with research participants?
- What are the kinds of knowledge of information I tend to value and gravitate toward more than other kinds (e.g., verbal vs. nonverbal, topics that capture my attention)? And what might I be missing as a result?
- Do I listen carefully? How might I improve my listening skills?
- Do I impose – either explicitly or implicitly – my opinions or value judgements during data collection and broader interactions with participants and, if so, in what ways?
- What assumptions lie underneath my data collection instruments (e.g., the content and wording of questions, their sequence)? The ways that I implement them?
- Am I probing for context and specifics adequately? How can I improve upon this?
- Do I cut people off or talk over them? Are there patterns related to when I seem to do this?

Ravitch and Carl, 2016, p. 116
## Appendix J: Observation Protocol

<table>
<thead>
<tr>
<th>Date &amp; Meeting Number</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe setting</td>
<td></td>
</tr>
<tr>
<td>Challenges mentioned</td>
<td></td>
</tr>
<tr>
<td>Was there mention of transition or similar? By whom?</td>
<td></td>
</tr>
<tr>
<td>Was there mention of relationship development? By whom?</td>
<td></td>
</tr>
<tr>
<td>Description of tone or energy or participants</td>
<td></td>
</tr>
<tr>
<td>Is there a power dynamic or differentiation between roles of current and new international students?</td>
<td></td>
</tr>
<tr>
<td>Any signs or mention of personal growth or triumph? By whom?</td>
<td></td>
</tr>
<tr>
<td>Do participants seem to be reacting to or learning from other participants’ stories or shared experiences? How so?</td>
<td></td>
</tr>
<tr>
<td>What is the discussion around adapting to new social norms?</td>
<td></td>
</tr>
<tr>
<td>Have participants mentioned support? From whom and from where?</td>
<td></td>
</tr>
<tr>
<td>Have participants discussed making friends outside the program participants? Is there evidence of their feeling like they “fit in”?</td>
<td></td>
</tr>
<tr>
<td>Who is putting effort towards fitting in and belonging, and how?</td>
<td></td>
</tr>
<tr>
<td>Any examples of belonging/making friends and connection to academic success?</td>
<td></td>
</tr>
</tbody>
</table>
# Appendix K: First Cycle Coding: Literature and Questions Guiding Analysis

<table>
<thead>
<tr>
<th>According to the literature, transitions are:</th>
<th>Coding questions</th>
<th>Type of coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>frightening (Anderson, Goodman, and Schlossberg, 2001)</td>
<td>what were their initial thoughts as they began this new journey?</td>
<td>Emotion</td>
</tr>
<tr>
<td>turning points in an individual’s life, which incites personal growth (Bridges, 1980)</td>
<td>how do the students feel they have changed or grown over the first five weeks?</td>
<td>Holistic</td>
</tr>
<tr>
<td>a catalyst for adult learning and that much learning in adulthood occurs in response to life changes Aslanian and Brickell (1980).</td>
<td>What learning has come from this change? Navigating the social nuances of American culture? Transpiration? Food?</td>
<td>Holistic</td>
</tr>
<tr>
<td>perspectives, recognizing if the transition is viewed as positive, negative or neither, or if they feel this transition will influence their future is important as it will determine “the impact of the transition, the perceived challenges and meaning this holds, and the specific needs for coping” (Anderson et al., 2011, p.44).</td>
<td>What emotions and feelings describe their initial thoughts about this transition?</td>
<td>Emotion</td>
</tr>
<tr>
<td>contextual - they influence the individual’s life, such as gender, ethnicity, and geographical location (Fouad &amp; Bynner, 2008). Contextual factors related to the transition may influence the perceived choices the individual thinks they have (Anderson et al., 2011).</td>
<td>Home country Program they are in Cultural/religious background</td>
<td>Holistic</td>
</tr>
<tr>
<td>impactful - the transition impacts the daily life of the individual must be considered. Transitions can impact “relationships, routines, assumptions, and roles” (Anderson et al., 2011, p. 47).</td>
<td>How has their day-to-day routine changed? What impact has this transition and the mentor groups had on their relationships and roles?</td>
<td>Holistic</td>
</tr>
<tr>
<td>encouraging of familiarity “with the rules, regulations, norms, and expectations of the new system” (Anderson et al., 2011, p. 57)</td>
<td>In what was have the PMCs assisted with the transition to the new environment? What has been the biggest changes?</td>
<td>Holistic</td>
</tr>
<tr>
<td>assist the individual through the first phase, institutions must orient the individual in a way that provides support and guidance indicating what is expected of the individual in the new environment (Anderson, Goodman, and Schlossberg, 2011).</td>
<td>In what ways has the PMCs assisted with orienting students to the new environment?</td>
<td>Holistic</td>
</tr>
<tr>
<td>situational - including triggers, timing, control, role change, duration, pervious experience with a similar transition, concurrent stress, and assessment (Anderson et al., 2011).</td>
<td>Are any of these mentioned during the first interview? Are these addressed during the PMCs?</td>
<td>Emotional</td>
</tr>
<tr>
<td>inclusive of the self component, or personal characteristics such as gender, socioeconomic</td>
<td>How have these “self-components” influenced their experience in the</td>
<td>Holistic</td>
</tr>
<tr>
<td>status, age, culture, or state of health, and psychological resources (ego development, spirituality, resiliency, commitment) (Anderson et al., 2011).</td>
<td>PMCs? Specifically, what role, if any, does gender play in the PMC experience?</td>
<td>Pattern</td>
</tr>
<tr>
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<tr>
<td>in need of Support is where the institution comes in to provide guidance through the transition. Anderson, Goodman, and Schlossberg (2011) note that social support is often considered the key to handling stress.</td>
<td>Is social support present in observations and interviews? What support elements are mentioned in the interviews and in the group meetings?</td>
<td>Holistic Emotional</td>
</tr>
<tr>
<td>in need of acceptance, self-esteem boosting, personal connections, role models, guidance, comfort, and assistance through networks of friends, communities, and other relationships (Anderson et al., 2011).</td>
<td>Do participants mention any of the characteristics above either during group meetings or in interviews?</td>
<td>Emotional</td>
</tr>
<tr>
<td>in need of coping. Anderson, Goodman, and Schlossberg (2011) assert that there are three ways of coping: modifying the situation (hope and optimism), controlling the meaning (reframing), and managing stress after transition (denial).</td>
<td>Which coping strategies do the participants exhibit?</td>
<td>Emotional</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Literature indicates sense of belonging:</th>
<th>Coding questions</th>
<th>Type of coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>reflects the need to belong or fit in with a group is part of human desire (Yao, 2015). Though belonging and love is a part of this theory, the details of this component is not explored thoroughly (Anant, 1969).</td>
<td>Is there mention of belonging, fitting in, or something similar?</td>
<td>Emotion</td>
</tr>
<tr>
<td>includes (1) the experience of being valued, needed, or important with respect to other people, groups, or environments (Hagerty, Lynch-Sauer, Patusky, Bouwsema, and Collier, 1992)</td>
<td>Do participants mention feeling valued, needed, or respected within a group or people or within certain environments?</td>
<td>Emotion</td>
</tr>
<tr>
<td>includes (2) the experience of fitting in or being congruent with other people, groups, or environments through shared or complementary characteristics” (Hagerty et al., 1996, p. 236).</td>
<td>Do participants discuss feeling congruent or compatible with groups of students or in certain environments</td>
<td>Emotion</td>
</tr>
<tr>
<td>has precursors, or “energy for involvement, potential and desire for meaningful involvement, and potential for shared complementary characteristics” (Hagerty, et al., 1996, p. 236).</td>
<td>Do participants show interest and energy for involvement? Do they discuss meaningful or impactful involvement?</td>
<td>Holistic Emotion</td>
</tr>
<tr>
<td>has Consequences of belonging include “psychological, social, spiritual, or physical involvement, attribution of meaningfulness to that involvement, and establishment or fortification of fundamental foundation for emotional, cognitive, and behavioral responses” Hagerty, et al., 1996, p. 236).</td>
<td>What are their responses or experiences based on the involvement with other groups?</td>
<td>Holistic</td>
</tr>
<tr>
<td>suggests that determined that gender differences can influence expressions, patterns of relatedness, and processes of</td>
<td>Do the perceptions and experiences of women differ from male participants?</td>
<td>Holistic Emotional</td>
</tr>
</tbody>
</table>
**sense of belonging.** Their assumption was that **women place greater emphasis on relationships than their male counterparts** (Hagerty, Lynch-Saucer, Patusky, and Bouwsema, 1993). However, much research supports the association between social support and well-being regardless of gender (Cohen & Syme, 1985; Ganster & Victor, 1988; Coyne & Downey, 1991).

**maintains that the more involved and **socially connected a student is in college, the more likely they are to be successful** (Astin, 1984).  

Do participants feel an advantage in the classroom if they have more friends?  

Do those who are more socially connect indicate more success?  

Emotion

Yao (2015) maintained that sense of belonging in a college setting includes the “students’ perceptions of institutional support and relationships with others, all of which combine to elicit feelings of connectedness and affiliation with the campus community” (p. 8).

Do participants feel support from the institution, outside of the PMCs?  

Do participants discuss feeling connected with the campus community?  

Holistic  

Emotion

Due to the relational nature of sense of belonging, **peers play a critical role in achieving belongingness** (Yao, 2015).

In what way have the other participants in the PMCs influence sense of belonging?  

Holistic

Feelings of **belonging can positively impact a students’ academic achievement and persistence** through their degree program (Hausmann et al., 2009).

Do participants describe feeling supported and encouraged to persist through their program because of their peers?  

Emotion

Yao (2015) argued that institutions should assist international students in achieving sense of belonging rather than attempting to integrate students to US campuses as belonging a more sustainability way to ease the transition. Thus, she maintained that international students should feel like members of the community rather than forced to integrate with the dominant culture.

Do participants feel they can be themselves (represent their culture, values, and beliefs) while still belonging?  

Emotion
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