Spring 5-8-2018

THE RELATIONSHIP OF MENTORING ON SENSE OF BELONGING, SELF-EFFICACY, AND STUDENT PERCEPTION OF MENTORSHIP IN FIRST-GENERATION COLLEGE STUDENTS

Chelsea Craig
chelsea.craig5293@gmail.com

THE RELATIONSHIP OF MENTORING ON SENSE OF BELONGING, SELF-EFFICACY,

AND STUDENT PERCEPTION OF MENTORSHIP

IN FIRST-GENERATION COLLEGE STUDENTS

By

CHELSEA E. CRAIG

A Thesis

Presented in Partial Fulfillment of Requirements for the

Degree of

Master of Science in First-Year Studies

Faculty of First-Year and Transition Studies
Accepted by:

Danelle Dyckhoff Stelzride Ph.D., Chair

Stephanie M. Foote Ph.D., Committee Member

Jennifer Wells Ph.D., Committee Member

Spring 2018

Dedication

To the talented, effervescent, dynamic and powerful First-Gen Owls. I believe in you, I am in

awe of you, and I am so grateful for each and every one of you.

Acknowledgements

There are so many people that make up my amazing support network. First and foremost, I'd like to thank my committee for dedicating their time and their knowledge to my scholarly journey. Dr. Danelle Dyckhoff Stelzride, Dr. Stephanie Foote, and Dr. Jennifer Wells – I could not have done this without you. Thank you all for being such inspiring scholars and for being such fantastic role models. I am honored that you took the time out of your busy schedule to help me to be the best scholar. Your never-ending encouragement and advice has kept me afloat, and I will always be so grateful for your words and your willingness to cheer me on.

Thank you to Kathryn for being a voice of reason, advice, and never-ending support. You are always there with a listening ear and a shoulder to cry on. I would have been lost without your guidance, and I will always be so grateful for your friendship. I admire you immensely and I'm so honored to call you my friend.

Thank you to all of my friends (Alyssa, Melissa, Laura, and my favorite Book Club) who have understood my lack of a social life and were my cheerleaders every step of the way. I'm sorry I had to skip so many fun nights to write my thesis, but I promise I'll make it up to each and every one of you. Thank you for listening to me gush about my research and for understanding that there wouldn't be a time when I was without a book in my hand to use in the literature review. You all allowed my passion to be your passion, and I count myself lucky to have all of you on my side.

To Sharon Brownlow, thank you for being so understanding and compassionate and for always checking in. Knowing that you supported me as a scholar as well as your employee has meant the world, and I cannot thank you enough for everything that you do. To Donald Coleman, thank you for taking a chance on me and for giving me an opportunity to work in a world that

allowed me to follow my passions. I look up to you a lot, and I'm happy to call you both a colleague and a friend.

To Megan, Mom, & Dad - thank you times 2 million. There hasn't been a time when you all have not pushed me to be my best self, and I hope you know how much I appreciate everything that you all do for me. I'm truly grateful to have you three as my family. I'm a lucky kid.

Thank you to Seth for understanding that a thesis makes a long-distance relationship even harder and believing in me throughout the entire process. This journey hasn't been easy, and even though you aren't writing a thesis, you've spent enough time with me to know all of the ins and outs of the process. I am so grateful our paths crossed three years ago. I can't imagine life without you. I love you.

I could go on for hours about all that you each mean to me, but I have a thesis to defend! I'm so grateful for all of you, and I could not have done this without every single one of you. Cheers!

TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

Mentoring programs have been implemented at institutions across the nation, with both intentional collaborations with different subpopulations of students and random pairing of mentees and mentors (Kuh et al., 2010). For first-generation students, mentoring may be a vital component of success. Since there was an increase in self-efficacy and sense of belonging in this study, the use of mentorship with first-generation students could become a more predominant and recognized practice, therefore helping this population of first-year students to become less "invisible" and more supported and celebrated. To measure the effect of mentoring on various aspects of collegiate success, approximately 40 first-generation students were surveyed during their first semester of enrollment at Kennesaw State University. These students were all enrolled in a "First-Gen Owls" Learning Community designed specifically for first-generation students at Kennesaw State University. These students were also connected to a group of faculty and staff mentors that were asked to help to motivate, support, and coach the students in this learning community. After completing the survey, students and mentors were asked to continue to connect on their own terms, allowing connections to form. At the conclusion of the student's first semester, a follow-up survey was given, along with the facilitation of a focus group. As a result of this study, it was found that mentorship had a positive correlation with the student's sense of belonging, self-efficacy, and perceptions of mentoring. This study also found that the student's academic self-efficacy declined as the semester progressed. It was also found that students believed that the information shared by their mentor was impactful, comforting, and assisted the student in feeling more supported at the institution.

CHAPTER 1

Introduction

Summary

First-generation students are becoming the "new majority" across college campuses, and there is existing research that supports the benefits these students receive when they participate in programming designed specifically for them (Ward, Siegel & Davenport, 2011). First-generation students have been studied across many years (Choy, 2001) and in many different environments (Ward, Siegel & Davenport, 2011; Jenhagir, 2010). While there is not one specific definition used across college campuses today (Ward, Siegel & Davenport, 2011), it is important for practitioners to recognize that this population is an important one, and develop strategies to ensure first-generation college students are supported throughout their collegiate experience.

The definition of a first-generation student can vary, depending on the institution, but the definition used for the purpose of this research is derived from a definition at Kennesaw State University in order to identify students eligible for a first-generation student learning community. For the "First-Gen Owls Learning Community" at Kennesaw State University, the definition of a first-generation student is written as "students whose parents have not completed four-year degrees from institutions in the United States" (Kennesaw State University, 2017). Alternate definitions include students whose parents have no postsecondary education experience (Redford & Mulvaney Hoyer, 2017) and students whose parents have not obtained a bachelor's degree (Davis, 2010).

First-generation students are more likely to come from households with an income between $20,001 and $50,000 (Redford & Mulvaney Hoyer, 2017). First-generation students are also more likely to have a disability, have or care for dependent children, and to be single parents

(Jehangir, 2010). First-generation students were more likely to attend a public, 2-year institution than their continuing generation counterparts (Redford & Mulvaney Hoover, 2017). Additionally, this student population is more likely to live off-campus, attend an institution local to their hometown, be enrolled as a part-time student, and to have a full-time job while enrolled at a college or a university (Jehangir, 2010).

First-generation students have been suggested to face a multitude of challenges when entering an institution, such possibly experiencing poor academic integration, social integration, and or having to balance work or family obligations alongside their academic work (Katrevich & Aruguete, 2017). Some studies have also suggested that, in the collegiate setting, first-generation college students are faced with a lack of social capital, which is defined as "a way of defining the intangible resources of community, shared values and trust" (Field, 2008, p.1) and the lack of this collegiate knowledge may leave a first-generation student with a lower sense of confidence and higher anxiety surrounding their ability to manage the academic course load, as well as the ability to navigate daily life on a college campus (Jehangir, 2010). Subsequently, first-generation students are almost four times as likely to cease their enrollment at an institution after the first year has concluded (Jehangir, 2010).

While these students may be at risk for a low sense of belonging than their peers and to higher attrition rates, first-generation students also have many qualities that their continuing generation student counterparts may not possess. First-generation students may put more time into studying than their counterparts and hold a stronger sense of determinism in their work and studies (Ward, Siegel & Davenport, 2012). First-generation students tend to have a stronger sense of resilience than their continuing generation peers, which can help these students better

handle stress and adapt to situations more aptly than continuing generation students (Alvarado, Spatariu, & Woodbury, 2017).

Upon entering higher education, a first-generation student may feel a sense of disconnect or that they do not belong; evidence of an "imposter syndrome", or the belief that one is inadequate when compared to one's peers (Jehangir, 2010). This can produce a feeling of disconnect from one's surroundings or community. A person's sense of belonging is a fundamental need and contains aspects of commitment, engagement and connectedness (Anderson-Butcher & Conroy, 2002). This need is fostered through relationships a person has as well as the person's social settings (Baumeister & Leary, 1995). Dohnne (1624) stated, "No [person] is an island" and centuries later, this sentiment still rings true (Baumeister & Leary, 1995). No person is meant to be isolated. In 1943, Maslow's publication of the Maslow's Hierarchy of Needs listed belonging in the third tier of the hierarchy, preceded by physical needs and security (Maslow, 1943). Sense of belonging was first measured in youth by a chartered Boys and Girls Club. Researchers utilized a subscale for a sense of belonging, courtesy of the Arizona Prevention Resource Center (Anderson-Butcher & Conroy, 2002) and this subscale has continued to evolve from measuring exclusively children to a variety of subpopulations. Now it is found that belonging can be just as vital as academics as a variable of the collegiate experience (Strayhorn, 2012). This sense of belonging impacts the student's experience, even contributing to the student's persistence to a degree (Strayhorn, 2012). Practitioners should consider this factor of collegiate experience as they continue to work with students, regardless of the practitioner's role at an institution of higher education.

Mentorship helps to create a sense of belonging. Mentoring is a practice found in many disciplines, careers, environments, and relationships across the world. A mentor, defined as "a

trusted counselor or guide," (Merrim-Webster Dictionary, 2017) is one that can assist in the development of a younger colleague through interactions had between both the mentor and the protégé. First mentioned in a Homeric work in written about the Trojan War, the presumed role of the mentor has not changed in nature in thousands of years. A study held in 1978 at Yale University surveyed 40 men, all of whom named the relationship with a mentor an important influence in their lives (Barondress, n.d.). Aspects in which the mentors supported the men included adjusting to the social world, adjusting to a career, enhancing skills, and "acquainting him or her with values, customs, resources and cast of characters," along with being a role model that the "protégé can seek to emulate" (Barondress p. 7). Mentoring allows a protégé to learn through example and emulate the qualities that he or she aspires to attain.

With a mentor, a first-generation student has someone to turn to in order to answer any questions that he or she may have, and these relationships provide the first-generation students with a role who may emulate the values and practices of someone in his or her collegiate community. The mentor can help contribute to the sense of belonging that a first-generation student experiences, and is able to help the student should any need for assistance arise. The mentor may also be a source of knowledge in regards to "opportunity orientation" which Richardson & Skinner (1992) define as "the beliefs students develop about valued adult roles and about the part played by education in structuring access to these roles" (p.30). Students can see a mentor in a role in which the student may begin to see his or herself in, and then the mentor can outline the process and the requirements of what it takes to get the student to that point.

The role of a mentor can provide many outcomes and can shape the collegiate experience, particularly for a first-generation college student. Without a mentor or interpersonal connection, it is possible that a first-generation student may not have an institutional connection

in which he or she feels comfortable discussing concerns or posing questions that he or she may have, and they may, ultimately, have a more difficult time adjusting to the new environment. Difficulty to adjust may inhibit the student's persistence to graduation and ultimately ability to earn his or her degree (Budge, 2006).

Statement of the Problem

In this research study, first-generation students were measured in sense of belonging and self-efficacy - two specific areas of their academic, social and collegiate success as it correlates with presence of a mentor. A focus group was also conducted in order to gain insight to the students' perception of mentorship during their first year of enrollment at Kennesaw State University.

Sense of belonging. Sense of belonging will affect first-generation students and their desire to persist at an institution. The student's sense of belonging will touch on their ability to make connections - to other students, to faculty and staff, within organizations, or even to their environment. Since self of belonging is in "heightened importance in certain contexts" and is "related to, and seemingly a consequence of, mattering" (Strayhorn, 2012, p. 21), the identification of this subset of academic adjustment in this research study is crucial.

Self-Efficacy. Self-efficacy, which is the belief that one achieve what he or she wishes to achieve, is a foundation of human behavior (Bandura, 1997). This belief is a resource that students can call upon in order to help themselves adapt in a new environment, allow the student to self-motivate, and simply put, push themselves to believe that they can. If a first-generation student does not have (or acquire) a sense of self-efficacy, then he or she may feel the same negative side effects that stem from a lack of sense of belonging - isolation, anxiety, or loneliness. For first-generation students, isolation impacts the student's level of involvement, and

ultimately his or her persistence in higher education (Jehangir, 2010). Additionally, students who do not have self-efficacy may feel as though they are not able to complete tasks required of them and may begin to feel down, embarrassed, or discouraged (Urdan & Pajares, 2006). A strong sense of self-efficacy in first-generation students can allow them to believe in their ability and will help their motivation and their ability to take on difficulties or adversities (Urdan & Pajares, 2006).

Purpose of the Study

The purpose of the study was to examine the effect of mentoring on the sense of belonging, and self-efficacy in first-generation students in a collegiate setting through the acquisition of both qualitative and quantitative data. Since first-generation students are historically underrepresented in research and often go unnoticed in a collegiate setting, it is important to measure the impact of a formalized mentoring practice in hopes that the findings of this study could impact mentorship programming in institutions of higher education.

Research Questions

This study aimed to answer the following research questions:

- What is the relationship in regards to mentorship between a faculty or staff member and a first-generation student on the student's sense of belonging at an institution?

- What is the relationship in regards to mentorship between a faculty or staff member and a first-generation student on a student's score on a validated self-efficacy scale?

- What are first-generation students' perceptions of mentoring at the conclusion of their first semester enrolled at an institution?

Through these questions, this study will aim to contribute to the field of First-Year Studies.

Limitations

For this study, there were a few limitations to the overall success to the study. First and foremost, all of these students were involved with a learning community focused on helping first-generation students to succeed in their collegiate venture. It cannot be determined if the mentoring that is being studied was the sole reason for any change in the students' sense of belonging, self-efficacy or perceptions of mentoring. Secondly, this survey was administered after some students were presently in the process of meeting with the mentors, meaning that the first survey administered may have been completed during the process rather than before it. Another limitation to this study is that the learning community that served as the population for research did have some students who did not fall into the definition of a first-generation student. The final limitation that this study encountered is that there was not any regulation on how many times the mentors met with the students nor was there a training program to ensure the same type and quality of mentorship was provided to the students in the study. These components to the study could be threats to the possible variability to the study, and may affect results of any replicating the study in the future.

Definitions

For the purpose of this study, the following definitions will be utilized throughout this thesis:

First - Generation Student: A student whose parents did not complete a four-year degree from an institution in the United States (Kennesaw University, 2017c).

Learning Community: A grouping of academic courses in which a student is enrolled. These courses can be thematically linked or academically linked by major or by program.

Mentor : One who meets with a student in order to share advice, information, and resources with a student outside of a scheduled class time.

Self-Efficacy: A belief in oneself that one can produce desired effects of their actions (Urdan & Pajares, 2006).

Sense of Belonging: A students' perceived social support on campus, a feeling or sensation of connectedness, the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the group or others on the campus (Strayhorn, 2012).

Overview

The following thesis will be comprised of five total chapters. The subsequent chapters will include a review of the literature, a description of the methods used to study the research questions, a description of the results of the study, and a discussion of the results, as well as implications of the research and any future recommendations for the research. All additional documents utilized, as well as a list of all resources, will be included in the appendices.

Conclusion

While many of these topics have been researched in regards to first-generation students, the effect of mentorship on both sense of belonging and self-efficacy has not been researched in depth. The relationships created through mentorship may be influential to the variables presented in this study. The addition of this research study to the current research can help to show the influence of mentorship on the first-generation student's transition, and can help practitioners to understand what influence this practice holds for students

CHAPTER TWO

Literature Review

The focus of this study was to examine the effect of mentoring on self-efficacy, sense of belonging, and perception of mentorship in first-generation students. While mentoring and its effect on first-generation students has been investigated in previous studies (Hegrenes, 2010), studying this effect that mentoring has on sense of belonging and self-efficacy in a cohort of students in a first-generation student learning community remains unique.

This literature review will address three main areas of research in relation to first-generation students and their perception of mentorship, sense of belonging, and their perceived self-efficacy. The first section will delve further into information on first-generation students. The second section will discuss the current literature on sense of belonging in a collegiate setting, and factors that influence a student's sense of belonging in higher education. The third section will outline the research and literature on the concept of self-efficacy as it applies to higher education and a student's experience in a collegiate setting. Throughout the review of literature, research on mentorship in regards to each of the subsets of information will be presented in efforts to examine the potential impact that mentoring may or may not have on the criterion being examined in this research study.

First-Generation Students

First-generation students have seen themselves increasingly represented in studies and literature in recent history (Herenges, 2010;, Ward, Siegel, & Davenport 2012; Choy, 2001; Jehangir, 2010). In fact, the "number of first-generation students enrolled in American colleges and universities has been report over the past thirty years to be anywhere from 22 percent to 47

percent (Choy, 2001)" (Ward, Siegal & Davenport, 2012, p. xiii). In "Students Who Parents Did Not Go to College: Postsecondary Access, Persistence, and Attainment", Choy (2001) outlines the experiential aspects of college that first-generation student experience and how to best support them through an analysis of studies conducted of students in an education system. She utilizes the studies held by The National Education Longitudinal Study (which studied a cohort of 8th graders every two years), the Beginning Postsecondary Students Longitudinal Study (which was comprised of students enrolling in postsecondary education for the first time), and the Baccalaureate and Beyond Longitudinal Study (which looked at following up with students who completed their degrees in 1992 and 1993). The information that Choy (2001) found in the analysis of these three studies held is considered a foundation in the literature on first-generation students.

In her work, Choy (2001) points out that the majority of the first- generation students from these studies were either Black or Hispanic, and that the first-generation students are more likely to be from homes in the lowest income quartile, with 50% of the families from this sub-population of students earning $25,000 or less annually. Choy (2001) also found that the education obtained by the parents of the student have a large impact on the student's enrollment in college, whether the student intended on going to a 4-year institution while in high school and instead went to a 2-year institution, or if the student decided not to enroll in an institution of higher education entirely. Choy (2001) also underscores the importance of academic preparation, having educational expectations (and reinforcing these expectations), and completing the proper tests and application processes, which helps make the case for institutional programming that focuses on supporting first-generation student through the academic transition. (Kuh et al., 2010). Finally, Choy (2001) found that, after three years, first-generation students are less likely

to remain enrolled at a four-year institution than students whose parents earned a four-year degree from an institution. This lets practitioners understand the importance of making sure that these students not only enroll at an institution, but that the students persist through their educational program so that the student is ultimately able to earn a degree from the four-year institution.

The work that Choy (2001) has contributed to the study of first-generation students helps practitioners understand what differentiates this population from their counterparts at an institution. Furthermore, Choy's research provides a robust description of the background of first-generation students, as well as examining different variables that may have contributed to the student's successful enrollment at an institution, or the variables that kept a student from enrolling at a four-year institution. In, "First-Generation College Students: Understanding and Improving the Experience from Recruitment to Commencement", the authors looked at the experiences of first-generation students in higher education through a variety of lenses. It was found that "first-generation students are an often overlooked, marginalized group" that does not "look different from other marginalized groups" (Hand & Payne, 2008, p. 12) and that there are both similarities and differences that will come with supporting this group of students in a setting of higher education. Assistance for first-generation students should come in different phases, typically during the transition *into* a collegiate environment, and then during the student's transition *through* the collegiate environment. With a multitude of needs, first-generation students may face difficulties during their primary transition. These needs include issues such as academic adequacy issues, academic adjustment issues, social adjustment issues, realignment of expectations, independence issues, affiliation issues, and issues with understanding campus culture (Ward, Siegel & Davenport, 2012). While these issues are not exclusive to first-

generation students, it does show the "critical concerns" of first-generation students (Ward, Siegel & Davenport, 2012). Specific factors that may inhibit the success of first-year students include, but are not limited to, a difficulty in coping with academic requirements, feelings of being academically unprepared, lack of encouragement and support from family members, difficulty in creating community, lack of familiarity with the college enrollment process, lack of knowledge about campus life, and lack of knowledge regarding norms and campus-based resources (Ward, Siegel & Davenport, 2012). Specifically, these issues that first-generation students face may contribute to their ability to persist to a degree.

One of the main characteristics of first-generation students being successful is ability to scale-down their collegiate experience (Richardson & Skinner, 1992). Meaning first-generation students who are more successful are those who find a "niche" in the campus community, rather than facing or encountering the campus community as a whole. Finding a niche can involve finding a smaller physical space where the student feels comfortable both socially and academically, such as a spot in the library or an area outdoors where the student feels comfortable; finding a more focused direction in the student's studies; an identity in a group of peers; making connections with faculty and staff mentors; and scaling down expectations and goals to become more tangible and attainable for the student (Richardson & Skinner, 1992).

Another aspect of first-generation student success is collaboration, both across departments and across the community. As Choy (2001) pointed out, academic preparedness is crucial to a first-generation student's persistence to graduation at an institution. Richardson Jr. & Skinner (1992) recommend that colleges and universities work with the community and public schools to help first-generation students before, during, and after the collegiate transition. By reaching out to public schools, and assisting these students in their collegiate preparation while

they are still enrolled in secondary education, these students may feel a higher sense of academic preparedness and therefore, be confident during their collegiate transition.

Inter-departmental collaboration can also greatly enhance the experience of first-generation students. When departments to work together and create programming for first-generation students that is deliberately targeted at serving this particular population of students, it can help students to scale down their academic resources into fewer, yet more effective, options, which ultimately can these students to succeed.

On-campus programming can be beneficial for first-generation students, especially programs that encompass numerous aspects of the collegiate experience (Kinzie et al, 2010. Inkelas et al, 2007). In a 2007 study, researchers analyzed data from 34 postsecondary institutions and found that students involved with a living/learning community, which allows a student to both live on-campus and enroll in classes with the same cohort of students, were more likely to experience an easier transition into college, both academically and socially, than the first-generation students who were not involved with this program (Inkelas et al., 2007). The living/learning community allowed students to create a strong cohort of peers that transcended the classroom relationship to become a part of the student's social experience at the institution. Additionally, faculty and staff involved with the program were ingrained in the student's experience in ways that existed outside of the classroom. This type of program allowed students to have an easier transition, which can help the first-generation student to persist through their collegiate experience to degree completion.

In recent research, the paradigm surrounding low-income or "disadvantaged" student populations is beginning to shift from that of a "deficit" perspective to one of a more positive and aspirational perspective (Fox, 2016). Rather than focusing on what first-generation college

students lack, or ways that these students are disadvantaged as compared to their continuing generation counterparts, an empowered framework focuses on the unique positive attributes that students bring to their communities and to their experience in higher education. For example, first-generation students have been found to have more resilience than students who are continuing generation students (Alvarado, Spatairu, & Woodbury, 2017) and are better able to adapt to situations (Alvarado, Spatairu & Woodbury, 2017). Using this framework allows practitioners to help first-generation students see how they are special, and can use their experiences to succeed, rather than stacking the odds against this population of students and letting them know ways in which they are lacking as compared to their counterparts.

Research on first-generation students has helped practitioners to learn what the characteristics of first-generation students in the current postsecondary educational system are, what challenges this population of students face, and how first-generation students can be supported. The current literature shows the trends in research on these students, but also shows the omission of studies in regards to intentionally mentoring this population during their first year at an institution. By providing a mentoring program to first-generation students, it allows the students to know that they are understood and appreciated, as well as helping students to scale down their community and meet people who will assist to support them at their institution. Mentorship allows the student to express their experiences and concerns on a one-to-one basis with an employee of the university in order to gain advice or anecdotal knowledge to assist the student in their concern. Specifically, mentoring allows the student to learn the language of the institution in a safe and supportive environment (Jehangir, 2010), and it gives the student an opportunity to create a connection with someone that he or she can trust. The presence of a mentoring community "can confirm faith that they will be a new home" (Parks, 2000, p.3). The

opportunity of mentorship takes the social or academic circle of first-generation students and narrows it down immensely, helping the student to find their niche in a more intimate and purposeful nature.

Mentoring

One way that faculty and staff can create support systems to assist the first-generation student population and address the difference in experiences between first-generation students and continuing generation students is to create a formal mentoring network. First mentioned in a Homeric work written about the Trojan War, the presumed role of the mentor has not changed in nature in thousands of years. The first literary acknowledgement of mentorship was documented when Homer wrote of Ullysess, who, upon leaving to fight in the war, left the guardianship of his son in the hands of his friend Mentor (Barondress, n.d.). The role of the mentor has manifested in a variety of forms, and has additionally been represented through many definitions. Budge (2006) collects eight varying definitions, including

> (1) a more advanced or experienced individual guiding a less experienced individual; (2) an older individual guiding a younger individual; (3) a faculty member guiding a student; (4) an individual providing academic advising; (5) an individual who shares their experience with another individual; (6) an individual who actively interacts with another individual; (7) an experienced individual guiding a group of individuals; and (8) an experienced, older individual who guides a younger, less experienced individual via internet resources. (p. 79)

Mentorship has been important in the transition and success of many college students because mentoring can give a student validation, something that Rendón (1994) says is "an enabling, confirming, and supportive process initiated by in-and-out of class agents that foster

academic and interpersonal development" (p. 44). Peer-mentoring, which is a form of mentoring that enhances the relationships between students and their counterparts at an institution, has become a popular practice in most settings of higher education (Kuh et al., 2010). Studies looking specifically at sub-populations of students in higher education, have found that minority students do receive a benefit from formalized mentoring programs (Redmond, 1990) and students who experience cross-cultural mentoring, in particular, also benefit from participating in these programs (Budge, 2006). Cross-cultural mentoring is a form of mentoring that allows students to connect with someone who is of a different culture than themselves. This allows the students to receive a unique viewpoint as a result of the mentorship.

At Fayetteville State University, faculty and staff work together to create a mentoring network for students that are experiencing difficulty during their first-year at an institution. Faculty members are given a roster of students and a name of a first-year seminar professor that acts as the student's mentor. If professor feels that the student in their course needs to be considered under the early-alert program, he or she contacts the mentor. The mentor then contacts the student and make the connections as to why the student may be experiencing difficulty (Kuh et al., 2010). It is the work of the faculty and staff to reach out to the student and make connections to ensure the student's ultimate success at the institution.

Equally important, is the positive experience gained is not just for the student, but the faculty or staff member who participates in the role of the mentor benefit from these experiences as well (Hansford, Tennent & Ehrich, 2010). Other positive impacts for mentors include: sharing ideas, personal rewards, engaging in reflection, and experiencing professional development (Ehrich et al., 2004). For mentees, some of the most anticipated outcomes when taking part in a mentorship relationship include counseling, empathy, and friendship (Ehrich et al., 2004).

Mentoring also allows a first-generation student to learn that they are both "knowers and teachers," and gives the student the opportunity to share their life experiences with someone else as a form of teaching from the student's cultural capital (Jehangir, 2010).

With the positive impacts such as mentoring including learning, personal growth, and development, it is important to note that mentoring must have some quality characteristics to ensure positive outcomes. In fact, Ehrich et al. (2004) points out that sometimes, bad mentorship worse than no mentoring at all. Other negative outcomes of mentorship that mentors experience include the lack of time or personalities not being compatible. More mentors than mentees reported problems with the mentoring relationship, and the majority of these issues stem from a lack of time or being spread too thinly in their work prior to beginning the mentoring relationship (Ehrich et al., 2004). Another area of contention is that of unclear roles or expectations, matched with a lack of training the mentors that work with mentees (Ehrich et al, 2004). This lack of understanding the process or the goals makes mentors and mentees alike confused on what they are supposed to do once the mentorship has begun. The literature on the subject of the negative effects of mentoring is not as vast as that of the positive effects, but it is important that faculty and staff understand all of the possible effects of mentorship with the student body. There is a gap in literature that examines the outcomes of mentorship on first-generation students, which this study seeks to help fill, specifically by examining the impact of mentoring on first-generation students' sense of belonging and self-efficacy.

Sense of Belonging

Maslow (1968) named sense of belonging as a third tiered need of humankind, categorized as a social need along with love and a sense of family connection. Sense of belonging has been studied in a variety of fields, but very few studies have placed sense of

belonging in its own realm of empirical research and instead simply view sense of belonging as a combination of frequency of interaction and a persistent sense of caring (Baumeister & Leary, 1995). While very few studies have focused exclusively on the development of sense of belonging in first-generation students, along with other social identities and populations (Vaccaro & Newman, 2016), studying sense of belonging in college students has been an increasingly popular practice (Strayhorn, 2012; Tachine, Cabrera, & Bird, 2017; Newnan, Wood & Harris, 2015). The research conducted by Strayhorn (2012) examines the concept of sense of belonging as an aspect of collegiate success, specifically with underrepresented students at an institution. Strayhorn (2012) states that sense of belonging takes on "heightened importance" in certain contexts, at certain times, and among certain populations enrolled at an institution and it is not static or consistent. Contexts in which sense of belonging is found as an important indicator of success can includes being a newcomer to an otherwise established group, such as being a first-year student at an institution, or if a student identifies as a marginalized population (Strayhorn, 2012). This context and identity can both readily lend themselves to fulfilling characteristics of first-year, first-generation students. Some programs, such as summer bridge programs or other intentional programs aimed at helping students transition to higher education, can greatly impact a student's sense of belonging in a positive way (Strayhorn, 2012).

With formalized mentoring programs appearing at many DEEP (Documenting Effective Educational Practices) institutions across the nation, it can be argued that these programs can be classified as a best practice. (Kuh et al, 2010; Barefoot et al, 2005 Strayhorn, 2012) DEEP institutions are institutions that have been studied and classified as exhibiting practices that have been evaluated and found to promote student success (Kuh et al., 2010). Programs implemented in these institutions may influence the sense of belonging that students experience at an

institution. Students who spoke frequently with faculty members and others at an institution had a "strong, positive association" between their interactions and their sense of belonging (Strayhorn, 2012, p.12).

Additionally, first-year seminars, and other best-practices in the field of first-year studies, often contribute to the sense of belonging students feel in the early college transition (Means & Pyne, 2017). In focus groups conducted by Hoffman et al. (2001), common aspects were found to enhance sense of belonging with first-year students from a variety of backgrounds and identities and participated in a learning community. The study concluded that students in the learning community found that it was easier to make friends and had a stronger academic support network. The students in the study also were found to have had a more positive interactions with and perceptions of faculty, more likely to feel valued by the faculty, and to have feelings of greater support from the instructor which made them feel more comfortable in the classroom setting as a whole (Hoffman et al., 2002). Participation in a learning community may also allow the student to find a space on campus where he or she finds a welcoming environment, rather than an environment that encourages the student to change themselves in order to fit into the landscape of higher education. As Jehangir (2010) pointed out, first-generation students report receiving a "message...that their cultural capital, language, and resilience are not of use here; rather, they must reshape themselves in the likeness of the status quo" (p. 34). Instead, giving the student a platform in which he or she can be their authentic self is a method of showing the student that he or she does belong at an institution of higher education.

If an institution provides a program that can enhance a student's sense of belonging, the student may find a higher level of satisfaction with the institution, as well as with the student's enrollment in the institution. This is also the case brought forth by the research conducted by

Gummadam, Pittaman and Ioffe (2016), which found that the sense of belonging in a school environment can positively effect a student's psychological well-being. In the same study, sense of belonging was also found to be positive influence on a first-year students' academic success (Gummadam, Pittaman & Ioffe, 2016). It is important that these programs are intentional and take place during the entirety of the school year. In a longitudinal study conducted by Hausmann, Scholfield and Woods (2007), it was found that sense of belonging declines as the academic year ensues, therefore providing evidence towards implementing year-long and persistent programs that will support first-generation students. With research in sense of belonging and first-generation students increasing, the correlation between mentorship and sense of belonging in this demographic of students is not commonly studied.

Self-Efficacy

In his 1977 work, Albert Bandura defined self-efficacy as "the conviction that one can successfully execute the behavior required to produce the outcomes (p.193)" (Weibell, 2011). Bandura (1977) also states that, if a person has a lower sense of self-efficacy, then the person may be less willing to put forth effort towards a task or project at hand. If a person has a higher sense of self-efficacy in a particular area, then that person is more likely to complete a task and have a higher confidence in oneself by doing so. Phinney and Haas (2003) used the concept of self-efficacy to measure a first-generation student's ability to cope in particular situations, finding that students who had a higher sense of self-efficacy were able to cope more successfully than students who had a lower sense of self-efficacy (Phinney & Haas, 2003). Through the journals collected in this study, the researchers observed the student's ability to cope depended greatly on their perceived support systems, as well as, their perceived ability to complete the tasks given to them in their academic programs (Phinney & Haas, 2003). While this study

efficiently evaluates the population of first-generation students in regards to their self-efficacy and coping mechanisms in stressful situations, researchers have not delved into the relationship between academic self-efficacy and first-generation students. However, there are studies that show that self-efficacy does, in fact, influence a first-generation student differently academically than it does their non-first-generation student peers (Wang & Castaneda-Sound, 2008). In a study conducted on 397 undergraduate students, it was shown that first-generation students reported lower levels of academic self-efficacy than did their counterparts (Wang & Castaneda-Sound, 2008). By utilizing the College Self-Efficacy Inventory, developed by Solberg, O'Brien, Villareal, Kennel & Davis (1993), the researchers were able to assess the student's confidence rate with their ability to complete specific academic tasks (Wang & Castaneda-Sound, 2008). The College Self-Efficacy Inventory also measures self-efficacy through three different subscales, including Course Efficacy (focusing largely on the academic tasks or projects that a student encounters), Social Efficacy, and Roommate Efficacy (Ramos-Sanchez & Nichols, 2007). A lower sense of self-efficacy in this population of students directs the attention of practitioners to the lower sense confidence that this population holds in comparison to the confidence that students whose parents did obtain a degree from a 4-year institution possess.

As practitioners, it is important to be aware of potentially lower confidence to better support and motivate the students in the first-generation population that one works with. The lack of self-efficacy in this population of students can stem from a variety of factors, including having weaker cognitive skills, being less involved with teachers in post-secondary schools, and having less familial support in their collegiate endeavors (Terenzini, Springer, Yaeger, Pascarella & Nora, 1996). Ramos-Sanchez & Nichols (2007) also state that the amount of life challenges faced by a first-generation student may be more than that of a non-first-generation student, and

because non-first-generation college student may not have experienced as many hardships, these students will hold more positive attitudes towards their abilities and collegiate performances as a whole. These life experiences may also assist in the student's ability to be more adaptive in their environment and to have more resilience in their academic tenure (Alvarado, Spatairu & Woodbury, 2017). It is also important that practitioners reiterate positive and empowering messages to students, and that they are capable, they belong, and they should be proud of their stories (Terenzini, Springer, Yaeger, Pascarella & Nora, 1996). Not only can this practice help to improve a student's sense of academic self-efficacy, but these affirmations may also contribute to the student's sense of belonging at an institution. While there is existing literature on self-efficacy in first-generation students, there appears to be a gap in research done on the correlation that the practice of formalized mentoring has with the presence of a student's reported self-efficacy.

Mentorship can directly impact a student's self-efficacy through the support and communication requested by Terenzini et. al. (2008). Mentors can use the conversations had with the students to help to support the student in finding their place in the community of higher education, to find pride in the student's journey and previous experiences, and to remind the student that, no matter the circumstances, he or she can always push forward to succeed. In the research conducted by Wang & Castaneda-Sound (2008), it was found that first-generation students have a lower sense of academic self-efficacy than their continuing generation student counterparts. A mentor can help a student to realize their academic (and non-academic) abilities, and help to create a sense of academic self-efficacy in students who may not have a positive sense of academic self-efficacy otherwise.

Conclusion

The research surrounding the various topics in this study has been approached in a variety of ways by a multitude of researchers. One omission is how these different aspects and components of a collegiate environment intersect with one another and can act as effects of the other's influences. While both mentorship and first-generation students have been studied independently in an institution of higher education, the two rarely have been studied together. The literature shows that how first-generation students may need additional support in their academic journeys than students whose parents did attend college, and implementation of programs that may elevate a student's reported sense of belonging is important to help students feel more as a part of the collegiate community rather than feeling as an outsider. Mentoring has been proven to provide support and counseling for the mentees, and this sort of support is what may be needed in order to enhance a student's confidence. Confidence can attribute to a student having a high sense of self-efficacy, particularly in the domain of academic self-efficacy. Specifically studying the effect of mentorship on sense of belonging and self-efficacy, along with the student's perception of mentoring, within a research population of first-generation students, may help to provide evidence toward a practice that can help first-generation students to feel more confident and more supported during their time at an institution.

CHAPTER THREE

Methods

First-generation students benefit greatly from institutional programs that are developed intentionally to support them to and through their first college year (Barefoot et al., 2005; Ward et al., 2012; Kuh et al., 2010). Existing research has demonstrated the ways in which institutional programs and initiatives have increased students' perceptions of self-efficacy, sense of belonging (Strayhorn, 2012, Inkelas et al., 2007, Terenzini et al., 1996), and similarly, these programs can have a positive impact on cultural and academic capital in first-generation students (Barefoot et al., 2005). A proven practice that assists students in feeling more confident and supported during their collegiate experience is the practice of formalized mentoring (Redmond, 1990). Mentoring, which can take many different forms, is a way to create connection, networks, and friendships. In higher education, mentoring is commonly seen through peer mentoring programs, where upperclassmen peers volunteer to help guide and support the incoming first-year students at an institution (Kuh et al., 2010).

This study aimed to answer questions surrounding the concept of mentoring and the effect that it has on first-generation students in three different aspects of collegiate life, particularly focusing on the relationship to student's sense of belonging and self-efficacy. The research questions that have guided this study include the following:

- What is the relationship in regards to mentorship between a faculty or staff member and a first-generation student on the student's sense of belonging at an institution?
- What is the relationship in regards to mentorship between a faculty or staff member and a first-generation student on a student's score on a validated self-efficacy scale?

●   What are first-generation students' perceptions of mentoring at the conclusion of their

first semester enrolled at an institution?

     The study looked exclusively at sense of belonging and self-efficacy while studying the

first-generation student population. This research sought to fill a gap in the existing literature

regarding first-year students by examining the practice of mentoring, and outlining any benefits

that a formal mentoring program can provide to the first-generation student population.

Research Design

     The research involved a mixed methods approach. For this research study, quantitative

data were collected in an effort to see data in a numeric form, allowing the researcher to have

tangible evidence of any growth or decline in the research variables (sense of belonging and self-

efficacy) in first-generation students. Additionally, the quantitative data was used to demonstrate

any observable differences in the sense of belonging and self-efficacy that the students reported.

The qualitative data was collected to give a voice to the numeric data, and to hear the perceptions

of the mentoring programs from the first-generation students involved in the study. No variable

was given more attention than the other and were equally as valuable to the results of the study.

Rationale

     For this study, the researcher wanted to create a strong base of data and evidence that

could be utilized to support one another in the research study. By allowing the students to share

personal narratives highlighting the impact that the mentoring experience had on their time thus

far at Kennesaw State University, the researcher was able to support the quantitative data that

had been previously recorded. While the responses between the surveys were not matched, and

there was no matching between the participants of the focus group and the survey responses, the

two forms of data collection were able to create an overarching view of the impact that the formal mentoring program provided the first-generation students.

Role of the Researcher

Since the researcher is both an employee and a student at Kennesaw State University, the mixed methods approach was also used to substantiate the data. The researcher worked as an advocate for first-generation students and was the coordinator for Parent and Family Programs at Kennesaw State University. Prior to this role, the researcher worked with the Office of Orientation and Transition Programs, and helped to facilitate the orientation sessions offered to first-year and transfer students at Kennesaw State University. The researcher also worked to the host the first-generation student mentor and mentee mixer that was held in September of 2017 as a "kick-off" to the mentoring program at Kennesaw State University. The researcher also visited the class to observe the lectures for a course assignment for the Master of Science of First-Year Studies program at Kennesaw State University. The students in the learning community had many opportunities to familiarize themselves with the researcher as to create a sense of trust and confidence, but this relationship was not impactful to the study in any way.

First-Gen Owls Learning Community

The data were collected from a population of first-generation students enrolled in the "First-Gen Owls" Learning Community at Kennesaw State University (KSU). The study ran multiple months, with the first survey being administered in October of 2017 and the second survey being administered in January of 2018. In the first semester, there were 45 first-generation students enrolled in the learning community, covering two different sections of the learning community. At the conclusion of the Fall 2017 semester, students were given the opportunity to register for the course for a second semester. The First-Gen Owls learning

community in the spring (second semester) was comprised of 21 of the 45 students from the previous semester. The first semester of the learning community consisted of two courses, KSU1101 (the first-year seminar offered at Kennesaw State University) and an English Composition course. First-generation students were recruited at orientations held during Summer 2017 and enrolled in the learning community during the class registration program. The courses in the learning community were designed to illuminate the journey of first-generation students during their first year of college, as well as to highlight some of the differences that may occur during a first-generation student's journey as compared to the journey of a continuing-generation student. The classes involved assignments that included outreach to local high school students who would be first-generation students if the student chose to attend an institution of higher education, videography assignments, meetings with the president of the institution, and presenting as a part of the "Learning Community Extravaganza" held later in the fall semester. Students were also assigned a writing assignment in the KSU1101 class that allowed the students to meet with mentors from the formal mentoring programs and write a reflection on their experiences in doing so. The mentoring assignment accompanied by the "Mentor/Mentee Mixer" which was held in late fall. The mixer was a way for mentees to mingle with a variety of mentors, and for the two populations to get to know each other in a casual environment. The mixer began with an ice-breaker and then transitioned into conversations in small groups that were guided by prompts. The goal of the conversation was to show the mentees and the mentors that there were similarities in their stories and their life experiences, as well as a way to highlight the unique differences between the people sitting around the table. The students and the mentors were then encouraged to continue conversations with the people they had met at the mixer, as well as continuing to meet with the mentors that the student had met during the assignment. This

event was led by the researcher, but was supported by the instructors of the courses. The instructors of the learning community were both first-generation students themselves. The two instructors assigned work unique to each course, but also assigned some tasks that could be applicable to both courses in the learning community.

Methodology

      Survey Instruments. For the quantitative data, the survey instrument used to collect data was an adaptation and combination of two previously existing inventories. The first instrument was that of the Sense of Belonging Scale Inventory created by Dawn Anderson-Butcher and David E. Conroy (Appendix A). The second instrument that was utilized and adapted was that of the College Self-Efficacy Inventory created by Solberg, O'Brien, Villareal, Kennel and Davis (Appendix B). The first inventory has ten questions that aimed at evaluating student perceptions of belonging at the university and asked specifically about their relationship with peers, the leadership at the institution, their instructors, and the institution itself. The inventory also has descriptions under each numerical response that corresponded with the number, with one meaning "strongly disagree" and five meaning "strongly agree". The second inventory has19 questions aimed at gathering data about an individual's ability to complete tasks that one may encounter in a collegiate setting, such as managing time effectively or keeping up to date with one's schoolwork. On this inventory, students are asked to rate their responses on a scale of zero to ten, with zero meaning "does not apply to me at all" and ten meaning "strongly applies to me". Each survey was administered twice, and the pre- or first survey was identical to the second or post-survey (Appendix C). The first survey was administered in person during class meetings for the two KSU 1101 first-year seminar classes offered in both of the First-Gen Owls learning communities. The students were told the surveys were measuring sense of belonging and self-

efficacy, but were not told that the variable of mentorship was the studied factor on growth. The second survey was administered through the student's institutional email in January to students who were a part of the learning community in the fall, as well as to the students who were a part of the learning community in the spring. After the administration of both surveys, the responses were recorded and analyzed through the software program "Statistics Package for Social Sciences" (SPSS). An analysis of the survey data resulted in the identification of frequencies, and after the frequencies were calculated, the means of both of the surveys were compared in order to find any correlation and statistical significance between the survey given in the fall and the survey given in the spring.

   Focus Group. The focus group was held during the KSU 1101 class on March 5, 2018. The researcher was granted 30 minutes to conduct the focus group in the classroom during scheduled class time. The instructor informed the class that the focus group would be held, but that it was not for a grade. The students were familiar with the on-going study prior to the focus group, but did not know of the specific variables being targeted in the research study. The instructor then left the classroom so the students remained solely with the researcher. Students were told that the focus group was anticipated to take 30 minutes, and were given a consent form with information about the focus group. If students did not wish to participate, they were told that they did not have to respond to any of the questions or participate in the focus group. The researcher explained that the purpose of the focus group was to gain insight on the student's experiences with mentorship as a result of their participation in the learning community's mentoring program. All responses were voluntary and offered by the students who were comfortable with participating in the focus group. The students were informed that the focus

group would be recorded through an audio recording. The students were asked three questions. The questions were:

- Can you describe any significant interaction that you've had with a mentor?

- Why or why not was this interaction significant?

- In what ways have your incorporated advice from your mentor into your day to day life at Kennesaw State University?

Additionally, students were told that there would be no identifying information added to the study. The data was collected through the primary researcher, and will remain secure for three years after the study has concluded. The focus group questions are included in Appendix H and were developed by the researcher of the study in order to help address the research questions. The research questions were decided upon in order to gain insights into the perceptions of mentoring experiences had by the students, as well as to gain insight to specific instances that influenced a student's collegiate experience. The focus group was held approximately three months after the conclusion of the formal mentoring program's meeting requirement, but many students still had continual interactions with their mentors.

Setting

The research for this study was conducted at Kennesaw State University, a large, comprehensive institution located outside of Atlanta, Georgia. Kennesaw State University (KSU) has a student population of approximately 36,000 students and is composed of multiple campuses. The university's mission statement emphasizes student success, institutional quality, and research as it connects to community and the global arena (Kennesaw State University, 2018a). The research included in this study was held on the Kennesaw campus. Kennesaw State University was chosen as the setting for this study because it houses the First-Gen Owls learning

community. This learning community was chosen because the curriculum included a mentoring assignment and utilized a formal mentoring program to support first-year first-generation students. The time frame of the learning community (in both the spring and fall semesters) was also an identifying factor for choosing this setting.

Participants

For this study, participants were included from the "First-Gen Owls" Learning Communities. The two communities were two class sections, both of which meet on Tuesdays and Thursdays. The students involved with the study were a purposeful selection in order to ensure that the population participated in a formal mentoring program. Participants were invited to complete the survey and could decline to participate. Additionally, students were given a form of consent prior to participating in both the quantitative data collection in the form of a survey (Appendix E) and the qualitative data in the form of a focus group (Appendix F). For the post-survey, the population from the learning community were invited to complete the survey through their institutional email. The results between the two surveys were not matched, as there was no identifying information between the two groups. However, the second survey was only sent to students who were enrolled in the learning community the previous semester. The students were compiled into an email list-serv in order to stay in touch with first-generation initiatives that continued to take place at Kennesaw State University. This convenience sample was utilized to ensure that a significant majority of students taking the survey were classified as first-generation students and participated in the mentoring program. Since the identity of first-generation was self-selected for this learning community, not every student in the learning community was, by definition, a first-generation student, but all students had an understanding of the differences in experiences between first-generation students and continuing generation students. The

information gathered was comprised of aggregate data, and did not look specifically at the individual students' responses to the quantitative data measures.

For the qualitative data, a focus group was held in a KSU 1101 course on March 5, 2018 for a total of thirty minutes. Students were invited to participate in the focus group interview and provided a consent form that allowed them to opt out if they wished. The students were all in the Spring 2018 First-Gen Owls Learning Community. Students had completed a previous section that introduced them to mentors as a part of a formal mentoring program. Since the students had all met with mentors through the formal mentoring program and the mentoring assignment during the first semester, this population was the ideal group of focus group participants because of the shared experience. The participants were recorded through an audio recording device and the students were informed that the researcher was hoping to gain insight to their experiences with mentoring. The students were encouraged by the researcher to answer the questions truthfully and authentically and nothing would be considered to be "off limits." The questions were created in order to sense the students' opinions and perceptions on the experiences that the first-generation students had during their mentoring experiences, but were intended to be broad enough that the focus group population felt comfortable to provide any sort of feedback, rather than simply answering a singular question about the experiences. The questions were asked to share any significant experiences, what made the experiences significant, and if there had been any advice from the mentor that the participant included in their day-to-day life at Kennesaw State University. Approximately twenty students were enrolled in the section in which the focus group was held, and 10 students provided feedback.

The mentors with whom the students met with were of diverse backgrounds as well, with some mentors being classified as first-generation, and other mentors having family members

who attended and obtained degrees from four-year institutions. These mentors were Kennesaw State University faculty and staff members who responded to an email that was sent in Spring 2017 to all faculty and staff to identify those who were interested in learning more about how to better support first-generation students. In the following semester, the list of the mentors was then shared with the First-Gen Owls Learning Community. The students were given the names of all mentors, their contact information, as well as the mentor's title at the university. With mentors ranging in positions from deans of colleges to coordinators of student services, students were presented with a diverse range of experience and interests. Not all mentors on the list were first-generation students themselves, but the mentors involved with the program were supportive of first-generation students, and were excited to support the First-Gen Owls community. The mentors met individually with students in the "First-Gen Owls" Learning Community for an initial meet up and one-on-one conversation, and then were encouraged to continue to meet with their mentees throughout the semester. In order to help mentors and mentees meet outside of the formal class assignment, all mentors and mentees were invited to attend a "First-Gen Owl Mixer" which hosted both groups for conversation and "get to know you" activities. The mentees were exposed to different mentors outside of their individual assignments, and were encouraged to keep in contact with mentors they met through this process as well.

Data Analysis

For this study, the quantitative data were collected and the aggregate results were calculated. Each question on the survey was analyzed for mean and median scores for both the first and second surveys. The means for each question, both first survey and second survey, were then recorded and reported. Additionally, the median data points for each of the questions on both surveys were gathered. Using the Statistical Package for Social Sciences software program,

the data were then collected in a comparative table to show the differences in responses in between the two semesters after running a paired samples T-test. Each question was granted statistical analysis, and the questions that showed statistical relevance were recorded in the written results questions. The qualitative data were recorded through and audio device and were transcribed by the researcher. There was no descriptive or identifying information recorded of the students in the focus group in an effort to maintain the student's anonymity. Quotations from the focus groups were then selected to illuminate the research questions proposed by the research. Additionally, the quantitative research was compared to the qualitative research to see if the two were in agreement with one another.

Results

Introduction

For this mixed methods study, both quantitative and qualitative data were collected to answer three primary research questions related to first-year student perceptions of mentoring on their sense of belonging and self-efficacy. This chapter will review the outcomes of the data provided, as well as discuss the qualitative data obtained from the focus group, and the findings from the study are presented as they relate to each of the three research questions.

Research Question 1 : What is the relationship in regards to mentorship between a faculty or staff member and a first-generation student on the student's sense of belonging at an institution?

For this study, the population for the study included first-year students in a First-Generation Learning Community in Fall 2017 or Spring 2018 at Kennesaw State University. A total of 46 responses were received for the first survey (which was administered in late October), and a total of 12 responses were recorded for the second survey (which was administered in January). These responses were not matched to the responses from the first survey. The first half of the survey (Appendix A) was adapted from the Sense of Belonging Scale Inventory (Anderson-Butcher & Conroy, 2002), which includes a total of ten questions that offer insight to the student's perceived sense of belonging as it relates to populations with which they identify. The survey items asked the student to rate their level of agreement with a proposed statement on a Likert scale, ranging from 1-5. For phrases that were originally proposed in negative lens (e.g. I do **not** feel accepted at Kennesaw State University), the data was flipped to represent a positive statement. For example, a score of two was flipped to a score of four to reflect a positive

statement of "I **do** feel accepted at Kennesaw State University." This practice wsas done to ensure that the averages of the results would not be skewed for negative answers that represented a growth for sense of belonging. In the following section, the survey response data is divided, by topic, with the first section focusing on data from the survey items associated with sense of belonging and the second section focusing on survey data related to self-efficacy. The final results section provides the qualitative data collected through a focus group conducted for the study.

For the first set of questions, students were asked to rate their perceptions of Kennesaw State University on a scale that would provide the researcher insight to the population's sense of belonging. The responses to the first question saw a difference in median answers of the students who participated in the survey. "I don't have many friends at the university" was then changed to a positive statement of "I have many friends at the university." The first survey scored a median score of four on the first survey, while increasing to five on the second survey, meaning the participants strongly agreed with the statement instead of agreeing with the response after participating in the mentoring program. The mean score increased from 3.33 to 4.13. Statement two, "I feel comfortable at Kennesaw State University," saw an increase in the mean. Statement three asked the student to respond to the statement "the leaders at Kennesaw State University make me feel wanted and accepted" and saw a decrease from the first survey to the second survey. "I feel like I am an important member of the university" saw a slight increase for the mean score of responses. After altering the negative statement of "I wish I were not a part of Kennesaw State University" to a positive statement, the mean saw an increase from 4.26 to 4.67. The increase was continued after altering the last negative statement, re-adjusting the scores from strongly disagreeing with the statement "I am disliked by students at Kennesaw State University"

to strongly agreeing with the statement "I am well-liked by students at Kennesaw State University." "I am committed to Kennesaw State University" saw a larger mean increase. Question eight saw an increased mean and statements nine and ten ("I am supported at Kennesaw State University" and "I am accepted at Kennesaw State University") increased in the mean (Table 1). Overall, the mean of the sense of belonging inventory saw an increase in the mean. Given these results, the researcher deduced that there was a positive relationship, over time, between mentoring and sense of belonging. The two sense of belonging surveys saw a positive correlation between the responses, with there being a positive correlation of .746 and a p-value of .013.

Table 1			
Results of Sense of Belonging Inventory Scale			
Statement	Survey 1 Mean	Survey 2 Mean	Change
I don't have many friends at Kennesaw State University (changed to "I do have many friends at Kennesaw State University)	3.33	4.13	+.80
I feel comfortable at Kennesaw State University	4.15	4.25	+.10
The leaders at Kennesaw State University make me feel wanted and accepted	3.87	3.67	-.20
I feel like I am an important member of Kennesaw State University	3.35	3.5	+.15
I wish I were not a part of Kennesaw State University (changed to "I wish I were a part of Kennesaw State University)	4.26	4.67	+.41

I am disliked by students at Kennesaw State University (changed to "I am liked by students at Kennesaw State University)	4.43	4.5	+.07
I am committed to Kennesaw State University	3.93	4.25	+.32
I am a part of Kennesaw State University	4.30	4.42	+.12
I am supported at Kennesaw State University	3.87	4.08	+.21
I am accepted at Kennesaw State University	4.11	4.25	+.14

In the responses given during the focus group, students mentioned receiving advice from their mentors that translated into sense of belonging. Namely, the mentors suggested that students get involved. This common suggestion was met with understanding and criticism from the mentees. For example, one student stated:

My mentors really stressed getting involved and pushing through the sense of overwhelmingness. It may be hard for the time being, but a lot of the times it will work out a lot easier if you push now in the time now. Just doing that and getting involved - that's just something that they pushed with me.

And another student stated:

> I remember my first semester, walking around the student center and we just asked "what's the best way to get engaged" and I remember wanting to do that after I had seen a mentor and I asked him like "how do I get engaged" and he said "just go to the student center". I started going to the CARC and it's great and it's a great place to hang out. I'm really glad I started doing that.

One student explained that they too heard this message of being involved, but did not feel as though he or she was given concrete examples on how to go about getting involved. He or she remarked:

> A lot of [mentors] told us to get involved but no one really told me how or where to do it. For one of my projects I had to ask [the professor] what in the world is going on in this time? I know there a club page at KSU but it's not dated - it's not up to date. Not all of the clubs are on it. I feel like they pushed that but they don't tell you how to find it. Like, when [other student] said "student center" I was like "what's in the student center? What in the world is there?"

Another student also expressed her frustration with the involvement advice that she received from her mentor.

> My mentor said 'get engaged' and get active, and yeah. I get it. It's easier said than done because I have things to do and I'm worried about graduating. Like, I'm trying to and I'm succeeding. So now, I'm doing it and trying to balance. They didn't really give me advice. They really just answer my questions. I didn't get any advice that I'm using now.

This lack of applied advice provided a scale of experiences in the classroom. Some students seemed to gain a lot out of the mentorship experience, whereas others did not seem to feel a connection between themselves and their mentor.

Research Question Two: What is the relationship in regards to mentorship between a faculty or staff member and a first-generation student on a student's score on a validated self-efficacy scale?

For the self-efficacy survey items, questions were adapted from the "College Self-Efficacy Inventory" (Solberg, O'Brien, Villareal, Kennel, & Davis, 1993). For this part of the survey, students were asked to rate their confidence in their ability to complete nineteen different tasks that are asked of students during their collegiate experience, such as writing a research paper or asking a question in class. The students rated their confidence on a scale that ranged from zero to ten. The second survey was distributed in the spring semester, and was identical to the first survey given to the students. Like the first survey for sense of belonging, a total of 46 responses were recorded for the first survey, and a total of 12 responses were recorded for the post-survey. Once the first and second survey data were received they were analyzed, and following are the results of the analysis of these data. The first statement on the self-efficacy scale asked the student to rate his or her confidence in their ability to write a research paper. Both the mean and the median increased between the first and second surveys, with the original mean being 5.83 and the secondary mean rising to 6.13. Statements two through six saw slight increases in the mean (Table 2). These statements asked the student to rate their confidence in their ability to write course papers, do well on exams, take good class notes, keep up to date with schoolwork, and manage time effectively.

Statement seven, which asked the student to rate their confidence in understanding their textbook, saw a slight decrease in the mean. Statement nine (confidence in the student's ability to socialize with peers) saw an increase in both data points. Statements ten and eleven (rate the confidence in your ability to participate in class discussions and to ask a question in class) both saw slight increases in the frequency methods utilized in this study.

While statement twelve did see an increase in the mean (5.57 to 5.67), the scores were of a lower value than the rest of the scores on the survey. The statement that asked the students to rate their confidence in their ability to "get a date when [they] want one" held the lowest numerical response on the survey.

Statement fourteen (a student's rated confidence in their ability to "talk with a university staff member") had a large increase in both the mean and the median. The mean saw a 1.34 increase. The confidence in a student's ability to talk with a professor (statement fifteen) showed a slight decrease in both mean and median. Statement sixteen (confidence in the ability to make new friends) saw almost an entire point interval increase in the mean. Statement seventeen, which asks the student to rate their confidence in their ability to join a student organization, saw the largest increase of all of the self-efficacy survey questions. The median score jumped to nine from a previous score of seven. The mean of this assessment criterion was originally 6.96 to 8.17. The following statement with a notable score was statement eighteen, which showed the mean score of the student's confidence in their ability to obtain a four-year Bachelor's degree also increased to 8.58 from 8.26. Finally, statement nineteen (get a career in a field that interests you) saw a mean increase to 8.08 to 7.89. The self-efficacy inventory overall saw an increase from 7.07 to 7.43 and a correlation of .870 with a p-value of $p < 0.01$.

Table 2			
Total results from the Self-Efficacy Scale			
Statement	Survey 1 Mean	Survey 2 Mean	Change
Research a term paper	5.83	6	+.17
Write course papers	6.76	6.58	-.18
Do well on your exams	6.91	7.17	+.26
Take good class notes	7.57	7.67	+.10
Keep up to date with your schoolwork	7.33	7.58	+.25
Manage time effectively	6.22	6.75	+.53
Understand your textbooks	6.28	6.17	-.11
Get along with your peers	8.61	8.67	+.06
Socialize with your peers	7.78	8.75	+.97
Participate in class discussions	7.24	7.75	+.51
Ask a question in class	6.61	6.67	+.06
Get a date when you want one	5.57	5.67	+.10
Talk to your professors	7.20	7.42	+.22
Talk to university staff	6.33	7.67	+1.34
Ask a professor a question	7.46	7.33	-.13
Make new friends at college	7.43	8.42	+.99

Join a student organization	6.96	8.17	+1.21
Get a four-year Bachelor's degree	8.26	8.58	+.32
Get a career in a field that interests you	7.89	8.08	+.19

When asked in the focus group what advice students were given that they took away with them after the conversation, the theme of time management was mentioned. "My biggest struggle is time management and I asked my mentor what their advice was and they said to get every assignment done 24 hours before the deadline. Do I actually do that? Debatable. But that's their advice. But my mentors gave me good advice on that since my focus was time management." Students who may have a better sense of time management may feel more capable in completing tasks or assignments in the collegiate setting, granting the student a higher sense of self-efficacy. This was the only statement given in the focus group that was transferrable to the concept of self-efficacy.

Research Question Three: What are first-generation students' perceptions of mentoring at the conclusion of their first semester enrolled at an institution?

The qualitative data for this study was collected through a focus group method. In the qualitative data, students were asked to describe a significant experience that they had with a mentor. Immediately, a student began describing his experience with a mentor. His response was the following:

My mentor took me to some seafood restaurant. Basically I walk into his office and he's like, "I'm about to go to lunch, are you trying to come?" And I was thinking we are about

to go to the Commons and we get into his Benz" and we went to this seafood restaurant and I ordered the most expensive thing because I knew I wasn't about to pay for it. Nah, anyways, he was really nice and real, which is like, I wasn't expecting that. Like, he was real. Like *real* real. Just genuine. I really bang with that. Cause you don't get a lot of that out of Kennesaw. And a lot of the people, they're just going to be fake with you. They just say what they're supposed to say like they're reading from a script I guess, like it's a movie. I'm trying to get real like opinions. Like, from a page, you know what I'm saying? They won't give it to you, like, I feel like with this [mentor] - if I really asked him that if I should drop out, he'd tell me if that was in my best interest. There's no other [mentors] where I would feel like genuine."

This student felt strongly that the genuine advice and authenticity of the mentoring experience was what made a positive and lasting impact on his participation in the mentoring program. The advice that was given seemed truthful and helpful, and the student appreciated this authenticity in his interaction. Another student followed this statement with a similar sentiment. She responded:

I had a meeting with [name] and we met over coffee at Starbucks, but what I was talking to her about was like what I do and my plans. I briefly mentioned my interest in computer science and how I focused so much on being a lawyer and I told her how much pressure that comes from my background of being Hispanic. We talked about how if you're not a doctor or a lawyer or whatever, your job isn't going to be that fulfilling - well, that's kind of the idea. So I didn't know with that pressure if I was gonna be a lawyer or not. I told her that I came here because I didn't know what I wanted to do and she said well have you tried taking classes in computer science. I tried to last semester but everybody talked

me down to do it and said it wasn't a good idea and it was super hard. I told them I was good at math, but they kinda turned me down I guess and she said "well what are you taking now instead of taking the class that you're supposed to be taking" and I said philosophy and in the end, I feel like I shouldn't have taken that class. She said "I have a lot of colleagues that I know really well and she told me which colleagues in computer science and political science I could take just in case I wanted both careers at the same time, because I can get a minor in computer science as well. And she said we can make it work. She was working with me. I met with the people she suggested and now I'm going to be taking a class in computer science next semester and if I like it enough, then I'm going to major. Instead of going to a counselor, I talked with someone who was more of an expert and has more expertise. I asked if a minor was worth anything, and she could answer those questions for me.

The student who gave this response noted that she felt she was able to meet with someone who was more so of an expert than an academic advisor (counselor) and felt that the interaction was personable and trustworthy.

Much like her peer, another student met multiple times with her mentor, and received transferable advice. This advice seemed to have had an impact on her collegiate experience and the opportunities that she chose to pursue at Kennesaw State:

I met with my mentors several times last semester. We have had breakfast and whatnot and talk about things. The first time I met them, I mentioned that I wanted to study abroad. They talked with me about their experiences with study abroad and they referred me to the Peru program. They told me to talk to [name] and one thing led to another and I started taking them up on their offer of going. I looked into the scholarship for it and I had both my mentors and [the program

coordinator] and both of them wrote my recommendations and I got the scholarship for it. They really helped me with recommendations and referrals and just being good people to talk through everything. I say they've changed my life so far.

For this group of students, who identify as first-generation college students, the ability to connect with a mentor to gain insight on what the college experience will entail was common theme. A student explained:

I'm first-gen so I have no idea what I'm doing, but she walked me through everything and explained what stuff means. It's good when they walk through what's recommended, but it's really good when they walk through what's good for you.

The students that met with mentors were able to connect based on their education and the programs offered at Kennesaw State University, both academic and social. One mentee also brought up the fact that she was able to connect with her mentor on something outside of their academic venture.

I met with my mentor, and I'm a diabetic, so we came across the topic that I'm a type one and she told me that she had lots of family members that were type one as well. In the type one world, it's kinda hard to find people that know what's going on. So, we actually talk a lot about it, and she helped me with projects. I ended up recommending a machine for her daughter and now her daughter is on the list to get it. So I kinda helped her in a way. I haven't seen her in person but we email all the time. I tell her how my blood sugars are and how the machine is working and I always ask how's your daughter doing? How are her numbers doing? It's just kinda nice that even a mentor can connect to something like that.

The student seemed to have the realization that she too could be a keeper of knowledge and a teacher to her mentor. She saw that she had something that she could add to the experience, making it a two-way relationship, rather than the mentor being the exclusive holder of knowledge.

While many students had a positive experience with their mentors, the students in the learning community also acknowledged that there were also negative experiences that they had with their mentors. The student who had a positive experience with his mentor at a seafood restaurant explained:

> There are some bad mentors. I'm dead serious. A lot of the times, when I was first registering, I don't know. I feel like some of the mentors just go with the script. They don't necessarily want to hear you out, they just say "here's what you're going to do" and "this is how it should be done" and I'm looking for actual help.

When this student opened the conversation to this sentiment, many students in the room nodded their heads and agreed with what the student had to say. One student explained her experience with a mentor that did not seem genuine, and then shared how her experience with a mentor she connected with helped to balance the experience in a more positive manner:

> I can kinda see what they are saying as well. The way I see it, well, one of the examples. One of the mentors was one of the people who told me "you sure you wanna take computer science? I don't wanna say that she was bringing me down and saying that I shouldn't take that, but she was suggesting and implying that I couldn't take it. But she did help me in other aspects that I did appreciate so it's not like I'm never going to talk to her again. But it is disappointing to hear that specifically. But another mentor, who was the one who was helping me out, she was the one who said "let's see what we can do

about it" and see what I wanna do and see what the options are that may work out. Instead of saying no, and seeing what doesn't work out - I've tried it. There have been occasions where in one aspect she brought me down but in another aspect she brought me back up and encouraged me to try things out.

The interactions with the mentors that were perceived by the student to be the most genuine were the interactions that were most beneficial to the student. A student commented that the best relationships were "The ones that actually care about what you want and what you want to do - that's what makes it better. It makes it custom." This sentiment was met by agreeing nods in the classroom.

When I asked the students if there were any last comments that they wanted to provide, the student who is going to Peru on a study abroad trip shared the following about the mentoring experience, and the overall job of a mentor versus a mentee:

I say that a lot of advice that mentors give - yes, it's on them giving the mentee advice, but a lot of it is the drive the mentee has and how they take it into consideration. A lot of people will say oh, they just referred me to this place. I feel like a lot of the time, mentees expect a little too too much out of the mentors, almost as if they are supposed to do the work for them in a way or guide them with their hand and do it, and it's like - I feel like it's harsh for the mentors sometimes. They can say get engaged and get involved and that's good advice and I feel like people aren't understanding that that's good advice.

It's just up to you to get involved and get engaged. Just don't talk about it just to talk about it. I feel like if you wanna get engaged or take any advice into their consideration, you would do it. You can't always put it onto the mentors.

The students were thanked for their time and the focus group concluded. Additionally, students were given the researcher's contact information in case they felt any need to reach back out in regards to the study.

Conclusion

While there were visible changes in the quantitative data, it is still important to note the statistical significance of the changes between the two surveys. In completing a paired samples t-test, the two surveys saw positive correlations of .919 for the sense of belonging inventory and .870 for the self-efficacy inventory and both inventories had a statistical significance score of $p<0.00$. Since both of the correlations were closer to one than zero, this shows that the correlations were highly positive. This rate of high significance between the two surveys allude that there is little chance that the results were purely chance, and there was an impacting factor between the distribution of the two surveys. Instead, the two surveys were only to monitor difference in the student's growth between the two semesters after participating in the mentor program, rather than to look specifically at a specific causation of the growth.

CHAPTER 5

Discussions, Recommendations and Implications

Introduction

For this study, the researcher sought to explore the relationship between a formal mentoring program and the perceived sense of belonging and self-efficacy in a group of first-generation college students at Kennesaw State University. In this section, the results of the first survey and the second survey will be discussed and related to current research on each of the instruments as well as how the results relate to the current literature on first-generation students. After the results are discussed in context of the current literature, the effectiveness of the models used will be analyzed, the limitations of the study will be discussed, and the study will conclude with a discussion of the implications of this research and suggestions for future research.

Significance to the Field

This study will provide both long-term and short-term benefits to the field of First-Year Studies. Short-term benefits include enhancing the experience of the first-generation students enrolled in the "First-Gen Owls" Learning Community at Kennesaw State University through the presence of the faculty and staff mentors and continued meetings between the students and the mentors. Another short-term benefit is to allow the mentors to have continual and enriching relationship with the students the faculty and staff will interact with. The research questions can also elucidate the numerous short-term benefits that students may experience. Since the results of this study showed a positive correlation, this study could help to empirically support the implementation of mentoring programs in various institutions, specifically programs designed to support first-generation students. The long-term benefits that can stem from this research include subsequent research deriving from the results of this study, implementing mentoring programs

and programs that support first-generation students, and an increased national awareness about first-generation students and their experiences in higher education.

Review of Results

For this study, the sense of belonging inventory saw an increase between the mean of the responses between the two surveys, while the self-efficacy inventory saw an increase in the mean. Both inventories had a positive correlation with overall growth. This positively linear correlation suggests that the mentorship that these first-generation students obtained through the learning community was beneficial to the perceived sense of belonging and the perceived self-efficacy the study population reported through their survey responses.

Research Question One : What is the relationship in regards to mentorship between a faculty or staff member and a first-generation student on the student's sense of belonging at an institution? In the study from Baumeister and Leary (1995), it was found that the sense of belonging could be derived from a combination of frequency of interaction and a persistent sense of caring. From the qualitative data, the mentoring that was most effective for the students who took part in the focus group had the same characteristics as suggested in the 1995 study. Throughout the focus group, students that mentioned having multiple meetings with their mentors had more positive feedback than students who only met once or twice with their mentor. Additionally, the genuine sense of caring that was persistent in nature also stood out to these students. This population of students related positively to mentoring relationships in which the genuine support was not just a onetime thing, but rather happened increasingly over time.

The results of this study also support the claims made by Strayhorn (2012) indicating students of a marginalized population may experience sense of belonging as a factor of success, and that sense of belonging for these groups can be cultivated through a formalized program

targeting specific student populations. This mentoring program was created specifically for first-generation college students during the first semester of enrollment at Kennesaw State University, which may have led to the high levels of reported sense of belonging for most of the students who took part in the study. Another point made by Strayhorn (2012) is that the more a student has positive interaction with faculty, the higher their sense of belonging may be. The qualitative data shows that the students who met more than once with their mentor were more able to find their niche at the institution, as seen through the student who is now pursuing computer science as an interest, as well as the student who will be studying abroad in May. This research also confirms the statement proposed by Means and Pyne in 2017 that participating in best practices, such as the mentoring program, can help to promote a student's sense of belonging at an institution.

The study had different conclusions than that of previous researchers, including the claim by Hausmann, Scholfield and Woods in 2007, who found that sense of belonging declines as the academic year ensues. The results of this current study also contradict the finding by Hausmann, Scholfield and Woods in 2007 that indicates sense of belonging had a higher average mean and also had a positive correlation of .953. The increase in the students' sense of belonging suggests that the students began to find their niche and their role at Kennesaw State University, and increasing their identity with this role between the first and second surveys. Another variable may be that this survey was taken in the second semester of the student's first year at Kennesaw State University, and the student may have chosen to continue their enrollment in the learning community. The learning community could have provided a sense of comradery and community for the enrolled students, and these factors combined with the support network created by the mentoring community could contribute to the student's sense of belonging, which is likely.

The qualitative data showed the students were also aligned with the statement proposed by Elrich et al (2004) that "bad" mentoring can be just as bad as no mentoring at all. The students stated that they wanted genuine mentorship, and not just a scripted interaction. These scripted interactions seemed off-putting to the student, and made the students frustrated with their interactions with the faculty and staff mentors that they interacted with rather than feeling fulfilled. The "bad" mentoring they experienced, whether it be through superficial interaction or by being given further information past a generic message (i.e. get involved), impacted the students in a negative manner as evident through their discouragement in the focus group.

The surveys also measured sense of belonging issues with social adjustment and creating community, aspects that Ward, Siegel & Davenport (2012) listed as qualifications of sense of belonging. The first question on the survey, which asked the participants about their friendships at Kennesaw State University, reported less students answering "disagree" than they did "strongly disagree." This indicates more students felt as though they had a stronger social network during the second semester of being enrolled as compared to the first semester and this finding stands out against other measured variables, since the overall sense of belonging increased. Additionally, the survey measured the level of support from faculty, staff and administrators at Kennesaw State University, which corresponds to the ability to create community as suggested in the same work by Ward, Siegel & Davenport (2012).

In the 1992 work by Richardson and Skinner, it was proposed that first-generation students are successful in their ability to scale-down their experiences in a collegiate setting. Scaling down an experience means, rather than facing the collegiate experience as an overwhelming whole, students are able to find their niche and see their experience in context of their individual role. By having connections with faculty and staff members, seen in both the

sense of belonging inventory as well as the qualitative data collected, as well as finding an identity within a group of peers, this study has aligned itself with this claim. The students involved in the study were able to look at Kennesaw State as a whole entity and then to scale down the university environment in order to find their own role and niche within the university community, ultimately displaying the sense of belonging that this group of students reported in the survey instruments.

      Research Question Two: What is the relationship in regards to mentorship between a faculty or staff member and a first-generation student on a student's score on a validated self-efficacy scale? In this study, the research showed that there was a significant growth in the overall sense of self-efficacy in the study group of first-generation students. This group had an initial average 7.06 in their primary assessment of their overall ability to complete the tasks on the assessment tool. This score would be classified as slightly higher than an average ability (which would rate a score of 5 on the scale). In the work written by Ramos-Sanchez & Nichols in 2007, the researchers noted that first-generation students would have a lower sense of self-efficacy than their continuing generation counterparts. While this study did not compare the first-generation sub-population against their continuing generation counterparts, the studied population did have an overall higher than average score of reported of self-efficacy. However, even with a slightly higher than average report of self-efficacy, there was still a decrease in the overall confidence to speak with a faculty member (or professor). This decrease in perceived confidence in the ability to speak with the student's professors confirms the claim made by Terenzini, Springer, Yaeger, Pascarella & Nora in 1996 which stated that first-generation students had a harder time being involved with their teachers in post-secondary schooling.

Terenzini et al. (1996) also stated that it was important for practitioners to send very specific messages to first-generation students, including messages of importance, capability, value, and pride. The increase in self-efficacy between the first survey and the second survey can be a residual effect of the support of the mentors involved with the mentoring program. The mentors, who communicated these directed messages to first-generation students, acted as a cheerleader and coach for this specific population, perhaps leading to a higher level of reported confidence for the students taking part in the study. The mentors also were aware of the importance of providing motivation to this population of students, and their directed efforts ensured that the students in the learning community knew that they held the tools and abilities to be successful at Kennesaw State University.

The self-efficacy inventory was also a tool that could help to support the work presented by Ward, Siegel & Davenport in 2007. In the research presented by these authors, it was found that first-generation students may have issues with academic adequacy, academic adjustment, and realigning their expectations about higher education. The growth in the self-efficacy inventory shows that this sub-population was able to continue to grow in these areas, and to obtain a higher sense of confidence in their academic endeavors. Additionally, the inventory showed growth in other potentially problematic areas presented by Ward et al. (2007), such as knowing about campus resources, knowing information in regards to campus life, feelings of being academically unprepared and difficulty in coping with the academic requirements being asked of this population of students. Feeling academically unprepared could translate into a lower sense of self-efficacy. In this study, in addition to the growth in self-efficacy, students reported qualitative data that supported the acquisition of knowledge in regards to campus life and resources (getting involved), as well as efficacy in the academic requirements of programs

offered to the students (such as the student who was able to acquire information about the computer science program available at Kennesaw State University and what the rigor of this program would actually entail). These students were also able to gain a more directed focus from the gathered advice from the mentors, and were ultimately able to show a sense of growth in their self-efficacy.

For both inventories, this research study was able to both support and contradict claims made in previous research. The sense of self-efficacy and the subsequent growth, was positively associated with the current literature in regards to setting specific goals (in both social efficacy and academic efficacy) but also saw some disconnect when it came to the student's ability to speak with faculty members. This disconnect, while still a negative association in this study, was comparable to the literature previously conducted on this topic. The sense of belonging inventory and the results from this study were aligned with previous studies, such as the decline in reported sense of belonging by students as the academic year ensues, the effectiveness of the mentor relationship increasing with the number of times that the mentees and the mentors met, and the ability and trend for first-generation students to be able to "scale down" their experiences and their academic endeavors. Overall, this research study was effective in its effort to provide insight to a practice that has the potential to greatly impact the collegiate experience of a first-generation college student at Kennesaw State University.

Research Question Three: What are first-generation students' perceptions of mentoring at the conclusion of their first semester enrolled at an institution? Since both of these surveys saw a positive correlation between the first survey and the second survey, it is important to understand the benefits that the mentoring practices provided to the students. In both the quantitative and qualitative data collections, there was a perceived benefit of mentoring.

The qualitative data, however, provided insight into the student's perception of the mentor's impact on his or her first semester at college. The most commonly mentioned theme in the collection of the qualitative data was in the importance of the quality of mentoring the first-generation students were receiving. The students reported positive mentoring experiences when they felt their mentors were genuine and did not give advice to the students on what they *should* say. When the students felt that they were getting "real" advice with genuine intentions, they felt that the mentoring was more effective and rewarding. The qualitative data also showed that the students learned that they had the ability to create a connection outside of the topics of school or classes, and that the connection could go both ways. This provided benefits can help develop the student and their relational skills, as well as helping to develop pride in their relationships with their mentors. As with the student who shared about her connection between her mentor and her diagnosis of diabetes, students can realize that this relationship between themselves and a mentor can be a two-way relationship, rather than just a one-sided relationship.

Another theme was that the mentors provided insight on what it meant to be successful at Kennesaw State University specifically, rather than just engaging the mentee in advice that would be applicable to any university. By recommending specific programs or ways to get involved, students can begin to formulate their own niche within the Kennesaw State University community. For example, in the case where the student was able to take part in the study abroad program going to Peru, she was led to a program that would fit her interests at Kennesaw State University. Beyond that, her mentors were able to write recommendation forms and help her through the process of applying for the program, ultimately assisting her in creating an engaging and impactful opportunity for her at Kennesaw State University.

A final theme brought forth by the students in the qualitative data was the importance of student autonomy. Even though they may have been met with some challenges in their collegiate experience, they were still able to make the final decision and take their own education into their hands. One student said that it was up to the mentee to ultimately make the decisions and to take the advice of their mentor when the student believes that it is appropriate. The student acknowledged that the mentor is not there to make the decisions for the students, or to lead the students by the hand into situations, but instead to be there as a sounding board and voice of guidance - not a voice of authority.

An unexpected finding of the qualitative data was the belief that the high standards for genuine connection between students and mentors would extend past the mentoring relationship to other faculty and staff members at Kennesaw State University. One student spoke of his disappointment with an advisor (an academic advisor who was not associated with the formal mentoring program) and described how he felt he was being told of how accepting Kennesaw State University is and how the educational experience can be tailored to the student, but that same philosophies were not greeted with enthusiasm from other constituents at the university. This statement was met with a lot of nods and agreements from his classmates, and led the researcher to interpret a common perception of the first-generation students was that there seemed to be more support and encouraging advice from faculty and staff in the mentoring program as compared to those outside of it.

Effectiveness of the Model

For this study, the mixed methods model used for the research study was effective into gaining insight to the growth of the study population of first-generation students, as well as to gain candid and honest insight and reactions from the test population in a personal setting. The

quantitative data allowed the researcher to see the growth in the student population between the two academic semesters, whereas the qualitative data was helpful in painting a story behind the numbers gained through the quantitative research.

The two instruments (The Sense of Belonging Scale Inventory and the College Self-Efficacy Scale) were also effective in their use for this study. The Sense of Belonging Scale Inventory gave the researcher valuable insight into student's sense of belonging specifically at Kennesaw State University, and additionally allowed the researcher to see potential areas of growth in this student population. The scale was appropriate and was able to be transferable to Kennesaw State University community. The College Self-Efficacy Scale was an effect scale to measure self-efficacy, and did a great job of being able to encompass efficacy in numerous avenues of the collegiate experience, rather than just the realm of academic self-efficacy. By asking students to rate their ability to complete social aspects of the college journey (such as the student's confidence in their ability to get a date when they want one), the students were able to give responses and shed light into a more holistic view of college and college success, rather than just focusing on the learning that happens inside of the classroom. Finally, the focus group was an effective tool to get the student's insight into some of the interactions had with their faculty and staff mentors. The focus group allowed the students a safe place to express their thoughts and feelings, and therefore the students were able to provide some valued feedback that was both authentic and significant to the results of the study.

Limitations of the Study

In this study, the researcher acknowledges that there were a multitude of limitations that may have effected the results of this study. The first limitation in the study is that the students in this learning community (and the study group) cannot all be considered as first-generation based

on the definition used by Kennesaw State University. A small handful of students chose to be enrolled in the learning community because it fit their schedule rather than because they were members of the target population of this learning community. Students enrolled in the course who were not first-generation students were explained the intent of the course and chose to remain enrolled based on their appreciation of the unique characteristics of the first-generation student college experience. The outcome of this enrollment process allowed a collaboration between both continuing generation students and first-generation students in efforts to understand the differences and similarities between the two communities. The continuing generation students were not identified in the survey and removed from the survey. While first-generation students were the intended audience and made up most of the classroom setting, it is important to note that not every student was first-generation.

A second limitation of the study is the low follow-up participation to the survey instruments. The second survey only saw 12 responses, and this limited response size did not allow the study to have as robust of a response group as the first survey. This could have limited the responses and not given the study as well-rounded pool of responses to analyze. However, the focus group allowed the researcher to gain a well-rounded view, as the number of participants was a typical size for research studies of this type.

A third limitation of this study was that the focus group was conducted in an environment where the time was constricted. For the focus group, the researcher was allowed thirty minutes of the First-Gen Owls Learning Community class period. Since the researcher chose to utilize thirty minutes, there was an expected end time of the focus group. Additionally, students did not elect to come to the focus group - instead, the students were already in the focus group setting. The

students were given the option to participate in the focus group, but were still present in the room even if they chose not to respond to the researcher's questions.

Another limitation of the study is that there is not a rubric or standard set of guidelines for the discussions that the mentors have with the mentees. Instead, the conversations are guided on an individual basis and determined by the mentor and mentee. While the individual nature of the conversations is good to make each interaction personalized and custom for the mentee, it does not allow itself to be held to a certain standard for every student participating in the program. Although one can hope that each mentor would be equally as enthusiastic, supportive, dedicated and thoughtful, that may not have been the case. Each individual student may not have felt an authentic connection with their mentor, and therefore not be as comfortable with the conversation or the mentorship relationship as a whole.

The final limitation is that this study was limited to one group of first-year, first-generation students at a specific institution (Kennesaw State University). This study was not advertised or open to the general student body at Kennesaw State University, and was only following a select subset of the first-generation student population.

Implications of Research

Because of this research, the findings will impact how faculty and staff interact with first-generation students, especially if the faculty or staff members were part of a mentoring relationship with the student. One of the implications for the mentoring program at Kennesaw State University is that the mentoring meetings continue into the spring semester with the same amount of frequency and impact that the meetings held in the fall semester. During the fall semester, there was not only a frequent amount of interaction between the mentors and their mentees, but there was also a "buzz" between the mentors in excitement for the mentoring

program. In order to continue to create excitement, frequent correspondences could be implemented in order to share topical information on first-generation students and/or mentoring, current events in this area, or to share current research that would support first-generation students. In the spring semester, mentor and mentee meetings declined, and the energy surrounding the program seemed to decrease. Since the results of this research found that the student's sense of belonging increased as the school year went on, it can be suggested that the mentors stay in contact and just as involved with their mentee (if not more involved) as the first semester. Though busy schedules or increased commitments may occur in the spring semester, it is important to remind mentors of their potential influence and impact. By encouraging the mentorship remain consistent in frequency as the school year proceeds, the mentee may continue to feel the sense of belonging between the two semesters, and further studies could continue to see this increased growth. Continued frequency can help to ensure that the student feels connected to the community well into his or her academic career.

Another implication for this study is that the connection between the mentor and the mentee needs to be genuine, starting with the role of the mentor. Through the focus group, it was found that the interactions that felt less genuine or more "scripted" left the student feeling more discouraged than the conversations that felt more "real" and seemed tailored to the student success. This knowledge can help the mentor to understand what is effective in the mentoring relationship, and to feel more comfortable with providing personal sentiment in the mentoring relationship with the mentee. Granted, it is important for the mentor to stay within the conduct guidelines of the institution and to make sure that the conversations and topics of the mentorship stay professional and representative of the institution, but it is possible to stay within the guidelines and still be authentic. Furthermore, it is important that the mentor make sure that the

conversations are representative of the student's individual circumstance, rather than giving a blanket statement to any mentee that the mentor may come in contact with. The advice that is appropriate for one student and his or her situation may not be applicable to another student. Making sure that the mentor is understanding of each individual mentee and his or her situation can help the mentor to have genuine and unique conversations with any mentee that he or she may work with.

Another implication of this research is to recognize that it is important that the mentors mention "how" to follow through with advice, rather than just giving the advice to the student. For example, many students were told to get involved at Kennesaw State University. However, they were not given advice or examples on how exactly to get involved. Simple suggestions on ways to get involved or how to go about finding the best way to make a connection to the university or the community can help the student to gain more confidence and feel a stronger sense of belonging at the institution, as well as to have a stronger connection with the mentor as well. Concrete examples would also help the student to receive a more personalized mentoring relationship, and would possibly feel less like a small fish in a big pond, especially at an institution like Kennesaw State University. In order to help to ensure that mentors are equipped with the correct information to give students, it is possible that the institution provide a quick review of services and opportunities available to students, possibly through an email correspondence or a webinar session. Mentors could also help students to learn how to talk with faculty or staff, particularly since the mentors at Kennesaw State University were all comprised of either faculty members or staff members. Since there was a decline in the student's confidence in their ability to talk with faculty members, giving the students examples of how to start difficult conversations and giving the student a safe space to practice having difficult

conversations with their mentor can help the student to gain more confidence in their interactions with their professors.

Recommendations for Future Research

This research study has shown possibly for future research in five key areas. One area for future research is to continue to measure the sense of belonging and the self-efficacy in this cohort of students. By making this study a longitudinal study, the researcher can see the lasting impacts of the mentoring program on this population of first-generation students. While measuring this same research population, the researcher could replicate the study again to gain a larger response sample size. Another area for research is to measure a test population of first-generation students against a population of continuing generation students to measure the reported sense of belonging and self-efficacy after mentoring. This would allow researchers to gain insight into whether or not mentoring was a more impactful practice for first-generation students rather than continuing generation students, or if mentoring impacts one population more so over another, or impacts both the same. Similar to this research suggestion, comparing a test group of first-generation students who participated in a formal mentoring program against first-generation students who did not partake in the formal mentoring program, or measuring the frequency in which students met with their mentors, could help researchers to draw a more definitive connection between mentoring and sense of belonging and self-efficacy. Holding this study outside of a learning community could be beneficial in gaining these results as well.

The other main area of future research could be in regards to the mentors, rather than the mentees. Implementing a training program for the mentors can help to give a more consistent and personalized experience to the students coming through, while allowing the mentors to know that it's okay to be authentic and genuine. This training program would need to undergo a formal

assessment in order to validate and improve the program for future implementations at other colleges or universities. The training program could also help to ensure that mentors are having conversations with the student that allows the mentee to be seen through a lens of inspiration, rather than one of being a student in a disadvantaged population. As a contrast to studying mentoring from the student's perspective, it is possible that researchers can develop a study that measure the perceptions of the mentors involved in the mentoring program. Allowing the mentors to give feedback on the process can help researchers to better understand received benefits for mentors as a result of this program and to help to identify any points of contention. Results from a study similar to this could help to identify areas of benefits for mentors and be used to gain more support from faculty and staff members. An enhanced level of support from faculty and staff members could help to grow the number of mentors involved with a program like the program implemented at Kennesaw State University.

Conclusion

This research study has shown the effects of the mentoring program at Kennesaw State University, explored the first-generation student perception of the mentoring experience, and identified the benefits behind a practice in place at Kennesaw State University. In the population of students who took part in a formal mentoring program, reported self-efficacy across a variety of efficacy scales was enhanced, whereas reported sense of belonging showed increase on individual variables, but decreased overall. The implications from this research can not only help the first-generation population at Kennesaw State University, but be applied to the population of first-generation students that are enrolled at institutions across the country. This research aims to help support first-generation students in creating a program that fits their needs, but also helps faculty and staff members to understand the how to effectively support this particular population.

The gap in the research in regards to formal mentoring programs and its effect on first-generation students is by no means filled, but this study aims to fill a small gap of this research in regards to first-generation students in Higher Education. It is hopeful that this research will be expanded on in the future, and that ultimately, more support will be gained for the first-generation students who make up such a large and important population in the higher education community today.

References

Alvarado, A., Spatariu, A., & Woodbury, C. (2017). Resilience & Emotional Intelligence

between First Generation College Students and Non-First Generation College Students.

FOCUS On Colleges, Universities & Schools, *11*(1), 1-10.

Anderson-Butcher, D., & Conroy, D. E. (2002, October 1). Factorial and criterion validity of

score of a measure of belonging in youth development programs. *Educational and

Psychological Measurement*, *62*(5).

Bandura, A. (1997). *Self-efficacy : The exercise of control*. New York, NY: W.H. Freeman &

Company.

Barefoot, B. O., Gardner, J. N., Cutright, M., Morris, L. V., Schroder, C. C., Schwartz, S. W., &

Siegel, M. J. (2005). *Achieving and Sustaining Institutional Excellence for the First Year

of College*. San Francisco, CA: Jossey-Bass.

Barondess, J. A. (n.d.). A Brief History of Mentoring. In *President's Address*. Retrieved

September 5, 2016, from

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2376519/pdf/tacca00082-0062.pdf

Baumeister, R F and Leary, M R (1995) The need to belong: desire for interpersonal attachments

as a fundamental human motivation Psychological Bulletin 117 (3) 497–529.

Budge, S. (2006). Peer Mentoring in Post-Secondary Education: Implications for Research and

Practice. *Journal Of College Reading And Learning*, *37*(1), 73-87.

Choy, S. P. (2001). Students Whose Parents Did Not Go to College : Postsecondary Access,

Persistence, and Attainment. *National Center of Education Statistics*, 1-34.

Davis, J. (2010). The first generation student experience: Implications for campus practice, and

strategies for improving persistence and success. Sterling, VA: Stylus Publishing, LLC.

Donne, J. (1624). *Devotions upon emergent occasions*. Montreal, Canada: McGill Queens University Press.

Ehrich, L. C., Hansford, B., & Tennent, L. (2004, October 1). Formal Mentoring Programs in Education and Other Professions: A Review of the Literature. *Educational Administration Quarterly*, *40*(4), 518-540.

Field, J. (2008). *Social Capital*. Milton Park, Abingdon, Oxon: Routledge.

Gummadam, P., Pittman, L. D., & Ioffe, M. (2016). School belonging, ethnic identity, and psychological adjustment among ethnic minority college students. Journal Of Experimental Education, 84(2), 289-306. doi:10.1080/00220973.2015.1048844

Hand, C., & Payne, E. M. (2008). First-generation students: A study of Appalachian student success. *Journal of Developmental Education, 32*(1), 4-15.

Hansford, B., Tennent, L., & Ehrich, L. C. (2010). Business Mentoring: Help or hindrance? *Mentoring & Tutoring: Partnership in Learning*, *10*(2), 101-115.

Hausmann, L. R. M., Schofield, J. W., & Woods, R. L. (2007). Sense of belonging as a predictor of intentionsto persist among African American and White first-year college students. *Research in Higher Education, 48*(7), 803-839.

Hegrenes, Stefanie A. "Pathways to Success in Higher Education: Understanding the Influence of Mentoring Programs on First-Generation Students." May 2013, https://conservancy.umn.edu/bitstream/handle/11299/158311/Hegrenes_umn_0130E_140 17.pdf?sequence=1&isAllowed=y. Accessed 28 Mar. 2018

Hoffman, M., Richmond, J., Morrow, J., & Salomone, K. (2002, November 1). Investigating "Sense of Belonging" in First-Year College Students. *Journal of College Student Retention: Research, Theory & Practice*, *4*(3).

Inkelas, K. K., Daver, Z. E., Vogt, K. E., & Leonard, J. (2007). Living–Learning Programs and

    First-Generation College Students' Academic and Social Transition to College. *Research*

    In Higher Education, *48*(4), 403-434.

Jehangir, R. R. (2010). *Higher education and first-generation students : Cultivating community,*

    voice, and place for the new majority. New York, NY: Palgrave Macmillan.

Katrevich, A. a., & Aruguete, M. a. (2017). Recognizing Challenges and Predicting Success in

    First-Generation University Students. *Journal Of STEM Education: Innovations &*

    Research, *18*(2), 40-44.

Kennesaw State University. (2018). About. In *About*. Retrieved April 5, 2018, from

    http://www.kennesaw.edu/about.php

(b) Kennesaw State University. (2018). Majors & Programs. In *Majors & Programs*. Retrieved

    April 5, 2018, from http://www.kennesaw.edu/majorsprograms.php

Kennesaw State University. (2017). First-Gen KSU. In *Department of First Year and Transition*

    Studies. Retrieved April 6, 2018, from

    http://uc.kennesaw.edu/fyts/programs/firsttogo/index.php

Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2010). *Student Success In College : Creating*

    Conditions that Matter (2nd ed.). San Francisco, CA: Jossey-Bass.

Maslow, A. H. (1943). A theory of human motivation. Psychological Review, 50(4), 370-396

Means, D. R., & Pyne, K. B. (2017). Finding my way: Perceptions of institutional support and

    belonging in low-income, first-generation, first-year college students. *Journal Of College*

    Student Development, *58*(6), 907-924. doi:10.1353/csd.2017.0071

Merriam-Webster. (2018). Mentorship. In *Dictionary*. Retrieved April 6, 2018, from

      https://www.merriam-webster.com/dictionary/mentorship

Newman, C. c., Wood, J. L., & Harris III, F. (2015). Black Men's Perceptions of Sense of

      Belonging with Faculty Members in Community Colleges. *Journal Of Negro Education*,

      84(4), 564-577.

Parks. S. D. (2000). *Big questions, worthy dreams : Mentoring young adults in their search for*

      meaning, purpose, and faith. San Francisco: Jossey-Bass.

Phinney, J.S., & Haas, K. (2010) The Process of Coping Among Ethnic Minority First-

      Generation College Freshmen: A Narrative Approach, The Journal of Social

      Psychology, 143:6,707-726, DOI: 10.1080/00224540309600426

Ramos-Sánchez, L., & Nichols, L. (2007). Self Efficacy of First-Generation and Non-First-

      Generation College Students: The Relationship With Academic Performance and College

      Adjustment. *Journal Of College Counseling*, *10*(1), 6-18.

Redford, J., & Hoyer, K. M. (2017, September). First-Generation and Continuing-Generation

      College Students: A Comparison of High School and Postsecondary Experiences

      [Electronic version]. *Stats in Brief : U.S. Department of Education*.

Rendón, L. I. (1994). Validating culturally diverse students: Toward a new model of learning and

      student development. *Innovative Higher Education, 19*(1), 33-51.

Richardson Jr., R. C., & Skinner, E. F. (1992). Helping first-generation minority students achieve

      degrees. *New Directions for Community Colleges*, 29-43.

Strayhorn, T. L. (2012). *College Students' Sense of Belonging*. New York, NY: Routledge.

Tachine, A. A., Cabrera, N. L., & Bird, E. Y. (2017). Home Away From Home: Native

    American Students' Sense of Belonging During Their First Year in College. *Journal Of*

    Higher Education, *88*(5), 785-807. doi:10.1080/00221546.2016.1257322

Terenzini, P., Springer, L., Yaeger, P., Pascarella, E., & Nora, A. (1996). First-Generation

    College Students: Characteristics, Experiences, and Cognitive Development. *Research in*

    Higher Education, 37(1), 1-22. Retrieved from http://www.jstor.org/stable/40196208

Urdan, T. C., & Pajares, F. (2006). *Self-efficacy Beliefs of Adolescents*. Greenwich, Conn:

    Information Age Publishing.

Vaccaro, A. & Newman, B. M. (2016). Development of a Sense of Belonging for Privileged and

    Minoritized Students: An Emergent Model. *Journal of College Student Development*

    57(8), 925-942. The Johns Hopkins University Press. Retrieved November 27, 2017,

    from Project MUSE database.

Wang, C. D., & Castañeda-Sound, C. (2008). The Role of Generational Status, Self-Esteem,

    Academic Self-Efficacy, and Perceived Social Support in College Students'

    Psychological Well-Being. *Journal Of College Counseling*, *11*(2), 101-118.

Ward, L., Siegel, M. J., & Davenport, Z. (2012). *First Generation College Students :*

    Understanding and Improving the Experience from Recruitment to Commencement. San

    Francisco, CA: Jossey-Bass.

 Weibell, C. J. (2011). *Principles of learning: 7 principles to guide personalized, student-*

    centered learning in the technology-enhanced, blended learning environment. Retrieved

    July 4, 2011 from [https://principlesoflearning.wordpress.com].

Appendix A

Survey to Measure Sense of Belonging

Mentoring and First-Generation Students:

Please answer the following questions. A score of 1 means strongly disagree, whereas a score of 5 means strongly agree.

1.   I don't have many friends at Kennesaw State University

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

2.   I feel comfortable at Kennesaw State University

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

3.   The leaders at Kennesaw State University make me feel wanted and accepted

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

4.   I feel like I am an important member of Kennesaw State University

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

5.   I wish I were not a part of Kennesaw State University

| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |

6.   I am disliked by students at Kennesaw State University

| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |

7.   I am committed to Kennesaw State University

| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |

8.   I am a part of Kennesaw State University

| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |

9.   I am supported at Kennesaw State University

| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |

10. I am accepted at Kennesaw State University

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

Appendix B
Instrument to measure self-efficacy in participants

For the following section, ***please rate your confidence*** in the following tasks, which 0 meaning "does not apply to me at all" and 10 meaning "strongly applies to me"

1.   Research a term paper

0   1   2   3   4   5   6   7   8   9   10

2.   Write course papers

0   1   2   3   4   5   6   7   8   9   10

3.   Do well on your exams

0   1   2   3   4   5   6   7   8   9   10

4.   Take good class notes

0   1   2   3   4   5   6   7   8   9   10

5.   Keep up to date with your schoolwork

0   1   2   3   4   5   6   7   8   9   10

6.   Manage time effectively

0   1   2   3   4   5   6   7   8   9   10
7.   Understand your textbooks

0   1   2   3   4   5   6   7   8   9   10

8.   Get along with your peers

0   1   2   3   4   5   6   7   8   9   10

9.   Socialize with your peers

0   1   2   3   4   5   6   7   8   9   10

10. Participate in class discussions

0   1   2   3   4   5   6   7   8   9   10

11. Ask a question in class

0   1   2   3   4   5   6   7   8   9   10

12. Get a date when you want one

0   1   2   3   4   5   6   7   8   9   10

13. Talk to your professors

0   1   2   3   4   5   6   7   8   9   10

14. Talk to university staff

0   1   2   3   4   5   6   7   8   9   10

15. Ask a professor a question

0   1   2   3   4   5   6   7   8   9   10

16. Make new friends at college

0   1   2   3   4   5   6   7   8   9   10

17. Join a student organization

0   1   2   3   4   5   6   7   8   9   10

18. Get a four-year Bachelor's degree

0   1   2   3   4   5   6   7   8   9   10

19. Get a career in a field that interests you

0   1   2   3   4   5   6   7   8   9   10

Appendix C

Total Instrument for Survey One and Two

Mentoring and First-Generation Students:

Please answer the following questions. A score of 1 means strongly disagree, whereas a score of
5 means strongly agree.

1.   I don't have many friends at Kennesaw State University

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

2.   I feel comfortable at Kennesaw State University

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

3.   The leaders at Kennesaw State University make me feel wanted and accepted

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

4.   I feel like I am an important member of Kennesaw State University

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

5.   I wish I were not a part of Kennesaw State University

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

Nor Disagree

6.   I am disliked by students at Kennesaw State University

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

7.   I am committed to Kennesaw State University

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

8.   I am a part of Kennesaw State University

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

9.   I am supported at Kennesaw State University

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

10. I am accepted at Kennesaw State University

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

For the following section, *please rate your confidence* in the following tasks, which 0 meaning "does not apply to me at all" and 10 meaning "strongly applies to me"

1.   Research a term paper

0   1   2   3   4   5   6   7   8   9   10

2.   Write course papers

 0   1   2   3   4   5   6   7   8   9   10

3.   Do well on your exams

0   1   2   3   4   5   6   7   8   9   10

4.   Take good class notes

0   1   2   3   4   5   6   7   8   9   10

5.   Keep up to date with your schoolwork

0   1   2   3   4   5   6   7   8   9   10

6.   Manage time effectively

0   1   2   3   4   5   6   7   8   9   10

7.   Understand your textbooks

0   1   2   3   4   5   6   7   8   9   10

8.   Get along with your peers

0   1   2   3   4   5   6   7   8   9   10

9.   Socialize with your peers

0   1   2   3   4   5   6   7   8   9   10

10. Participate in class discussions

0   1   2   3   4   5   6   7   8   9   10

11. Ask a question in class

0   1   2   3   4   5   6   7   8   9   10

12. Get a date when you want one

0   1   2   3   4   5   6   7   8   9   10

13. Talk to your professors

0   1   2   3   4   5   6   7   8   9   10

14. Talk to university staff

0   1   2   3   4   5   6   7   8   9   10

15. Ask a professor a question

0   1   2   3   4   5   6   7   8   9   10

16. Make new friends at college

0   1   2   3   4   5   6   7   8   9   10

17. Join a student organization

0   1   2   3   4   5   6   7   8   9   10

18. Get a four-year Bachelor's degree

0   1   2   3   4   5   6   7   8   9   10

19. Get a career in a field that interests you

0   1   2   3   4   5   6   7   8   9   10

(1st scaled adapted from the Sense of Belonging Scale Inventory utilized by Dawn Anderson-Butcher and David E. Conroy)
(2nd scale adapted from the College Self-Efficacy Inventory created by V.S. Solber, K. O'Brien, P. Villareal, R. Kennel, B. Davis)

Appendix D
CONSENT COVER LETTER
Survey

Title of Research Study: Effect of Mentoring on Self-Efficacy, Academic Success and Sense of Belonging in First-Generation College Students

Researcher's Contact Information: Chelsea Craig, 404-295-9788, ccraig16@kennesaw.edu

Introduction

You are being invited to take part in a research study conducted by Chelsea Craig of Kennesaw State University. Before you decide to participate in this study, you should read this form and ask questions about anything that you do not understand.

Description of Project

The purpose of the study is to study the effect of mentoring relationships between mentors and first-generation student "mentees."

Explanation of Procedures

For this survey, please answer the following questions provided. You may skip any questions that you do not feel comfortable answering.

Time Required

This survey will take approximately 30 minutes.

Risks or Discomforts

There are no known risks anticipated because of taking part in this study.

Benefits

Although there will be no direct benefits to you for taking part in the study, the researcher may learn more about mentoring programs and their effect on first-generation students.

Confidentiality

The results of this participation will be anonymous. Any data collected will be kept in a locked file cabinet and subsequently destroyed three years after the conclusion of the study.

Inclusion Criteria for Participation

Students participating in this study must be 18+ years old and self-identify as first-generation students, meaning that they are the first in their family to pursue a four-year degree.

Statement of Understanding

The purpose of this research has been explained and my participation is voluntary. I have the right to stop participation at any time without penalty. I understand that the research has no known risks, and I will not be identified. By completing this survey, I am agreeing to participate in this research project.

_____

THIS PAGE MAY BE REMOVED AND KEPT BY EACH PARTICIPANT

Research at Kennesaw State University that involves human participants is carried out under the oversight of an Institutional Review Board. Questions or problems regarding these activities should be addressed to the Institutional Review Board, Kennesaw State University, 585 Cobb Avenue, KH3403, Kennesaw, GA 30144-5591, (470) 578-2268.

Appendix E

CONSENT COVER LETTER
Focus Group

Title of Research Study: Effect of Mentoring on Self-Efficacy, Academic Success and Sense of Belonging in First-Generation College Students

Researcher's Contact Information: Chelsea Craig, 404-295-9788, ccraig16@kennesaw.edu

Introduction

You are being invited to take part in a research study conducted by Chelsea Craig of Kennesaw State University. Before you decide to participate in this study, you should read this form and ask questions about anything that you do not understand.

Description of Project

The purpose of the study is to study the effect of mentoring relationships between mentors and first-generation student "mentees."

Explanation of Procedures

For this focus group, please answer the following questions provided. You may choose to not answer any question that you do not want to.

Time Required

This focus group will take approximately one hour.

Risks or Discomforts

There are no known risks anticipated because of taking part in this study.

Benefits

Although there will be no direct benefits to you for taking part in the study, the researcher may learn more about mentoring programs and their effect on first-generation students.

Confidentiality

The results of this participation will be anonymous. Any data collected will be kept in a locked file cabinet and subsequently destroyed three years after the conclusion of the study.

Inclusion Criteria for Participation

Students participating in this study must be 18+ years old and self-identify as first-generation students, meaning that they are the first in their family to pursue a four-year degree.

Statement of Understanding

The purpose of this research has been explained and my participation is voluntary. I have the right to stop participation at any time without penalty. I understand that the research has no known risks, and I will not be identified. By completing this focus group, I am agreeing to participate in this research project.

_____

_____

THIS PAGE MAY BE REMOVED AND KEPT BY EACH PARTICIPANT

Research at Kennesaw State University that involves human participants is carried out under the oversight of an Institutional Review Board. Questions or problems regarding these activities should be addressed to the Institutional Review Board, Kennesaw State University, 585 Cobb Avenue, KH3403, Kennesaw, GA 30144-5591, (470) 578-2268.

Appendix F

Questions for IRB Study #18-101 Focus Group

Effect of Mentoring on Self Efficacy, Academic Achievement and Sense of Belonging in First-

Generation College Students

1. Can anyone tell me about any significant interactions that you have had with a mentor?

2. Why was/were this/these significant?

3. In what ways have you incorporated any advice from a mentor into your day to day life at

Kennesaw State University?