MENTORING DISTANCE-BASED GRADUATE STUDENTS: THE ROLE OF ACADEMIC ADVISORS

A Dissertation

by

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ABSTRACT

Distance education continues to be a hot topic in higher education. This study examined the perceptions of distance-based graduate students at one university to help determine whether professional academic advisors are perceived to serve as mentors. Distance-based students were contacted to determine their perceptions of mentoring in relation to professional academic advisors using an online survey adapted from the Mentor Role Inventory. In the area of graduate education, mentoring is primarily conducted by faculty; however, evidence in this study shows professional academic advisors can help supplement mentoring as it relates to distance-based graduate students, but cannot replace faculty. Traditional academic advisors generally are not understood to be serving in a mentorship role for distance-based graduate students, and while this study does not entirely dispel this assumption, it does reveal that academic advisors do meaningfully contribute to the overall mentoring process.

Academic advisors not only serve a different role and function from faculty for distance-based graduate students, but can also serve as supplemental mentors. Advisors are well situated to meet some of the needs within a mentoring relationship with distance students by consistently and actively engaging this population to meet student needs. This study shows that the academic advisors cannot replace the mentoring provided by faculty, but still play a valuable role for graduate students. The findings underscore the importance of ongoing social interaction throughout the socialization and research process graduate students undertake, and professional academic advisors can help close some of the gap. While graduate programs in online education continue to grow and consist of larger

components of online and blended delivery components, these findings reveal that distance graduate programs need to be more intentionally designed so the graduate student experience includes a variety of social interactions and increasing their access to faculty, academic advisors, and other campus resources. This study does not solve the conundrum of mentoring distance-based graduate students or prove that academic advisors can replace faculty in reference to mentoring, but it shows that it is important to intentionally improve students' access to an active learning community and attention paid to distance-based graduate students.

DEDICATION

To my family, thanks for all your love and support. Without each of you none of this would be possible.

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NOMENCLATURE

COI	Community of Inquiry
DE	Distance Education
HRD	Human Resource Development
MRI	Mentor Role Instrument
NACADA	National Association of Academic Advisors
TAMU	Texas A&M University
Univ.	University
Attn.	Attention
M	Mean
SD	Standard Deviation
n	Sample Size
N	Overall Population
df	Degree of Freedom
p	Probability
t	t-score
f	Frequency

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CHAPTER I

INTRODUCTION

This chapter introduces the topic of mentoring distance-based graduate students by professional academic advisors and sets up the related research objectives for this dissertation as it relates to Human Resource Development (HRD). The chapter is organized into different sections providing an overview of the topic, identifying problems or gaps, and defining the research purpose and questions. It also addresses issues such as significance of the study, the theoretical framework, assumptions, limitations, and the organization of the rest of the dissertation.

Overview of Topics

Distance Education (DE) is a hot topic in higher education today and relevant to HRD. In today's economy, there has been an increasing demand for people to continue their education while continuing to work (NACADA, 2006; Schroeder & Terras, 2015; Starks, 2011). This continued learning adds value to the companies by which these students are employed (Bierema & Eraut, 2004). In the past, people already in the workforce would have to attend evening or weekend classes if they wanted to continue their education; however, with the advent of the internet and other technologies, distance education has become the new way to help people further their education.

Distance Education, as defined by Moore and Kearsley (2012), is education in which learning occurs in a different location. These web-based courses not only allow more students to attend school, but it also allows those who are working the flexibility to attend classes asynchronously (at their convenience). Web-based programs such as

courses, webinars, and mentoring are growing in popularity with companies today as a means of reducing costs and time while still providing professional and career development opportunities to employees (i.e. students) (Bierema & Hill, 2005).

Distance Education not only encompasses online undergraduate and graduate students, but also those looking to further their education through certificate programs or participate in free learning courses such as in Massive Online Open Courses (MOOC), and companies looking to reduce education related costs. That being said, there is limited in-depth focus on distance education in HRD literature (Black, 2013). This concept, while fairly new at the turn of the century, now permeates nearly all aspects of further education, training, and professional development. Most of the literature presents a qualitative view on the management and evaluation of a single experience and does not focus on a specific benefit or function (Black, 2013). With the increasing use of distance delivery platforms and the various changes taking place in higher education, a transition is taking place, such as the push to have more online classes to accommodate growing numbers of students, lack of space, increasing responsibilities of faculty, cost reductions, and limited resources. This push has gained so much momentum that it is now common place for popular university rankings, such as US News & World Report, QS, and Times Higher Education to rank distance-based programs by subject. According to the 2019 US New & World Report Rankings there were 311 ranked distance-based graduate programs in Education, with the university studied for this dissertation ranked 16.

This transition in the focus of higher education away from traditional on-campus, face-to-face courses, to more online, asynchronous methods is to meet the changing needs and demands of today's students (Grabowski, 2016; Nigel, 2011). These changing needs have become more relevant as greater numbers of non-traditional students continue their education and as traditional students have to increasingly work to help pay for college. Some students may not live or work in proximity to a college campus with degree offerings that they need, and adults are much less likely to leave their job in order to pursue their graduate education. Today, students can take online courses or complete an entire degree online without ever stepping foot on a college campus. In the beginning, only the University of Phoenix was thought of when DE was discussed, but as time has passed there are now a wide range of alternatives (i.e. traditional colleges offering online degrees, Kaplan University, Strayer University, Western Governors University, etc.) available to students when it comes to DE, while traditional on-campus powerhouses (Columbia University, University of Florida, Johns Hopkins University, and Carnegie Mellon, etc.) have also started offering more online options. These alternatives are each unique, focusing on different subject matter, programs, and technology, and have different requirements. Students now have choices as to when and how they will further their education and advance their knowledge. While these programs were once thought of as a passing fad and irrelevant, mainstream education and even brick and mortar institutions have latched on to DE as a means of expanding their educational reach, adding legitimacy to this mode of learning (Allen & Seaman, 2011; US News & World Report, 2019).

Increased student enrollment in higher education has also led to an increased workload for professional academic advisors, who promise guidance on requirements. When higher education started, faculty members primarily handled the academic advising of students. This has shifted in the last ten to fifteen years, mainly at the undergraduate level, as professional academic advisors now hold most of the advising responsibilities (NACADA, 2004). Faculty continue to be the main advising source for graduate students, especially with courses, research, and career-related advice, while the day-to-day administrative advising of graduate students (university requirements, program requirements, registration, deadlines, campus resources, etc.) has also started to shift to academic advisors. These professional academic advisors supplement the academic advising carried out by the faculty to help reduce the heavy burden placed on faculty time (NACADA, 2006).

Academic advising is defined as a long-term process of learning or teaching through a dynamic relationship in regards to student's academic and life concerns (Crockett, 1978; NACADA, 2004, 2006; Noel-Levitz, 1997; O'Banion, 1972). With this recent shift in advising, a faculty members' time is now spent teaching, conducting research, and writing grants (not necessarily in that order), leaving less time to advise students (NACADA, 2006; Noel-Levitz, 1997). This change led to the creation of professional academic advisors, who are solely focused on helping students with their academic progress and facilitating improved time to degree completion. In the context of higher education, an academic advisor's role is multifaceted (NACADA, 2004). They serve not only as an advisor, but may also function as a counselor, friend, guide, mentor,

and teacher (Crockett, 1978; NACADA, 2004, 2006; Noel-Levitz, 1997; O'Banion, 1972).

There is not one word to describe what an advisor is or does, because academic advisors tailor their methods to help students through their academic journey on a case-by-case basis, specific to an individual student (NACADA, 2004). During an advising session, if done properly, bonds are formed which lead to the student trusting the advisor. The trust developed between the advisor and the student, combined with frequent communication, can evolve into a mentoring relationship (Buchanan, Myers, & Harding, 2005; NACADA, 2004; NACADA, 2006; Noel-Levitz, 1997; Stein and Glazer, 2003). Although mentoring is not the sole function of advising, it is often associated with the advising process (NADAD, 2006; Noel-Levitz, 1997). This trusting relationship is important for DE students as the advisor is typically their primary point of contact with the university (Noel-Levitz, 1997; Stein and Glazer, 2003) outside the faculty.

Students relationships with faculty are also multifaceted, and throughout history one of the main roles faculty have filled has been mentoring (NACADA, 2004; Nigel, 2011). This relatively new and expanding advising relationship between professional academic advisors and faculty members is constantly shifting. Although the advising offered by professional academic advisors is growing, it will never fully replace the advising by faculty, especially at the graduate level. The changing landscape of higher education has necessitated these changes, thus allowing the professional academic

advisor to assume an enhanced role in working with students, especially with those who are not on campus (NACADA, 2004; 2006; Nigel, 2011).

A problem many DE students face is their perceived lack of connectedness with other students and faculty resulting from not attending courses face-to-face or being on campus (Gaytan, 2015; Noel-Levitz, 1997; Stein and Glazer, 2003). With the help and support of professional academic advisors, distance-based graduate students can successfully navigate the journey of higher education while still feeling connected through a Community of Inquiry (Garrison, 2018; NACADA, 2006; Stein and Glazer, 2003; Stermer, 2018). A Community of Inquiry (COI) is the purposeful creation of a collaborative and trusting community through by building presence through social interaction (Garrison, 2018). This connection developed through a COI and distance education students has, thus far, been positive when done with a purposeful intent (Garrison, 2018; Stein & Glazer, 2003). Research on DE graduate studies has shown that students must feel socially connected during their education experience, or they are likely to feel less satisfied (Garrison, 2018; Grabowski, 2016, Sloan C Consortium, 2004).

Properly utilizing these limited resources needs to be accomplished quickly as distance education is projected to continue to grow and maximum satisfaction for DE students' needs to be achieved (Garrison, 2018; Nigel, 2011). One way toward accomplishing the goal of providing more consistent contact and support with DE students is to increase the responsibilities of professional academic advisors in regards to outreach with distance-based graduate students (Garrison, 2018; Grabowski, 2016;

Nigel, 2011; NACADA, 2006; Sloan C Consortium, 2004), as a form of distributing social presence and student engagement responsibilities.

As part of this increase in roles and responsibilities, professional academic advisors can provide social support and mentoring to this population, supplementing the foundational mentoring already provided by the faculty (Nigel, 2011; Sloan C Consortium, 2004). Research has shown that mentoring helps increase attendance, improve individuals' attitudes and motivation, reduce obstacles and barriers, and contribute to building relationships within the program community (Jekielek, Moore, & Hair, 2002; Mavrinac, 2005; Angelique, Kyle, & Taylor, 2002). This is akin to Herzberg's (1966) theory of motivation and thus by feeling more connected, their individual needs are better met and their satisfaction increased (Harandi, 2015).

Professional academic advisors complement the one-on-one support, advice, and guidance graduate students receive from faculty, while providing additional encouragement and praise and a sense of community, which is often referred to as mentoring (Lyons, Scroggins, & Rule, 1990). To accomplish this task, advisors help establish a relationship between students, their school, peers, and instructors so students feel as though they belong and are an active member of a learning community (Buchanan, Myers, & Harding, 2005; Stein & Glazer, 2003). Meeting the needs of individual learners and student groups through professional academic advisors also incorporates components of adult learning theory (Houle, 1980; Knowles, 1990; Merriam & Caffarella, 1999). By using components of Adult Learning Theory (Knowles, 1990) a sense of belonging, coupled with the interaction between students,

faculty, and staff can help to create a Community of Inquiry for these distance-based graduate students (Garrison, 2018; Garrison & Cleveland-Innes, 2005; Stein & Glazer, 2003).

Statement of Problem

Despite the increased interest in and demand for distance education at the graduate level, there has been limited research on the specific role professional academic advisors play in supporting and mentoring distance-based graduate students (Black, 2013; Nigel, 2011). Distance-based students are those who complete most, if not all, of their education online. Most of current research has focused on the role faculty play in distance education, though not specifically focusing on mentoring (Nigel, 2011; Pifer & Baker, 2016). This is caused in part by the traditional mentoring relationship between graduate students and faculty, but also because the concept of, and more specifically defined role of, professional academic advisors is still relatively new to have garnered significant interest (Black, 2013). Further research is needed to help determine to what extent a supplemental mentoring relationship between professional academic advisors and distance-based graduate students contributes to program completion and student satisfaction. For the purpose of this study, distance-based graduate students are considered to be students who are completing their graduate degree fully online.

According to the National Association of Academic Advising (2006), a main function of academic advising is mentoring, but this notion is applied mainly to undergraduate students and is not the only function associated with advising. This function carries over to academic advisors serving as liaisons for students focusing on

both their developmental and educational interests (Stein & Glazer, 2003). The relationship between academic advisors and distance-based graduate students is usually established, at least at first, primarily through the job function of academic advisors and the interactions and support they provide to DE graduate students (NACADA, 2006; Ragins & Cotton, 1999).

The initial relationship between faculty and DE students is mandatory and not initiated by choice on the student's behalf. Unlike most relationships with faculty, academic advisors serve as required points of contact. Generally, what is understood to set the role of mentoring apart in professional academic advising is the required interaction and the frequency of that interaction between the two parties (NACADA, 2006; Noe, 1988). The desire by both the advisor and the student to develop a deeper relationship beyond their required interactions is what potentially leads to a mentoring relationship. A greater social bond can be created when the interaction between both parties is increased, leading to what Garrison & Cleveland-Innes (2005) call a Community of Inquiry.

A Community of Inquiry (COI) for this study is defined as an online learning model of the necessary core themes needed to develop an engaged community who can then socially interact to further pursue inquiry in an education environment (Garrison, 2018; Garrison, Anderson, & Archer, 2000; & Garrison & Cleveland-Innes, 2005). This idea relates to the community which is naturally created on campus between graduate students, faculty, and academic advisors (Garrison, 2018; Grabowski, 2016; &NACADA, 2006). For distance-based students, this community must be artificially

created, at first, through encouragement and deliberate interactions by faculty and academic advisors modeling the way (Harandi, 2015; Pifer & Baker, 2016; Schroeder & Terras, 2015). To do this, the environment is made up of three elements: cognitive discourse, social presence, and teaching. Cognitive discourse refers to the ability confirm meaning through reflection (Garrison, 2018; Garrison, Anderson, & Archer, 2000; Swan & Richardson, 2009). Social Presence is the ability online learners feel connected (Schoeder & Terras, 2015; Swan & Richardson, 2009). Teaching presence is the combination of cognitive discourse and social presence in an online environment related to personal and meaning learning outlines (Garrison, 2018; Garrison, Anderson, & Archer, 2000; Schoeder & Terras, 2015; Swan & Richardson, 2009).

This community is a more encompassing ecological view of distance education, which helps to contribute to the overall education experience of DE students (Garrison, 2018; Garrison, Anderson, Archer, 2000; Schroeder & Terras, 2015). Since distance-based graduate students are not attending conventional classes on campus, academic advisors serve as a conduit to help connect them to the university and to feel included, as advisors are typically an additional primary and consistent means of contact with the COI (Garrison & Cleveland-Innes, 2007, Garrison, 2007 & 2018; & Zachary, 2002). This connection, coupled with the needs of the students, can lead to a mentoring-type relationship between professional academic advisors and distance-based graduate students (Garrison & Cleveland-Innes, 2007, Garrison, 2007 & 2018; Grabowski, 2016; NACADA 2006 & Zachary, 2002).

During the last twenty years, there has been an increase in research relating to the function of mentoring associated with academic advising, but little, if anything, has been explored related to the relationship between distance-based graduate students and professional academic advisors (Garrison, 2018; Garrison, Anderson, Archer, 2000; NACADA, 2006; Schoeder & Terras, 2015; Zachary, 2002). This could be because a more conventional conception of graduate education focuses on the traditional relationship between the student and their advising faculty member. Also, traditionally, professional academic advisors have had little, if anything, to do with graduation education. To better understand how professional academic advisors can help contribute to the COI and this mentoring relationship, more detailed research is needed on mentoring distance-based graduate students by professional academic advisors (Garrison, 2018; Gaytan, 2015; NACADA, 2004, Nigel, 2011; Zachary, 2002).

In order to contribute to the body of literature on COIs and advising relationships in distance education, I examined the approved distance-based degrees and certificate programs at a Tier One, Land Grant research institution located in the Southern United States. I used the Ragins and McFarlin's (1990) Mentor Role Instrument (MRI) to assess the relationship between professional academic advisors and distance-based graduate students in order to determine whether an active mentoring relationship existed between these actors within the COI, which supplements the mentoring that provided by the primary faculty in the DE program.

Purpose of Study

The purpose of this study was to examine the relationship between professional academic advisors and distance-based graduate students. The researcher was an academic advisor for graduate students at the time of study design. As such, the researcher could be biased towards the role of the academic advisor and this could have influenced the design of the study. During this time, the researcher was responsible for advising graduate students with a large distance-based population. Believing the researcher was the main point of contact and often the sole university contact for the student, the researcher designed this study to test the hypothesis to see if mentoring could be taking place.

Buchanan et al. (2005) defined mentors as providing active and regular support and encouragement to someone, which research shows is a function of academic advisors (NACADA, 2016; Tanis & Baker, 2017). The work of Stein and Glazer (2003) echoed this, where they concluded that online mentors are more about providing support, helping to increase students' independent learning, and ultimately advocating for student success and degree completion (NACADA, 2004 & 2016). This study looked specifically at the relationship between professional academic advisors and distance-based graduate students at a Tier-One research institution located in the Southern United States using the Mentor Role Instrument (MRI) developed by Ragins and McFarlin (1990) to measure whether DE graduate students perceived an active mentoring relationship to exist.

Research Objectives

The organization of this study was based on 5 objectives related to professional academic advisers' mentoring relationships with distance-based graduate students:

1. To examine the role professional academic advisors serve in mentoring distance-based graduate students within online communities of inquiry.
2. To examine the career development function professional academic advisors serve for distance-based graduate students.
3. To examine the psychosocial functions professional academic advisors serve for distance-based graduate students.
4. To examine the parental functions professional academic advisors serve for distance-based graduate students.
5. To examine the social functions professional academic advisors serve for supporting and mentoring distance-based graduate students.

Significance of Study

In relationship to the field of HRD, this study makes a significant contribution to the literature pertaining to distance learning in the following areas: providing a clearer understanding of mentoring in distance environments and COIs; expanding what is known about academic and career advising for students pursuing graduate degrees; the application of the MRI within a graduate education COI; and identifying more effective practices for supporting learners in graduate distance education. First, in relation to HRD, there is an increasing need by companies to reduce costs associated with professional development (continuing education, training, and development) and career

development (Bierema & Hill, 2005). One of the ways to accomplish this is through distance learning, which not only provides ways for companies to increase the learning of employees and support explicit knowledge transfer, but also through virtual mentoring related to tacit knowledge transfer (Bierema & Hill, 2005, Goffin & Koners, 2011). By contributing to this body of knowledge, this study also adds value to the concept of virtual mentoring, providing further evidence of its benefits.

Virtual mentoring, a relatively new topic, has been explored in the HRD context before, but strictly from the professional side and not from an academic perspective. As the functions in higher education eventually relate to the professional world, understanding how virtual mentoring can be conducted, at an advanced level, and within a different context also expands the knowledge base in the field. Additionally, limited quantitative research has been conducted within distance education related to mentoring, as most studies have been qualitative (Black, 2013; Stein & Glazer, 2003). There is also limited research relating to mentoring graduate students by professional academic advisors (NACADA, 2006 & 2016; Nigel, 2011).

The research conducted on mentoring and academic advisors has focused on either undergraduate students and/or faculty advisors (Black, 2013; NACADA, 2004 & 2016; Nigel, 2011). This study expands this knowledge base and helps determine if, and to what extent, a mentoring relationship might develop between professional academic advisors and distance-based graduate students. Further research is needed to properly quantify this relationship and how it supplements the mentoring provided by faculty. This information is invaluable when it comes to the design on online graduate

programming, and how academic programs can provide additional structure and support to DE students to facilitate their academic persistence and completion.

The MRI was originally developed to examine cross-gender mentoring relationships in the business world (Ragins & McFarlin, 1990) and has only sporadically been used in higher education. In the context of higher education, the MRI has been primarily used to examine the mentoring of student affairs personnel (Clifford, 2009), and has only been used with employees and not with students. Although this is a specific, limited-population, this study contributes to further establishing the instrument's reliability and validating it for a new population.

While distance education and graduate education have been increasingly researched, little if any, research has been conducted in regards to professional academic advising. So far, this specific topic has been neglected in the research, especially as it relates to professional academic advisors. By examining the relationship between distance-based graduate students and professional academic advisors, students could be offered additional mentoring resources at the graduate level. Additionally, the study can illuminate the benefit and value professional academic advisors contribute to the COI through the overall support and mentoring of these DE students.

It is important to note that there is a difference between advising distance-based graduate students and traditional graduate students. There is also a difference between advising graduate and undergraduate students. When it comes to advising traditional graduate students, the role of the academic advisor differs significantly from that of a faculty member. The academic advisor is responsible more for logistical functions and

advise, while the faculty focuses on mentoring, research, teaching, etc. There can be times when the two overlap or lines become blurred as often faculty advise their students on not only courses, but completion timelines and other logistical functions. Academic advisors also make recommendations for courses, completion timelines based on university calendars, etc. During these advising interactions the advisor and student are in close proximity, if not, face-to-face. This adds to the relationship and understanding as a student can stop by anytime they have questions instead of relying solely on email and phone calls.

For distance-based graduate students, this is not always the case as they are geographically away from campus, often in other states or countries. As such, the advising relationship is restricted to almost nothing but emails, phone calls, and the occasionally video conference. During this time the advisor is typically the only point of contact with the university outside of courses and the faculty advisor. Typically distance-based students are an afterthought for both academic and advisors and faculty advisors. This is not always the case, but often is, as the frequency and depth of interactions is limited to more transactional items. The student only contacts the academic advisor if they need something and vice versa. The same can be true for the faculty advisor; however, they often will check in with their advisees about once a semester.

This is important distinction to make as faculty, although heavily committed to teaching, research, and students, have lower advisor/student ratios then academic advisors. This can make it easier for them to keep track and communicate more

frequently with students, especially those that do not put forth the effort on their own. The academic advisor would do their best to follow up with students, but their workload often does not allow them to be able to do so. These same concepts can also be applied to advising undergraduate students. Although, with most undergraduate students they rely on faculty for teaching and advisor, their interactions are limited to class and possibly office hours. During these interactions they would have a small focus and typically the faculty would not be directly responsible for their progress and advising as with graduate students. For academic advisors, it is a reversed scenario as they take the lead advising role for undergraduate students and become the main source of information and guidance.

Overview of the Theoretical Framework

The relationship between a professional academic advisor and a graduate student is based on the job function of the advisor and the need for them to interact with each other (NACADA, 2016; Pifer & Baker, 2016; Ragins & Cotton, 1999). A relationship is created when the frequency of social interaction increases, leading to what Garrison & Cleveland-Innes (2005) term a Community of Inquiry (COI). This sense of community is a broad and encompassing ecological view of distance education, which contributes to the overall education experience of DE students (Garrison, 2018; Garrison et al., 2000; Stein & Glazer, 2003).

Distance-based graduate students need to feel connected to their faculty, peers, and learning environment and experiences just as much, if not more so, than their on-campus counterparts (Dewey, 1933; Garrison, 2018; Harandi, 2015; Henri, 1992). The

notion of a Community of Inquiry (COI) combines three elemental dimensions (social presence, cognitive presence, and teaching presence) of the traditional college experience and translates them to the virtual context experienced by online learners (Garrison & Cleveland-Innes, 2005). When the COI framework is combined with the concepts of mentoring and professional academic advising within the ecology of the distance learning environment, the learning experience for distance-based graduate students can be improved and enhanced (Garrison, 2018; NACADA, 2016, Sloan C Consortium, 2004).

Social presence, as defined by Garrison et al. (2000), relates to establishing personal and purposeful relationships within the virtual learning environment. These relationships include effective communication skills, open and frequent communication, and a perceived sense of group cohesion. Cognitive presence is defined as "the exploration, construction, resolution and confirmation of understanding through collaboration and reflection" (Garrison, 2018). The notion of cognitive presence incorporates active reflection and connection of meaning to experience through social interaction as advocated by Dewey (1959). The final component in the framework entails teacher presence. Teacher presence reflects the three components of design, facilitation, and instruction. As it relates to online learning, teacher presence is the most important component of the COI framework (Garrison, 2007; Swan & Shih, 2005; Swan, 2003).

The mentoring associated with professional academic advising, although commonly thought of as formal, is actually informal as it refers to the natural forming of

relationships on the basis of perceived competence and comfort between individuals (Allen, Poteet, & Burroughs, 1997; Kram, 1985; Ragins & Cotton, 1999; Tanis & Baker, 2017). This type of emergent relationship is also geared more towards respect of the mentor by the protégé, as the protégé is the one typically seeking the relationship (Ragins & Cotton, 1999).

According to Ragins and Cotton (1999), informal mentoring is more concerned with the functions of psychosocial, parent, and career development. This concern is not only in the present and limited to the term of the mentoring relationship, as with formal mentoring, but is slower to develop and extends for a life-time (Kram, 1983; Ragins & McFarlin, 1990). Communication is an integral part of the mentoring relationship and can be enhanced through training as well (Sipe, 2002; Allen, Eby, Lentz, 2006). Proper communication is integral in communicating online, so it is a vital skill in distance education.

When distance-education is viewed through the lens of a Community of Inquiry, an environment where true learning can take place is facilitated (Dewey, 1933; Garrison, 2007 & 2018; Garrison et al., 2000). By combining this framework with professional academic advising, a Community of Inquiry can be further defined. Academic advising adds to the COI model by contributing to the social interactions outside of instruction for distance-based students. Professional academic advisors play a key role in contributing to the COI through assisting students with navigating the structure and processes of higher education (Garrison & Cleveland-Innes, 2005; Garrison, 2018; NACADA, 2016; Stein & Glazer, 2003). This guidance is accomplished by supporting and encouraging

graduate students, by making sure they are aware of all policies and procedures related to their education, and by helping connect and resolve issues with various offices and entities on campus for the student (NACADA, 2006; Stein and Glazer, 2003). If the academic advising process is coupled with frequent and intentional interactions, as defined by the student, mentoring can also occur (Buchanan et al., 2005; Harandi, 2015; NACADA 2004).

Applying this idea of informal mentoring to the professional academic advising process allows the academic advisor to become an ancillary support system, as they are neither a faculty member nor directly involved in the students' education, but also allows them to have an insider's knowledge of the workings of higher education and the program environment (Allen et al., 2006). The advising relationship also somewhat resembles an academic coaching relationship where the advisor encourages graduate students and helps them develop new strategies for success (Robinson & Gahagan, 2010). Although mentoring and academic coaching are different, academic advisors often serve both functions within the virtual Community of Inquiry (NACADA, 2016; Robison & Gahagan, 2010).

Overview of the Research Design

This study aimed to examine the relationship between professional academic advisors and distance-based graduate students at a Tier One research institution located in the Southern United States to see whether it resembles a mentoring relationship using the Mentor Role Instrument (MRI) developed by Ragins and McFarlin (1990). The

function of mentoring distance-based graduate students by professional academic advisors was assessed by using a descriptive and correlational design.

The exact number of graduate students participating in distance-based programs is elusive at this particular institution, as any enrolled student is allowed to register for distance-based courses. During this study the Distance Education (2013) website at a Southern Land-Grant university listed four colleges offering distance-based graduate degrees. Now, the Distance Education (2019) website lists all eleven colleges offering almost 50 distance-based degrees. For the purpose of the study, graduate students were contacted through a university report based on course enrollment and were allowed to choose whether they wanted to participate in the study. At the same time, the various colleges and departments were contacted to receive an estimate of number of students enrolled as distance students in order to calculate and approximate population size and response rate for the survey.

The graduate students contacted were all participating strictly in online courses spanning 3 semesters during the academic year of 2014. All students registered for these online classes were contacted based on their enrollment status and invited to participate on the basis of whether they were truly participating in a distance-based program. Students who were selectively taking an online course as part of their conventional plan of study were asked not to respond to the survey. A majority of the survey participants were actively pursuing distance-based master's degrees or certificates. At the time, there were 37 programs offering such programs at the participating Southern, Tier-One, Land Grant institution.

Mentor role instrument

Ragins and McFarlin (1990) developed the Mentor Role Instrument using Kram's (1985) original study which found mentors serve two primary functions: career development and psychological support. The Mentor Role Instrument (MRI) gauges the protégés/mentees' perceptions of the mentoring relationship (Ragins and McFarlin, 1990). Ragins and McFarlin (1990) added two additional mentor functions: parent and social. These additional functions were based on Kram's (1985) original observations which had not been fully explored until the publication of Ragins and McFarlin's (1990) article.

Originally consisting of 9 roles (sponsorship, coach, protector, challenge, exposure, friendship, role model, counseling, and acceptance) the MRI was divided between the career develop and psychological needs of protégés. The career development function assessed perceptions relating to the roles of sponsorship, coaching, protecting, challenging, assignments, and exposure (Kram, 1985; Ragins & McFarlin, 1990). These roles help with the advancement of one's career. The function of psychological development assessed perceptions relating to the roles of friendship, role modeling, counseling, and acceptance (Kram, 1985; Ragins & McFarlin, 1990). These mentoring roles address components of interpersonal skills and relationships. The 11 mentoring roles evaluated with the MRI evaluate people's perceptions of mentoring relationships. Ragins and Cotton (1999) suggest mentoring is not an all or nothing endeavor, and that a mentor might only partially fulfill some of these functions and roles.

The mentoring roles of Career Development Psychosocial Development, Parental Development, and Social Development were used as a basis of the study as the researcher believed they were the main point of contact at the university. This lead the research to believe that mentoring might be taking place as often the student only took classes and then wrote a final paper for the programs the researcher was advising for at the time. Since no research was taking place, as with a traditional graduate program, the researcher believe most of the faculty in their department were hands-off and thus mentoring might not be taking place.

Assumptions

Certain assumptions were made in regards to the quality of the data as well as biases and assumptions of the researcher. It was also assumed the Mentor Role Instrument (MRI) accurately reflected the perceptions of mentoring relationships between an academic advisor (mentor) and a graduate student (mentee). It was further assumed the MRI was readily adaptable for the purpose of this study and adequately describes the role of a professional academic advisor in relationship with distance-based graduate students, as being a staff member/professional academic advisor and not a faculty advisor/member, committee chair, or primary instructor. The final assumption was that all distance-based graduate students were receptive to the idea of a non-traditional mentoring relationship with their professional academic adviser within their virtual Community of Inquiry.

Limitations

The sample population for this study was a convenience sample of distance students who were willing to self-identify as distance students for the purpose of this study. As the institution did not have an official marker distinguishing between the enrollment of distance students and conventional students, the actual sample is based on these self-identifying participants, and it is not clearly known if they were actually fully online distance education students. That said, it is fairly safe to assume that the students who chose to participate completed the majority of their coursework in the online format. Although the sample did span multiple colleges, departments, majors, and degree/certificate programs, it is limited to one university. Each of the participating distance programs are advised differently according to their own norms, where some programs enlist the services of professional academic advisors and other do not, so there is not a singular, consistent advising model for each student.

Each program was contacted via email and the program advisor was asked to encourage their students to participate in the survey. Although follow-up emails were sent by the university to all students registered in courses of distance-based majors for the spring, summer, and fall 2014 semesters, there was no way to guarantee the emails were received or read by students. Since the population was not clearly defined, there was no accurate way to fully gauge the response rate or to know what percentage of the target population was reached or responded to the survey. Other limitations include the social desirability of participating in an online program, the students self-selecting to

participate in the study, the students self-reporting, and the definitions for or support and advising may vary by program, field, degree, and college.

Organization of the Dissertation

This dissertation is divided into five chapters. The first chapter contains an introduction, summary of terms, statement of the problem, purpose of the study, research questions, assumptions and limitations, significance of study, and organization of the dissertation. The second chapter contains the review of the literature as it relates to mentoring, academic advising, distance education, and the conceptual framework. The third chapter describes the methodology and methods selected to answer the research questions, discuss the population and sample selection process, and procedures for data collection and analysis. The fourth chapter presents the results and data analyses. The final chapter contains a discussion of the research findings in relation to current literature, conclusions, and recommendations for future research.

CHAPTER II

LITERATURE REVIEW

Overview of Topics

This chapter reviews the literature related to the academic advising of distance-based graduate students by professional academic advisors and is organized into five sections. The first section provides an overview and description of graduate academic advising in general. The second section provides an overview of mentoring in general. The third section reviews the context of distance education. The fourth covers the Community of Inquiry framework that was utilized in this study. And finally, the last chapter provides an overview of the Community of Inquiry model as it relates to professional academic advising in graduate studies.

A review of the literature revealed a gap in research pertaining to the academic advising of distance-based graduate students, especially by a professional academic advisor. This is also true for literature relating to the mentoring of graduate students by professional academic advisors, and most especially distance-based students. This dissertation explores how academic advisors, who are primarily professional staff members, both advise distance-based graduate students and can also serve as informal mentors to these students, supplementing the traditional mentoring relationships offered by program faculty. This exploration of mentoring of distance-based graduate students was conducted utilizing the lens of informal mentoring and the Community of Inquiry model for learning in virtual environments (Stein & Glazer, 2003; Garrison, 2007).

The purpose of this study was to examine the mentoring relationship between professional academic advisors and distance-based graduate students. The theoretical context was drawn from three bodies of literature related to academic advising, mentoring, and distance education. The main purpose of distance education (DE) is to afford geographic and temporal flexibility for non-traditional graduate students and to provide as much of the college learning experience in an online delivery format as possible (Garrison & Cleveland-Innes, 2005; Grabowski, 2016). The connection to be made here is that when the idea of a learning "community" in online programs is combined with professional academic advising, distance-based graduate students may feel more connected to the university and their education, and therefore be more successful in their graduate studies (Garrison, 2018; Garrison et al., 2000; NACADA, 2016; Stein & Glazer, 2003). The lessons learned from the online learning community and support through informal mentoring also carries forward to the working world, where distance-based teams, collaborators, or persons working from home or offsite can also feel better connected, gaining benefits from this virtual community of learners and mentors (Berg, 1999; Lipnack & Stamps, 1999; Tanis & Baker, 2017).

Professional Academic Advising

Today, academic advisors are primarily professional staff members who serve more of an administrative function in academic programs as compared to the academic and didactic role of faculty advisors. Although the process of graduate student mentoring is still conventionally conceived of as a traditional dyadic relationship between a faculty member and a graduate student, with the increasing demand placed on

faculty due to the growing enrollment numbers of online of graduate students, professional academic advisors are now assisting faculty with the advising of graduate students. The role of academic advising includes components of both mentoring and coaching, both of which are only a portion of the many facets often associated with this profession (NACADA, 2006). The National Academic Advising Association, NACADA (2006), Kuhn (2008), and Stermer (2018) define academic advising an institutional representative who uses a pedagogy focused on student learning, involving curriculum, built on a series of purposeful interactions revolving around informing, counseling, coaching, mentoring, and teaching students as they move through a program of study.

These functions carry over and are also shared with the same mentoring roles of faculty advisors, as both faculty and advisers serve as liaisons for the student with their development and educational interests at heart (Pifer & Baker, 2016; Stein & Glazer, 2003; Tanis & Baker, 2017). Academic advising is often associated with mentoring, although the two processes and definitions differ. Not every advisor/student relationship will lead to mentoring; however, the way advising is implemented may increase the likelihood that informal mentoring may also occur (NACADA, 2004; 2006).

Professional academic advisors supplement the mentoring role facilitated by faculty members who also have other major responsibilities such as (but not limited to) teaching, research, and grants, which occupy the majority of their time. Both emails and phone calls may get lost in the shuffle of higher education, especially for faculty members who have increasing responsibilities. Professional academic advisors have

similar issues; however, their main function is to work with and be in direct contact with students, which is often not a rewarded and/or encouraged responsibility of faculty at many institutions. This especially leaves the distance-based graduate student at a further disadvantage. Professional academic advisors help fill this gap and meet this need by facilitating necessary connections between the students and the university and helping them feel welcomed and included in the learning community (Garrison & Cleveland-Innes, 2007, Garrison, 2018; & Zachary, 2002), supplementing the support which is provided through the program of study. The social interaction with students and the relationships created help form the virtual Community of Inquiry which can further build the foundation for student mentoring.

Academic Advising traces its roots to the inception of higher education in the United States (Gillispie, 2003). Based on the English template, colleges were established to educate young men, mainly to become clergyman, focusing on the moral and intellectual development of students by faculty (Gallagher & Demos, 1983; Gillispie, 2003). During this time, faculty lived with and taught students both inside and outside of the classroom, which created strong social bonds (Brubacher & Rudy, 1997; Gillispie, 2003). This all changed during the American Revolutionary War when faculty began distancing themselves from the strict guidance of students and began viewing them as more free-thinking individuals (Gillispie, 2003).

It was during the nineteenth century when academic advising groups began forming and faculty, possessing specialized subject knowledge, began guiding students through their educational careers (Gillispie, 2003; Gordan, 1992). With the start of

World War I, advising changed again as the focus and energy in America switched to industrial processes (Gallagher & Demos, 1983). Combined with the growth in psychology taking place during this time, higher education further evolved and processes were implemented mirroring their military influences (Gillispie, 2003). It was at this point in history when the United States Army implemented vocational guidance centers and began using occupational assessments to help advise students in their academic pursuits (Gillispie, 2003).

The Progressive Education Movement of the 1920s, coupled with the start of World War II, pushed students to self-direct their education and redirected the role of mentoring toward educators as the philosophy of holistic learning was taking root within higher education (Gillispie, 2003; Strange, 1994). As the baby boomers began college and interest grew in measuring students' interests and aptitudes, an increasing demand was placed on academic advising and counseling (Gillispie, 2003; Zunker, 2002). This growth and interest continued throughout the 1960s and 1970s as the issues of social justice, access, usefulness, and accountability became focal points within higher education (Gordon, 1992). Today academic advising is considered to be a professional field, albeit one without its own established theories, but influenced and guided by Knowles' (1990) Adult Learning Theory, Maslow's social Need Theory (Maslow, 1954; Herzberg, 1966), and the broader influence of the social sciences (Creamer & Creamer, 1994; Williams, 2007).

The National Academic Advising Association (NACADA) was founded in 1979 with the purpose to foster quality academic advising in higher education, and since then

has continued to grow, support, and improve the profession (Miller & Thurmond, 2006; Stermer, 2018). NACADA puts forward that academic advising involves a pedagogy and curriculum built on the framework of purposeful meetings and focuses on targeted student learning outcomes. Academic advising is usually the only consistent and formal bridge that exists between the institution and students with the aim of identifying and advocating for students and to improve policies and procedures (Britto & Rush, 2013; NACADA, 2004; Polson, 1994; Polson & Vowell, 1995; Stermer, 2018; Swecker, Fifolt, & Searby, 2013; Young-Jones, Burt, Dixon, & Hawthorne, 2013).

Either staff or faculty advisors, depending on the structure of the college or university, carry out the role of academic advising. Academic advising comes in many forms with these trained professionals drawing on theories from the social sciences, humanities, and educational fields (Creamer & Creamer, 1994; NACADA, 2006; Williams, 2007). According to the National Association of Academic Advising (NACADA, 2006) academic advising is a teaching and learning process which requires a pedagogy that incorporates the preparation, facilitation, documentation, and assessment of advising interactions.

One-way advisers can help students succeed is through developing a set of micro-skills (Barnett, Roach, & Smith, 2006). Micro-skills are behaviors that establish active listening such as: attending behaviors, open-ended questions, paraphrases, summaries, etc. that are observed and learned quickly (Starks, 2011). Reynolds (2011) noted micro-skills as being one of the most important skillsets for student affairs professionals to develop. These skills are especially helpful when advisers serve as

mentors and when focused on improving communication. Mentoring is an additional function of academic advising and incorporates the concept of academic coaching, which refers to forming partnerships (NACADA, 2006; Jarvis, Lane, & Fillery-Travis, 2006).

O'Banion (1972) defines academic advising as a process in which the advisor and student participate in a dynamic relationship respectful of the student's academic concerns. In this relationship, the advisor takes on the role of guide and interacts with the student to enhance their self-awareness and fulfillment of their academic career (O'Banion, 1972; Winston, Enders, & Miller, 1982). For the context of this dissertation, academic advising is being related to the academic careers of distance-based graduate students which is facilitated by a professional staff member who works to supplement the guidance provided by a faculty member.

Academic advising is defined as an "intentional" process of educating someone, requiring a concern for fundamental goals (NACADA, 2004). Traditionally, faculty members advise graduate students, but it is also becoming more and more common for a professional academic advisor to serve in this role. Academic advising is a systematic, developmental process focused on the educational and career plans of a student through a close student-advisor relationship (Crockett, 1978; Winston et al., 1982). It is a decision-making process facilitated by an academic advisor through communication, which coordinates the learning experiences of students through course and career planning (Crockett, 1978). Crookston (1972) expanded on this relationship by saying it

also facilitates the student's rational processes, interactions, behaviors, and problem-solving, decision-making, and evaluation skills.

Steele (2005) defines distance advising as using technology to help distance learners maximize their educational potential, enabling them to reach their goals. Academic advisors for distance-based students need to have a slightly different skill set, as there is a difference between advising a distance-based student and a traditional on-campus student, especially in consideration of the geographical isolation associated with distance education (Finley & Chapman, 2011; Steele, 2005). According to a study by the Online Learning Consortium (2004) and later reported by Allen and Seaman (2017), the number of distance-based students will continue to grow, with no foreseeable end in sight, and so far, research report that distance learning experiences in higher education have been mostly positive.

By using a full range of resources and collaborating with students in a developmental relationship, professional academic advisors can help facilitate distance-based students' academic and professional goals (Winston, Miller, Enders, Grites, & Associates, 1984). It is crucial to intentionally further develop this support role in distance programs and institutions, and to learn how to properly utilize institutional resources to meet student needs, as distance education opportunities will eventually surpass traditionally delivered education (Allen & Seaman, 2017; Nigel, 2011). As this distance student demographic is changing, adult learning styles and other HRD practices will also need to be incorporated into the academic advising role in order to better serve this rapidly growing student population and help to reduce attrition rates (Parahoo,

Tamim, & Crane, 2010; Starks, 2011). There are noteworthy differences between non-traditional and traditional students, and between distance graduate and conventional graduate students, and many distance students tend to be non-traditional students as well. Non-traditional students tend to be more focused on their learning and want to be actively engaged in their program, even though their family and work obligations can be a burden (Kantrowitz, 2011). Varney (2009) points out that attrition rates for distance leaners also tend to be higher, so it important for professional academic advisors to not only better understand the needs of these students, but also how to help them succeed (Steele, 2005).

Academic coaching

The concept of academic coaching refers to a partnership between two individuals where there are mutually understood goals and objectives (International Coach Federation, 2008). This definition traces its roots back to the HRD concept of executive coaching, which is a short-term relationship between two individuals focused on a common goal for the purpose of improving effectiveness (Bono, Purvanova, Towler, & Peterson, 2009; Hall, Otazo, & Hollenbeck, 1999; McClellan & Moser, 2011; & Wasylyshyn, 2003). This relationship, according to Tee, Jowett, and Bechelet-Carter (2009), focuses on the short-term development of an individual, which is determined by their motivation through a mutual understanding of objectives and goals. Research by the Nursing and Midwifery Council (2006) in the United Kingdom found the coaching relationship between the student and the university (i.e. academic advisor) contributed to supporting the students' learning. This relationship allows the coach to facilitate the

learning of an individual by helping them transfer their discussions into practice (Makenzie, 2007) and influencing their development (Tee et al., 2009). Coaching allows an individual to be placed in the center of their own learning by focusing on their specific needs and skills and encouraging them to take responsibility for their development (Jarvis et al., 2006).

Coaching would allow the academic advisor to help the student to align their goals with those of the program and institution through a supportive relationship, akin to mentoring (Jarvis et al., 2006; Tee et al., 2006). This relationship allows students to assist in the learning process by developing skills necessary to succeed and then practice those skills in a supportive environment, quite similar to a Community of Inquiry (Garrison, 2007; Garrison Anderson, 2003; Tee et al., 2006). Individuals have indicated that coaching allows the 'experts' to share their experiences and knowledge (Claridge & Lewis, 2005; Mulec & Roth, 2005), while still allowing the coachee to self-cultivate. This knowledge can come from past experiences, training, education, and institutional resources (International Coach Federation, 2008 & NACADA, 2006). Academic advisors would have experiences and knowledge not traditionally held by students and thus be considered experts as it relates to their program and university (Claridge & Lewis, 2005; Deiorio, Carney, Kahl, Bonura, & Juve, 2016; Mulec & Roth, 2005). To effectively utilize a coaching relationship, an academic advisor needs to be properly trained in interventions (Jarvis et al., 2006). This aligns with what Kram (1985) said about mentors needing training, so they know how to effectively empower their protégé and are clear about what their role is in the relationship.

Academic coaches can use online delivery methods and phone calls through both synchronous and asynchronous means. Many people involved in online coaching find it more beneficial since they can do it on their own time (Ensher, Heun, & Blanchard, 2003; Oreopoulos, Petronivevic, Logel & Geattie, 2018). Harrington (1998) even went as far as saying some individuals find it more beneficial than face-to-face coaching. The online function provides a sense of anonymity, or even perhaps safety, allowing individuals to be more honest and open. The coaches can use this distance to their benefit and utilize it to appear more neutral (Ensher et al., 2003).

Although academic advising and academic coaching are very similar and often considered to be interchangeable terms, they are different and distinctive methods of working with students. These approaches do overlap and are often indistinguishable from each other as mentoring and coaching are often viewed as synonymous terms (Conceicaco & Swaminathan, 2011). The umbrella holding academic coaching and mentoring together as techniques is the function of academic advising, as it blends the two concepts, but encompasses many other processes and functions as well.

Academic advising versus academic coaching

Academic advising is more concerned with a student's overall education and career goals, while academic coaching is more concerned with behaviors and strategies for academic success. Academic coaching is involved in the academic advising process and extends beyond this function to other areas of a student's life. According to Conceicaco and Swaminathan (2011), academic advising is composed of three elements that progressively expand and overlap over time: advisor, coach, and mentor. Graduate

students look to their academic advisor for survival strategies related to the culture of higher education, which Garrison et al. (2000) refer to as a Community of Inquiry, while they refer to and rely on faculty for more subject matter and career development specific questions.

According to Paglis, Green, & Bauer (2006), academic advising literature lumps the functions of academic mentoring and coaching under the term of academic advising. Conceicaco and Swaminathan (2011) contend the academic advising process starts with advising, moves to coaching, and ends with mentoring, with each phase having a distinct role played by the academic advisor. The researchers postulate that the process of academic advising, if performed thoughtfully, will progress through all three stages (Conceicaco & Swaminathan, 2011). McClellan and Moser (2011) add that academic advising actually incorporates components of coaching and mentoring, although they are not the sole functions.

The academic advisor/student relationship is complex and whether it is thought of as advising, coaching, or mentoring is really a matter of semantics (Conceicaco & Swaminathan, 2011; McClellan & Moser, 2011; NACADA 2004, 2006). According to NACADA (2004; 2006; 2010), academic advising is the overall concept and field of working with students and incorporates parts of coaching and mentoring. While the concept of academic coaching falls under academic advising, it specifically refers to a short-term relationship based on strategies and behaviors for academic success (Makenzie, 2007; Pagis et al., 2006; Tee et al., 2009). Advising is a holistic process concerned with the overall, long-term, well-being of students through various

approaches and may result in mentoring (McClellan & Moser, 2001; NACADA, 2004; Paglis et al., 2006).

The research relating to academic advising is extensive, mainly focused on undergraduate students (Jacobi, 1991). The same is true for academic advisors as mentors, although this research has also focused solely on undergraduate education. Academic advising research relating to mentoring of graduate students exists exclusively related to faculty mentoring (Jacobi, 1991; Luna & Prieto, 2009). Remaining research as it relates to mentoring at the graduate level has focused on minority groups and those who might mentor this specific group of students (Luna & Prieto, 2009). Little research has been done on distance-based students from the academic advising perspective; however, this body of knowledge is growing as the term virtual mentoring is catching on (Bierema & Hill, 2005; Kahraman & Kuzu, 2016; NACADA, 2016; Starks, 2011). Distance education is becoming an important component of academic advising and requires more focused attention on specific aspects of virtual academic advising (Garrison & Cleveland-Innes, 2005; NACADA, 2010; Sloan C Consortium, 2004; Starks, 2011).

Mentoring

The notion of mentoring has existed for a long time, first appearing in Homer's *the Odyssey*. Mentor, in the context of the story, refers to a man who is asked to raise the son of Odysseus, a king and the lead character of the epic poem (Lyons, Scroggins, & Rule, 1990). Odysseus asks Mentor to raise his son, Telemachus, by serving as a role-model/advisor while he leaves to fight in the Trojan War (Healy & Welchert, 1990).

Unbeknownst to everyone, Mentor is actually Athena, the Greek goddess of wisdom, in disguise and she imparts wisdom on Telemachus (Lyons et al., 1990; Healy & Welchert, 1990). "By acting as a guide and counselor to Odysseus' son Telemachus, Mentor became a model for centuries to come. Although contexts now differ, mentoring still refers to a supportive relationship between a neophyte and an older, more experienced guide" (Lyons et al., 1990, p. 2). Referencing this story, Healy & Welchert (1990) suggested that in order to kick-start America's competitive edge, mentoring needs to be facilitated by seasoned educators so they can share their wisdom with future generations. This "traditional" mentoring relationship is typically developed between a seasoned individual and someone new to an organization as a way of assisting the new individual in various ways (Ragins & McFarlin, 1990).

Mentoring in the post-industrial era started in corporations and governmental entities during the 1970s and focused on geographically close relationships (Gibson, Tesone, & Buchalski, 2000; Healy & Welchert, 1990), and has become a very important component of the field of HRD. Today, the notion of virtual mentoring is increasing as it relates to HRD, but it is not as widespread in higher education. In reference to higher education, administrators first used mentoring to enhance the quality of faculty teaching (Healy & Welchert, 1990). Then, in the 1990s, mentoring filtered down to the student-level with both faculty and staff members providing wisdom and guidance to students (Gibson et al., 2000). McLean (2004) suggests students who receive mentoring are more likely to want to continue learning. Wanting to learn is not the only benefit received

from mentoring, but it also contributes to personal, professional, and career development growth (Kram, 1985).

Jekielek, Moore, & Hair (2002) suggest that mentoring is a relationship, cultivated over time, between people of different experiences, with the more experienced person providing support, guidance, and assistance, which develops voluntarily (Allen et al., 2006). The relationship is founded on common interests, identification, trust, and understanding (Kram, 1985; Ragins & Cotton, 1999). Through their research, Jekielek et al. (2002) found that if mentoring concerned with a caring relationship provided a younger person, the younger person is more likely to become a successful adult. Northouse (2004) suggests that mentoring is the combined function of both networking and coaching. Networking involves connected systems of people created for the purpose of all individuals involved in the network. Mentoring relates to coaching, which focuses on a supportive relationship used for personal and/or professional growth. Successful mentoring can lead to the creation of beneficial networks and life-long friendships that has ramifications in both higher education and the professional world (Mullen, 2006).

According to Rosser and Egan (2003), many individuals point to mentoring as a critical component of their success and career development. Not only is this true in the business world as it relates to HRD, but also in graduate school, as it is essential to success and is central to the graduate experience (Harandi, 2015; Lyons et al., 1990, Tanis & Baker, 2017). In these relationships, Rosser & Egan (2003) suggest that mentors provide them with support, guidance, and counseling at both the personal and professional level. It is interesting to note what little research has focused on the

negative aspects of mentoring (Eby, McManus, Simon, & Russell, 2000). These negative experiences commonly occur in healthy relationships, ranging from the benign to the severe, when communication and trust are lacking (Duck, 1994; Marshall, 1994). Scandura (1998) and Duck (1994) warn however that mentoring should not be thought of as 'positive' or 'negative,' because even good relationships have difficulties.

Other researchers, such as Higgins and Kram (2001), have shown there are many positive effects of mentoring for both the mentor and the protégé. These positive effects include increased performance, higher satisfaction rates, lower turnover, and increased advancement (Chao, 1997; Fagenson, 1989; Scandura, 1992). Research also has shown that mentoring can help increase attendance rates, improve individuals' attitudes, reduce negative barriers, and help build relationships (Jekielek at al., 2002; Mavrinac, 2005; Angelique et al., 2002; Tanis & Baker, 2015). Angelique et al. (2002) concluded that successful mentoring programs vary greatly in higher education, having become more prevalent in recent years and are model after those commonly used HRD interventions. According to Mavrinac (2005), mentoring continues to be a popular learning process that has endured over the years and has helped with both the recruitment and retention of graduate students and employees.

Mentoring is an important part of both the graduate and later professional experiences (Paglis et al., 2006). This relationship adds value by encouraging, motivating, cultivating, and providing a sense of belonging to individuals (Stein and Glazer, 2003; Paglis et al., 2006; and Buchanan et al., 2005). These benefits are especially useful for distance-based students who are often juggling other full-time

commitments, in addition to going to school (Stein and Glazer, 2003; Buchanan et al., 2005). One of the primary functions of academic advisors is to provide support for the learning needs of graduate students by providing encouragement and praise (Lyons et al., 1990). To accomplish this task, academic advisors help to create a bond for graduate students between themselves and their school, peers, and instructors (Buchanan, et. al, 2005). This sense of belonging, coupled with the interaction between students, faculty, and staff help to create an active and virtual Community of Inquiry for these distance-based graduate students (Garrison, 2018; Stein and Glazer, 2003).

These interactions add to the educational experiences for students, allowing them to receive advice and guidance from multiple people. Kram (1985) suggested individuals should receive mentoring from multiple people throughout their life and at any given time. The relationships created by an organization, such as the one at a college or corporation, are influenced by the organizational culture (Aryee, Wyatt, & Stone, 1996). Higgins & Kram (2001) concluded from an extensive literature review on mentoring that the idea of traditional mentoring has just focused on one mentoring relationship, when the benefits of mentoring actually comes from multiple relationships. These multiple mentoring relationships add to the idea of students being mentored by both faculty and staff simultaneously with each focusing on different, but complimentary functions (Higgins & Kram, 2001; NACADA, 2006; Kram, 1985). One particularly interesting phenomenon of mentoring research is that the literature primarily focuses on the perspective of the mentor and not of the protégée (Higgins & Kram, 2001).

The concept of mentoring has changed recently with functions of a mentor evolving in today's society (Dick, 2018; Mullen, 1998). Research suggests mentoring can come in many shapes and forms and especially helpful for individuals who are adapting to a new organization (Eby, 1997; Dick, 2018; Kram & Hall, 1996; Liske, Starkey, & Austgen, 2016). Mentoring is now seen as a developmental process benefiting not just the mentor and the protégé, but also the organization (Russell, 2004). This research, focusing on individuals naming their mentors, does not distinguish between formal and informal mentoring relationships (Ragins & McFarlin, 1990). Not being able to distinguish between the types of mentoring relationships has led some, such as Higgins & Kram (2001), to suggest that mentoring occurs through multiple relationships, not just one, with each supplementing the other. These relationships can be both formal and/or informal, with different structures and processes (Hansford, Ehrich, & Tennent, 2004). The idea of formal mentoring is newer and offers structure to the mentoring relationship.

Formal mentoring

Formal mentoring refers to established relationships created for a specific purpose. These relationships are usually structured and offer benefits similar to traditional mentoring relationships (Hansford et al., 2004). Unlike traditional mentoring relationships, which occur spontaneously, these relationships are structured and do not occur spontaneously (Ragins & Cotton, 1999). The relationship between a faculty member and a graduate student can be seen as a formal relationship, because it is established and elicits an intended response (Allen et al., 2006; Ragins & Cotton, 1999).

The same can be said of the relationship between students and professional academic advisors. This formal relationship allows both the faculty member and/or professional academic advisor to help develop the academic identity and competence of students, at the same time giving the advisor a sense of purpose while connecting them to a larger community (Kram, 1985; Erickson, 1963).

To overcome compatibility issues that would be addressed with the spontaneity of the informal mentoring process, formal mentoring allows both parties to make decisions on the process and have a voice in how it is established and functions (Burke & McKeen, 1990). The rationale behind this allows both individuals to feel as though the relationship is not forced and thus both individuals are motivated to participate (Eby & McManus, 2004; Kram & Hall, 1996). When the formal mentoring process is set to mirror informal mentoring there is greater perceived satisfaction from both parties (Viator, 1999). To help increase satisfaction, there needs to be physical proximity between both the mentor and the protégé, which helps develop stronger psychosocial ties (Festinger, Schachter, & Back, 1950). However, a successful mentoring relationship can still occur between geographically separated individuals (Eby & Lockwood, 2005) by not only increasing the frequency of interactions (Garrison & Cleveland-Innes, 2005), but also by creating a collaborative experience (Zachary, 2002; Lipnack & Stamps, 1999). This frequent interaction requires a time commitment on the part of both individuals' and can be a challenge at times (Eby & Lockwood, 2005; Noe, 1988; Allen et al., 2006). By establishing an asynchronous relationship, these challenges can be

overcome and true mentoring can occur (Garrison & Cleveland-Innes, 2005), irrespective of geographic distance (Lipnack & Stamps, 1999).

Informal mentoring

Informal mentoring relationships are emergent and develop on the basis of perceived competence and comfort between the individuals (Allen, Poteet, & Burroughs, 1997; Kram, 1985; Ragins & Cotton, 1999). This type of mentoring relationship forms based on interaction and usually has an undetermined timeframe, typically lasting longer than a formal mentoring relationship (Kram, 1985; Ragins & Cotton, 1999). The catalyst for informal mentoring relationships is usually a need on the part of the protégé, but also benefits the mentor (Ragins & Cotton, 1999).

Research suggests the informal mentoring relationship is more akin to a parent/child relationship than formal mentoring and might meet the needs associated with this role in Kram's (1985) mentor role inventory (Ragins & Cotton, 1990). This type of relationship is also geared more towards respect of the mentor by the protégé, as they are the ones typically seeking the relationship (Ragins & Cotton, 1999). The academic advisor/student relationship although formal, often leads to informal mentoring as both parties have a choice on how and if the advising relationship evolves (NACADA, 2004; Ragins & Cotton, 1990). This differs from the more formal mentoring relationship between faculty and graduate students.

According to Ragins and Cotton (1999) informal mentoring is more concerned with the functions of psychosocial, parent, career development, and social. This concern is not only in the present and limited to the term of the relationship, as with formal

mentoring, but is slow to develop and can extend over a life-time (Kram, 1985; Ragins & Cotton, 1990). Informal mentors are also seen as more motivated and able, as they are not required to participate in the relationship, even though they do not receive the recognition of formal mentors (Ragins & Cotton, 1999; Ragins & Scandia, 1999).

This collaborative experience can also be enhanced through training. Burke and McKeen (1989) along with Kram (1985) suggest mentor training to be one of the most common recommendations for improving informal mentoring programs by teaching mentoring techniques and communication strategies. Through this training, the mentor is able to articulate the purpose of their relationship and help the protégé to clarify any objectives, as well as guidelines of the program (Eby & Lockwood, 2005; Forrest, Turban, & Dougherty, 1996). Communication is an integral part of the mentoring relationship and can be enhanced through training associated with HRD (Sipe, 2002; Allen et al., 2006). The training associated with the context of this research focuses on communication abilities. Thompson, Jeffries, and Topping (2010) suggest e-mentoring shows promising results.

`Participating in a successful mentoring relationship allows for the mentor and the protégé to be geographically separate (Ragins et al., 2000). This outside perspective allows for higher quality mentoring to take place because the mentor is removed from the situation (Allen et al., 2006). While the interactions may be less frequent and mostly asynchronous, more thought and intention can be placed in the communication and each of the interpersonal interactions (Allent, et al., 2006 & Ragins, Cotton, & Miller, 2000). Applying this idea to both HRD and academic advising allows the mentor to be an

outsider to the process, but also allows them to have an insider's knowledge of the workings of the organization (Allen et al., 2006). This interaction can also resemble another HRD intervention such as a coaching relationship where the coach encourages individuals and helps them come up with new strategies for success (Robinson & Gahagan, 2010). Again, applying this concept to academic advising, it can be seen as a reciprocal process guiding students through their academic journey with support and encouragement.

Mentoring functions

According to Kram's (1985) original study, mentors serve two functions: career development and psychological development. These functions consist of 9 roles associated with different subscales of the Mentor Role Instrument (sponsorship, coach, protector, challenge, exposure, friendship, role model, counseling, and acceptance). The first five functions are related to career development and the last four to psychological development. Ragins and Cotton (1999, p. 530) wrote:

> Kram (1985) theorized that mentors can provide five specific career development functions: sponsoring promotions and lateral moves (sponsorship); coaching the protégé (coaching); protecting the protégé from adverse forces (protection); providing challenging assignment (challenging); and increasing the protégé's exposure and visibility (exposure)… psychosocial functions: helping the protégé develop a sense of professional self (acceptance and confirmation), providing problem-solving and as sounding board (counseling), giving respect and support

(friendship) and providing identification and role modeling (role modeling).

Using Kram's (1985) study, Ragins and McFarlin (1990) developed the Mentor Role Instrument (MRI) to gauge the perceptions of protégés on the mentoring relationship by adding two additional functions: parent and social. These additional functions were based on Kram's (1985) original observations. The career development function assessed perceptions relating to the roles sponsorship, coaching, protecting, challenging, assignments, and exposure (Kram, 1985; Ragins & McFarlin, 1990). While the function of psychological development assesses perceptions relating to the roles of friendship, role modeling, counseling, and acceptance (Kram, 1985; Ragins & McFarlin, 1990).

Research suggests that gender is an influential dynamic in the mentoring relationship (Kram, 1985). Kram (1985) observed, in the original research, that the functions of parent and social might be in response to cross-gender relationships. Mentors are often viewed as parents in cross-gender mentoring relationships to help diffuse concerns of sexual tension (Ragins & McFarlin, 1990). Additionally, cross-gender mentoring relationships may avoid informal social activities in hopes of diffusing sexual tension as well (Ragins & McFarlin, 1990). Ragins and Cotton (1999) suggest mentoring is not all or nothing and that a mentor might only fulfill some of these functions and roles for an individual and thus, they encourage multiple mentors.

The functions and roles of a mentor align with those of both a faculty member and an academic advisor (NACADA, 2004; Ragins & Cotton, 1999; Ragins & McFarlin,

1990). The research available on mentoring related to academic advising has concentrated primarily on the undergraduate level; at the graduate level, research has focused on faculty mentoring (NACADA 2004; 2006) from a qualitative perspective and not on the student. For this reason, there is a gap in the research related to mentoring graduate students by academic advisors (Garrison, et al., 2000; NACADA, 2006; Zachary, 2002). Mentoring is a major facet of academic advising and further research needs to be conducted on graduate academic advising from the non-faculty perspective to see if mentoring occurs on this level as well (NACADA, 2006; Zachary, 2002).

The formality associated with this relationship can lead to what is called formal mentoring if the relationship is a requirement. If the relationship is not required, then informal mentoring can occur. This relationship is usually created based on the job function of the academic advisor and the need for the student to interact with them (Ragins & Cotton, 1999) and thus bears a resemblance to HRD roles. As such, there is little choice by either party in this relationship, but when the student desires more out of their interactions with an academic advisor and the advisor accomodates, mentoring can occur. What sets mentoring apart in this relationship is the required interaction and the frequency of that interaction between the two parties (Noe, 1988) as academic advising is not just about mentoring. A greater social bond is created when there is increased interaction between both parties, leading to what Garrison et al. (2000) term a Community of Inquiry, which is a more holistic view of the distance education learning environment, which contributes to the overall social and learning experiences of students (Garrison et al., 2000).

Distance Education

Distance education, is defined as using technology to mediate instruction, excluding web-based courses for on-campus students, with learning occurring in a different location than the site of instruction (Black, 2013; Sloan C Consortium, 2004). The interaction between students and instructors/academic advisors can be both synchronous and asynchronous. This leads Buchanan et al. (2005) to conclude that this relationship resembles the definition of mentoring, which they define as helping the protégés develop professionally by offering advice and providing information. These definitions provided the theoretical framework for this study by defining what a mentor is and does as related to distance-based graduate students. Stein and Glazer (2003) concluded that online mentors focus on providing support, helping to increase independent learning, and advocating for student success. In this setting, online mentors and professional academic advisors play similar roles, and their roles differ from the traditional faculty/graduate student relationship.

Distance education traces its roots back to correspondence courses in the eighteenth century (Holmberg, 2005). These courses focused on handwriting and later expanded to university-run correspondence courses in England (Levinson, 2005). This soon led the University of Chicago to develop the concept of extended education. Extended education was merely the creation of satellite college campuses in rural communities, which gave birth to the correspondence boom in the United States (Levinson, 2005). Due to the use of aggressive sales tactics and sale of whole textbooks

and complete lesson plans, enrollment skyrocketed near the turn of the twentieth century (Kett, 1996).

As technology advanced, correspondence courses were replaced with educational radio and television programing, led by funding from the Carnegie Foundation (Cox, 1999). This also produced recorded lectures or projected lecture so learners could be in separate rooms from instructors. With the advent of the internet, technology again made education access faster and easier for the masses (Fresen, 2017; Gold & Maitland, 1999). These advances led to the fully online courses and degrees available today. After the first fully-online university was established, others began to spring up across the country. Now distance education is available almost anywhere in the world at the K-12 level and both undergraduate and graduate levels (Fresen, 2017; Lederman, 2013; Oslzewski-Kubilius & Corwith, 2011). Distance education is now a common and accepted way of transferring knowledge and is increasingly being used in the corporate world (Maggio, Chenail, & Todd, 2001; Knox, 2014). Since distance-based students are not physically present on campus, they cannot regularly stop by an office to speak with faculty, so they are compelled to communicate through email, telephone calls, and additional electronic means (Bolliger & Halupa, 2018; Fresen, 2017).

According to the United States Distance Learning Association (USDLA), distance education (i.e. Distance Education, DE, E-Learning, Remote Learning, and Distance Learning) is defined as acquiring new skills and knowledge by the use of all technology to deliver information and instruction at a distance. Distance education (DE) is becoming more prevalent in both higher education and the corporate worlds (Starks,

2011; Fresen, 2017). The Unites States Department of Education, through The Condition of Education 2001, reports that 9 percent of graduate students complete their degrees online and this number will continue to grow (Starks, 2011). According to the U.S. Department of Education, National Center for Education Statistics (2018) these changed to 26.1 percent of graduate students completing their degrees online in 2015. This population of distance students also no longer fits the traditional 18 to 22-year-old demographic of typical college age matriculants who live on-campus, as over 50 percent of students entering college today are non-traditional (Stokes, 2006; Siegel, 2011).

With the advent of new technologies, the experience of those participating in DE programs have increased the need for higher-level interaction (Berry, 2018; Garrison & Cleveland-Innes, 2005). These higher-level interactions can be both synchronous and asynchronous, but the communication needs to be both reciprocal and collaborative (Schroeder & Terra, 2015; Zachary, 2002). Each student varies on the level of interaction individually required, but the more interaction the students have with the university, the more connected they feel (Bolliger & Halupa, 2018; Thistoll & Yates, 2016). To better accommodate the increased interactions, academic advisors need to improve their communication skills (Nutt, 2000).

The Community of Inquiry created through these communicative interactions can closely resemble a traditional graduate experience, which can help facilitate student retention and motivation (Rockinson-Szapkiw, Wendt, Wighting, & Nisbet, 2016; Garrison et al., 2000). Building these strong relationships is essential for distance-based students to succeed (Berry, 2018; Knox, 2014; Starks, 2011). As the distance-based

students feel more connected with their education, it helps their overall experience (Garrison & Cleveland-Innes, 2005; Stein and Glazer, 2003). Lorenzetti (2006) and Berry (2018) concluded that because today's distance-based students have numerous experiences with the online environment and high expectations, they also require a high level of interaction. These interpersonal interactions should focus on the strengths, reflect feelings, clarify concerns, and use open-ended questions to elicit student responses (Kramer, 2011; Starks, 2011; Schroeder & Terra, 2015).

Advising interactions at the graduate level are traditionally thought of as being between students and faculty members (Gillispie, 2003; Schroeder & Terra, 2015). Faculty play a major role in the motivation and mentoring of graduate students, historically being seen as the principal mentors for these students (Buchanan et. al, 2005; Gillispie, 2003; Paglis, et. al, 2006). When you consider the definition of mentoring associated with graduate students provided by Buchanan, et al. (2005) and combine it with the definition of mentoring distance-based students provided by Stein and Glazer (2003), academic advisors can be seen as providing complementary mentoring for distance-based graduate students (Garrison et al., 2000; NACADA, 2006; Schroeder & Terra, 2015; Zachary, 2002). Academic advisors are aided by the fact that the online learning environment can be personalized, further adding to the learning experience (McCrea, 2012; Schroeder & Terra, 2015). Finley and Chapman (2011) term this personalization as "high touch."

By using "high touch" and frequent interpersonal interactions, academic advisors are utilizing resources and technologies at their disposal to best reach, interact with,

support, and encourage distance learners (Bolliger & Halupa, 2018; Finely & Chapman, 2011). This effective use of technology is important to advising distance students (Schroeder & Terra, 2015; Steele, 2005). Many colleges have greatly improved both their student information systems, learning management system (LMS), and other resources to improve their ability to serve their distance-based students (Fresen, 2017; Starks, 2011), but there is still a long way to go (Habley, 2004). To overcome the drawbacks and obstacles inherent in online education, Habley (2004) suggests improving asynchronous communication tools and accessibility other than email. Once this barrier is overcome, academic advisors will be able to more effectively advise distance-based students (Stermer, 2018; Steele, 2005; Habley, 2004). Another barrier between institutions is classroom instruction, which is typically seen as the primary way a majority of student's interactions occur with institutions. Attrition rates for graduate students is already high but are even higher for distance-based graduate students and properly utilizing online and technology resources might help in developing effective interventions toward improving completion rates (Shaw, Fergusen, & Burrus, 2016; Varney, 2009).

With graduate education focused on the learning environment, faculty provide instruction and mentoring related to careers, research, and content (Green & Bauer, 1995). The academic advisor provides mentoring related to courses, procedures, and university policies, which change and are updated on a regular basis, thus professional academic advisors can provide supplemental mentoring (Buchanan et. al, 2005; Schroeder & Terra, 2015). Professional academic advisors provide an important

component to the graduate experience, and perhaps even more so for distance-based students (NACADA, 2010; Starks, 2011; Steele, 2005). The relationships, social interaction, and advice contributed by professional academic advisors is an increasingly important factor in the mentoring of distance-based graduate students and should not be overlooked or undervalued (Grabowski, 2016; Nutt, 2000; Steele, 2005, Tanis & Baker, 2017).

Theoretical Framework: Community of Inquiry

A Community of Inquiry (COI) can be defined as a deep and meaningful learning environment with three overlapping pieces: cognitive presence, social presence, and teaching presence (Stermer, 2018). This theory was envisioned after three years of discussion and interactions as part of an online MBA program (Garrison et al, 2000). The main idea behind distance education is providing a sense of belonging to students who are not located on campus. The theory of Community of Inquiry allows higher education practitioners a way to provide a more socially interactive college and learning experience to distance-based students, thus allowing the students to receive some of the benefits more commonly associated with being active on campus during their education (Garrison et al, 2000).

As distance education grows in popularity, increased attention is being paid to the "community" that is often associated with traditional higher education (Garrison, 2007). This is also true in the professional world, where virtual teams composed of people from around the world must work together (Lipnack & Stamps, 1999). There is growing need for distance-based students to feel more connected to their learning

environment and experience, and to the people they are learning with similar to a traditional education (Stermer, 2018: Thistoll & Yates, 2016). This notion is based on the historical work and educational philosophy of John Dewey (1933) who argued that learning is both an interactive and social experience and Henri (1992)'s work on the social and cognitive dimensions of online learning.

In this work, Henri (1992) concluded that computer-media messages can convey information and do produce cognitive activity. Combining these ideas, Garrison et al. (2000) formulated a framework for the Community of Inquiry Model (see Figure 1). The COI framework served as a basis for this study, where a Community of Inquiry can be seen as combining the three dimensions of social, cognitive, and teaching presence representing the more customary social interaction and college experience for online learners "with the specific purposes of facilitating, constructing, and validating understanding, and of developing capabilities that will lead" to lifelong learning (Garrison & Anderson, 2003, p. 23).

Garrison and colleagues' (2000) framework combined three key dimensions of learning: social presence, cognitive presence, and teaching presence. Social presence relates to establishing personal and purposeful relationships within the virtual learning environment (Garrison et al., 2000). These relationships include effective communication skills, open communication, and the facilitation of social interaction and group cohesion. Cognitive presence incorporates the notion of reflection in learning and making meaningful connections between the content being learned and the students' own lived experience (Dewey, 1959). Dewey (1959) postulated that for true learning to

occur, reflection on the learning must first take place and only then does true learning and meaning making occur. Cognitive presence is defined as "the exploration, construction, resolution and confirmation of understanding through collaboration and reflection" (Garrison, 2007). The final component of the COI framework is teacher presence, which entails the three components of instructional design, facilitation, and instruction. Teacher presence is the most important component of the framework as it relates to online learning (Garrison, 2007; Swan & Shih, 2005; Swan, 2003). Each element of presence in the online learning environment (Social, Cognitive, and Teacher) is represented by a circle in a Venn diagram that overlap creating an almond shape appearing where the elements of presence overlap and a triangle appearing where all three overlaps (Arbaugh & Hwang, 2006; COI, 2017; Garrison, Cleveland-Innes, & Fung, 2004; Stermer, 2018).

When distance-education is viewed through the lens of a Community of Inquiry, true learning takes place (Dewey, 1933; Garrison, 2007; Garrison et al, 2000). By combining this framework with the mentoring and social interactions of professional academic advising, a Community of Inquiry can be further defined. Academic advising adds to the COI model by further contributing to the Teaching presence and didactic interactions faculty build through instruction for their distance-based students. The job of professional academic advisors is to help students with the structure and processes of higher education (Garrison, 2018; NACADA, 2004) and supplement the sense of community and social presence within the virtual learning community. Thus, academic advisors guide graduate students through their virtual educative process (Garrison &

Cleveland-Innes, 2005; NACADA, 2006; Stein & Glazer, 2003). This guidance is accomplished by supporting and encouraging graduate students, by making sure they are aware of all policies and procedures related to their education, and by helping connect and resolve issues with various offices and entities on campus for the student (NACADA, 2006; Stein & Glazer, 2003). If the professional academic advising process is coupled with frequent and intentional interactions, as defined by the student, eventually a form of mentoring can occur (Buchanan et al., 2005; NACADA 2004).

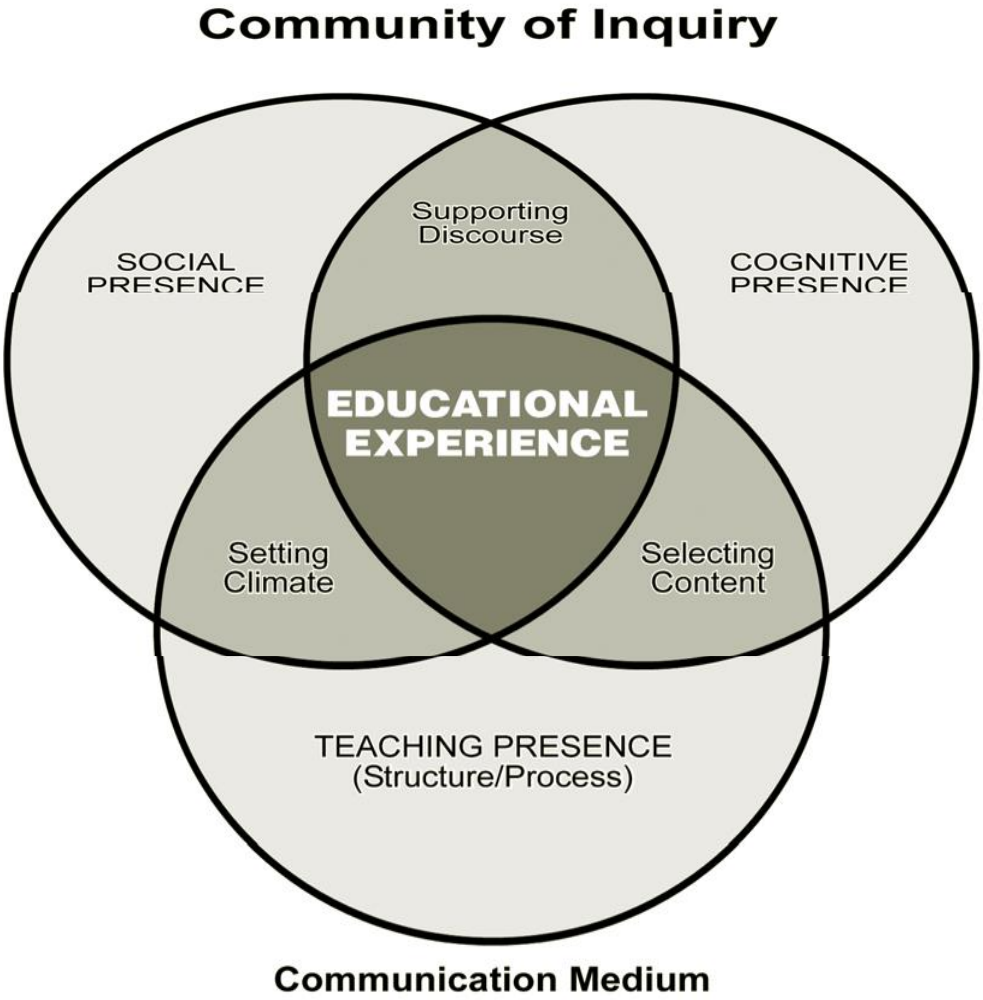

Figure 1 Community of Inquiry Framework. Recreated from Garrison, Anderson, & Archer (2000), p. 88.

Community of Inquiry in Academic Advising

Academic advisors for distance-based students need to be able to respond to their unique needs and not try to compel them to blend in with their traditional counterparts through conventional advising practices (NACADA, 2010). At the basic level, the process associated with the interaction between academic advisors and distance-based students is defined by Buchanan, Myers, and Hardin (2005) as providing support and encouragement. Ludwig-Hardman and Dunlap (2003) found that support service (i.e. academic advisors) were more successful in assisting distance-based students over their academic career compared to the support a single instructor or course provided. The COI is further built in addition to faculty interaction, where academic advisors serve as the primary, if not the only, long-term and consistent contact for distance-based students throughout the duration of their studies and provide needed resources and support (Britto & Rush, 2013; NACADA, 2010; Stermer, 2018; Tones, Fraser, Elder, & White, 2009).

One of the most important factors for distance-based students is having access to resources and help when they need it, which quite often occurs outside of normal operating hours (Finley & Chapman, 2011). After a distance-based student has exhausted all of their resources, they reach out to university staff, namely the academic advisor (National Survey for Student Engagement, 2016; Powers, Carlstrom, & Hughey, 2014; Stermer, 2018). Under the right circumstances, academic advisors can provide increased levels of mentoring (Buchanan et al., 2005; NACADA, 2004, 2006; Stein & Glazer, 2003). Coaching is one of the commonly utilized techniques used to accomplish

this (Buchanan et al., 2005; Hall, Otazo, & Hollenbeck, 1999; NACADA, 2004, 2006; & Stein & Glazer, 2003)

Although there is a lack of extensive empirical evidence to support these claims, a study by Hall, Otazo, and Hollenbeck (1999) found that there are benefits to online coaching. These benefits included allowing participants to learn new skills, abilities, and perspectives while improving their performance and helping them with change. Zunitch (2001) also found similar benefits, noting that the use of online coaching improved the work-life balance. The work-life balance of distance learners is unique because they typically have full-time jobs and family commitments (Kantrowitz, 2010; Schroeder & Terras, 2015). The use of technology has allowed these non-traditional graduate students to thrive in higher education in ever-increasing numbers by using asynchronous methods of participation, allowing them to learn on their own schedules (Grabowski, 2016; Steele, 2005; Starks, 2011).

All of these elements and forms of interaction and support come together to form a virtual Community of Inquiry where professional academic advising plays a critical role. Stermer (2018) found that social presence in academic advising as related to the COI was the highest perceived presence by students. Academic advising fits within this framework as the concept as teaching aligns with the academic components of (informational, conceptual, and relational) and the COI components (cognitive, social, and teaching presence). Stermer (2018) clearly states that this theoretical framework between professional academic advising and COI is clearly grounded in the literature.

Informational advising has always been a part of academic advising and includes four main areas that academic advisors must be knowledgeable about to provide the right information—procedures, policies, law, and resources—and aligns with the COI concept of cognitive presence (Fox, 2008; Higgins, 2000; Stermer, 2018). Mahoney (2009) went on to describe three competencies for information advising: institutional specific, technological, and student assessment. Both informational advising and COI focus on decision-making, technology, student assessment, and outcomes (Stermer, 2018).

Conceptual academic advising best aligns with the COI concept of teaching presence (Stermer, 2018). This advising piece focuses on the finer details such as course planning, and the larger processes of contributing to the academic world through the use of student development and learning theories (Fox, 2008; Habley, 1986). Higgins (2000) went on to say that the conceptual component has two parts: understanding the role of the student and the role of the academic advisor within the institution. The conceptual component informs advising practices (McClellan, 2007). This is most closely aligned with the COI component of teaching presence pertaining to the responsibility of the roles, student development theory, and the use of a syllabus (Stermer, 2018).

Another academic advising component, relational advising, also aligns with teaching presence and social presence as both focus on interpersonal aspects of advisor/advisee interactions (Stermer, 2018). The knowledge imparted during an academic advising session is done by building a relationship and through effective communication (Higgins, 2000). This includes the competencies of building rapport,

interviewing, and influencing development (Mahoney, 2009; Stermer, 2018). Stermer (2018), using Hably's (1986) work, concluded that this intrapersonal dimension aligns with teaching presence.

Relational advising also aligns with social presence (Stermer, 2018). Founded in a Deweyan perspective and educational philosophy (1916), Garrison (2007) concluded that the purpose of social presence, in higher education, is to provide support and quality interpersonal interactions. This can also be carried over to professional academic advising, especially for distance-based students, as it focuses on purposeful interactions (Stermer, 2018). Professional academic advising and the COI framework fully align when looking at the variety of academic advising styles and primary functions.

Summary

According to Guri-Rosenblit and Gos (2011), there are many gaps in research related to distance education. The researchers found that most research related to distance education has focused on either a specific technology or on policy (Guri-Rosenblit & Gos, 2011). Andrews and Haythornthwaite (2009) found that distance education research is concentrated in four areas: administration and management, technological infrastructure, pedagogy in the virtual environment, and social context. Although academic advising might fall into one or more of these categories broadly, it has never been explicitly explored as it relates to mentoring distance-based graduate students (NACADA, 2016; Nutt, 2000; Steele, 2005; Andrews & Haythornthwaite, 2009).

As the gaps within the literature related to the academic advising of graduate students overlap, specific functions of the advising relationship need to be explored (NACADA, 2016; Pasquini & Steele, 2016; Starks, 2011). Although mentoring is a recognized component of academic advising, little to no research has been done related to graduate education (Dick, 2018; NACADA, 2006; Ragins & Cotton, 1999), least of all in distance graduate education. Mentoring related to graduate education has been heavily explored, even relating to the distance-based population; however, the research has centered exclusively on faculty involvement and perspectives and through qualitative studies (Black, 2013; Garrison & Cleveland-Innes, 2005; Garrison, et al., 2000; Grabowski, 2016; NACADA, 2016; Sloan C Consortium, 2004; Starks, 2011; Zachary, 2002), warranting research from the students' perspective and more quantitative studies. Stermer (2018) clearly states that professional academic advising and the COI framework are fully aligned. Professional academic advisors cannot replace the function of faculty mentoring associated with graduate education, but they can meaningfully supplement the learning experience through advising and mentoring to relieve some of the burden currently placed on faculty, and to help students receive the full benefits of an interactive college experience through a Community of Inquiry (Garrison & Cleveland-Innes, 2005; NACADA, 2016; Stermer, 2018; Zachary, 2002). The next chapter will outline the methods and procedures applied to conduct this quantitative study measuring student perceptions of mentoring by professional academic advisors in the online graduate education learning environment.

CHAPTER III

METHODOLOGY

The purpose of this study was to examine the relationship between professional academic advisors and distance-based graduate students, and this relationship at a Tier-One, research institution located in the Southern United States. To determine whether a mentoring relationship existed, the Mentor Role Instrument (MRI) developed by Ragins and McFarlin (1990) to assess graduate student perceptions of mentoring within their virtual Community of Inquiry. This study is significant within the field of Human Resource Development in a few key areas: mentoring and coaching within a virtual environment, academic and career advising, the application of the MRI instrument within and academic context, and advanced distance learning. By contributing to these aspects of knowledge in the field, this study also adds value to the concept of virtual mentoring, providing further evidence of its benefits.

Related to mentoring, there is little quantitative research within the context of distance education, as most of the research that has been conducted is qualitative in nature (Black, 2013; Stein & Glazer, 2003). The research conducted on mentoring and academic advisors has focused on either undergraduate students and/or the perspectives of the faculty advisors (Black, 2013, NACADA, 2004; Nigel, 2011; Pifer & Baker, 2016). There have been numerous studies which show the positive effects of mentoring: reduced attrition, higher success rates, & feeling connected to name a few (Dick, 2018; Harandi, 2015; Tanis & Baker, 2017)

By examining the relationship between distance-based graduate students and professional academic advisors, more will be known about how online students could be offered additional mentoring resources at the graduate level. Additionally, the benefits and value professional academic advisors contribute in the Community of Inquiry and the overall are better understood, as well as the mentoring of distance graduate students in a virtual environment.

This chapter outlines the methodology and methods used to assess the mentoring relationship between distance-based graduate students and professional academic advisors. The chapter is organized into four sections. The first section reviews the purpose of the study, the second outlines the selection and sampling of the participants in the study. The third section discusses the population, and the final section describes the instrument and discusses its reliability and validity, data collection, and data analysis.

Purpose of Study

This study assessed the relationship between academic advisors and distance-based graduate students at a Tier-One, research institution located in the Southern United States to see if it resembled a mentoring relationship using the Mentor Role Instrument (MRI) developed by Ragins and McFarlin (1990). This study used a descriptive and correlational design to assess the function of mentoring distance-based graduate students by academic advisors.

Based on the purpose of this study, research questions were formed to examine the academic advisor/distance-based graduate student relationship in reference to mentoring as outlined by the MRI developed by Ragins and McFarlin (1990). Objective

One focused on professional academic advisors serving as mentors for distance-based graduate students. Objective Two focused on professional academic advisors serving as mentors for distance-based graduate students within the function of career development. Objective Three focused on professional academic advisors serving as mentors for distance-based graduate students on the psychosocial function. Objective Four focused on professional academic advisors serving as mentors for distance-based graduate students on the parent function. Objective Five focused on professional academic advisors serving as mentors for distance-based graduate students on the social function.

The functions and roles of professional academic advisors are examined as a complimentary function and role within the overall mentoring and community interaction with distance-based graduate students, where the faculty advisor role remains principle as in traditional graduate education. It is understood, within the virtual and distance learning context, the professional academic advisors can serve to supplement the social interactions distance-based graduate students can engage in as they are not on-campus in a conventional sense (Black, 2013; Garrison, 2018; Garrison & Cleveland-Innes, 2005; Garrison, et al., 2000; Gayton, 2015; NACADA, 2016; Sloan C Consortium, 2004; Starks, 2011; Zachary, 2002).

Research Context

The entire population of graduate students who participated in this study is unknown because there was no system in place for tracking distance students at the study institution outside of the records kept within individual departments. This particular protocol was in place because multiple programs allowed students to

participate in the same academic program and curriculum regardless of whether they were face-to-face or distance students. These numbers could not be differentiated in student numbers, because all students received was an attribute (code) to take distance-based courses based on their physical location. As such, at the time of the study, programs had to keep track of their own registration numbers for distance-based students separate from the university system. During the timeframe the research was conducted, distance-based programs were comprised of primarily master's level programs from four colleges within the institution (College of Agriculture and Life Sciences, College of Education and Human Resource Development, College of Engineering, College of Science, and School of Government Government) (Distance Education, 2013). Since, this number has grown to almost 50 degrees in 2019 (Distance Education, 2019), meaning the concerns and research questions are all the more relevant now.

In the summer of 2010, the Office of Distance Education was disbanded and the duties were relegated and distributed to the individual colleges. As such, the accuracy of the programs and colleges is not certain (Distance Education Campus Announcement, June 8, 2010). For the purpose of this study, this information was double-checked by visiting each individual college's website and comparing the information. At the time of this study, these five colleges offered 37 separate degrees/certificates in the online delivery format. Two of the degrees were Doctorates of Education, 27 were various types of master's degrees (both thesis and non-thesis), and the remaining eight were certificate programs. This study focused on the approved distance-based graduate programs (degree and certificate) at this particular southern, land-grant university.

Population

The exact number of graduate students participating in distance-based programs was difficult to define due to the institution's policies and available data, as any student from any program was allowed to enroll in any distance-based course offered. According to the Distance Education (2013) website at the time for the institution, four colleges were offering distance-based graduate degrees or certificates at the time. In order to identify distance-based graduate students, they were contacted through a university bulk-mail request based on student enrollment during the spring, summer, and fall semesters of academic year 2014, providing students the option of self-identifying as distance students in order to participate in the study. At the same time, the 23 separate departments representing 37 programs (degree granting and certificates) from five colleges, were contacted to acquire a rough estimate of possible participants in order to calculate the population size and return rate. Unfortunately, due to both the nature of the request and the amount of email academic advisors receive, only two departments responded with an accurate count.

At the time of the study, the College of Agriculture and Life Sciences offered nine distance-based graduate degree programs and three certificates through eight different departments. Degree offerings ranged from single department offerings in Agriculture Development, Agricultural Education (Ed.D.), Poultry Science, Wildlife Science, Biological and Agricultural Engineering, Agricultural Systems Management, Recreation Resource Development, and Plant Breeding to interdisciplinary degrees such as Natural Resource Development (offered by three departments). Certificates offered

included Military Land Sustainability, Agriculture eLearning Development, and Regulatory Science in Food Systems.

The College of Education and Human Resource Development offered degrees in Bilingual Education, Curriculum and Instruction (General, Elementary, and TESOL), Educational Psychology, Educational Technology, Health Education, Human Resource Development, Public School Administration, Counseling, Special Education, and Sports Management. An executive Ed.D. was also offered in Curriculum and Instruction. In total, the college offered twelve separate master's degrees and one Ed.D through distance delivery.

The College of Engineering offered a total of five separate master's degrees. These focused areas for the degrees include Systems Management, Industrial Engineering, Petroleum Engineering, Industrial Distribution, and Safety Engineering. The College of Science offered two master's degrees in Mathematics and Statistics. The Statistics department also offered a certificate. The School of Government offered four separate certificate programs: Advanced International Affairs, Homeland Security, Nonprofit Management, and National Security Affairs. Each college also offered numerous online courses available to all students and various certificate programs. Only students participating in approved programs, as listed above, were included in this study.

Students participating in distance-based graduate programs, in departments that were offering distance-based programs at the time, were contacted through a bulk-mail request. In the request, students who were registered in courses during the spring, summer, and fall semesters of 2014 in the approved distance-based programs were

contacted. Students were allowed to choose whether they would like to participate in this study. Using an online version of the MRI via Qualtrics, ballot stuffing was prevented to prevent multiple responses from individuals. Students were provided a definition explaining who a professional academic advisor is and what was meant by mentoring in each of the contact email(s) (Appendix B) and within the survey instrument. These students were asked whether they met the criteria for participation in the research study.

Instrumentation

The survey instrument was originally designed to gauge cross-gendered mentoring relationships in the business world and was adapted for use in an educational setting (Ragins & McFarlin, 1990). An online version of the MRI was used via Qualtrics for data collection and to examine the mentoring relationship between distance-based graduate students and academic advisors. The instrument was slightly modified to reflect the relationship within context, with the word "mentor" being replaced with the term "academic advisor" to assist differentiation. The survey was then converted to an online format (See Appendix A) using Qualtrics survey software. Demographic questions were added to the survey to provide variables to use for comparison with the mentoring relationship scales within the survey, to measure the student perceptions of mentoring between the distance-based graduate students and professional academic advisors.

Using Kram's (1985) original study as a reference point, which found that mentors serve two primary functions of supporting career development and

psychological development, Ragins and McFarlin (1990) further developed the Mentor Role Instrument that was adopted for this study. The Mentor Role Instrument (MRI) was created to measure the perceptions of protégés/mentees' perceptions of the mentoring relationship (Ragins & McFarlin, 1990). Ragins and McFarlin (1990) added two additional mentor functions: parent and social. These additional functions were based on Kram's (1985) original observations that were later more fully explored when Ragins and McFarlin (1990) further expended on the previous research.

Mentor role instrument

Originally consisting of nine mentoring roles (sponsorship, coach, protector, challenge, exposure, friendship, role model, counseling, and acceptance), the MRI was divided between the career development and psychological needs of protégés. The career development function assessed perceptions relating to the roles of sponsorship, coaching, protecting, challenging, and exposure (Kram, 1985; Ragins & McFarlin, 1990), while the function of psychological development assessed perceptions relating to the roles of friendship, role modeling, counseling, and acceptance (Kram, 1985; Ragins & McFarlin, 1990).

The two additional functions of parent and social support were based on suggestions from Kram's (1985) original study. These functions focus solely on their individual areas with no subcategories. Using a seven-point summative scale, the instrument measured the perceived mentoring relationship between academic advisors and distance-based graduate students (Dillman, 2007). Ragins and Cotton (1999)

suggested that mentoring is not an all-or-nothing process and that a mentor might only fulfill some of the many functions and roles.

Ragins and McFarlin (1990) used a pre-test to develop the instrument with a sample of 69 participants. Each participant was employed in either a public or a private sector job in the East, Midwest, or Southeast United States. Originally, 59 items were compiled to assess from Kram' (1985) work to measure the eleven mentor roles. The researchers defined a mentor as "a high-ranking, influential member of your organization who has advanced experience and knowledge and who is committed to providing upward mobility and support to your career" (Ragins and McFarlin, 1990, pp. 326).

LISREL was used to further reduce the 59 items to a manageable number. Using Joreskog and Sorbom (1981) as a model for LISREL, Ragins and McFarlin (1990) were able to use a confirmatory factor analysis to allow for a cleaner assessment of a given item and the associated mentor role it was measuring (Fleishman & Benson, 1987). Due to space limitations, the final survey was reduced to the top three items from each role subscale using *t* values. The final instrument contained 33 roles representing the four functions and used a seven-point summative scale (strongly disagree to strongly agree). For this study, the 33 roles were separated over two pages on the Qualtrics survey as in the original MRI.

Reliability and validity

In lieu of creating another instrument to assess mentoring, the MRI was adapted and applied to this new context. It had been previously used in an educational context,

but solely to assess cross-gender mentoring in one specific program. Based on the work by Ragins and McFarlin (1990), the reliability for the MRI based on each coefficient ranged from *r*=.66 to .94. Ragins and Cotton (1999) found that the reliability for each coefficient ranged between *r*=.63 and .91. Both of these studies showed the MRI to be a reasonably reliable instrument.

Based on this data, the MRI was used to measure the students' perceptions of the mentoring relationship between distance-based graduate students and academic advisors, looking at each of the four functions. A Cronbach's alpha coefficient was calculated for each internal scale (Cronbach, 1951) to help determine the reliability. Cronbach's alpha coefficients were examined to establish the internal consistency of items within a scale and also to indicate reliability. According to Gall, Gall, and Borg (2007) a reliability level of *r* =.80 or higher is considered acceptable. The reliability for this study was *r* = .751 (See Table 2). The lower reliability may be contributed in part to the low number of participants and the switching of the word mentor, on the original instrument, to academic advisor in this study. Students have a difficult time differentiating what academic advisor means and separating the role from that of their faculty advisor.

According to Ragins and Cotton (1999) and Ragins and McFarlin (1990) the MRI is a valid instrument for determining mentoring roles. In the original study, Ragins and McFarlin (1990) had Kathy Kram and John Cotton, leading mentoring experts, review their questionnaire. Based on their responses, Ragins and McFarlin (1990) edited their instrument before the pilot study. For the purpose of this study, the online instrument was reviewed by a faculty committee serving as an expert review panel.

Between conversations with the faculty committee, it was determined there was no need to pilot test this instrument, as it has already proven valid and reliable with only slight wording alterations (mentor to advisor, industry to school, and employment to education).

Data collection

With no exact records existing for this specific population, a bulk-mail request was submitted to reach all students registered during the spring, summer, and fall semesters of academic year 2014 in departments with approved distance-based programs. This option was chosen as the most straight forward approach for reaching these students, relying only on registration data and not individual departments to forward the survey to their students. The first email was sent to 10,119 students on May 7, 2014 (last day of the spring semester), as previously described (See Appendix B). These students were informed of the study parameters and asked to self-select to participate.

A follow-up email was sent on May 27, 2014 (first day of summer semester) to 10,123 students, as previously described (See Appendix C). As the university leaves tracking of distance-based students to the departments, there is no accurate way to determine the entire population size without departmental responses. Departments were contacted the day following both emails were sent to students to inform them of the study, help encourage participation, and ask them to provide numbers relating to their students in distance-based programs to help obtain a more complete picture of the number of students involved (See Appendix D and E).

These emails included information about the study parameters, providing students the needed information to determine if students fit the requested population, described the informed consent for participants, listed the approved IRB number, and provided contact information for the researcher. The data collection method matched as closely to Dillman's (2007) Tailored Design Method as possible. In total, 37 different degree/certificate programs were included in the study representing five separate colleges. Some of the departments offered multiple degrees and/or certificates at the time.

With the limited departmental responses, there was no accurate way to determine the entire population size for this study. The responders had five weeks to submit their responses. A Reminder email was sent after 20 days to correspond with the start of a new semester. Due to the amount of the students being contacted and unknown numbers of participants, only one follow-up email was sent. According to Dillman (2007), reminders help to increase the response rate. Data collection ceased at midnight on the 35th day.

Multiple students contacted the researcher about participating in the study. A majority of the responses were related to not being able to find the survey link, as it was embedded within a word (link). The first email sent by the bulk-request did not contain an active link. After the researcher was contacted by multiple students, the research followed up with the university and the link was corrected. The reminder email was updated to include a traditional URL to help responders. A number of students who did

not fit the research parameters also contacted the research asking to be removed from the distribution list.

Data analysis

The results of this study (correlations, means, standard deviations, and coefficients) are displayed in tables and were analyzed using descriptive and inferential statistics in the Statistical Package for Social Sciences (SPSS) and Qualtrics. The data were analyzed using multiple regression analysis and priori contrasts to test the objectives of this study as noted by Ragins and Cotton (1999). Each dependent variable was analyzed using a separate hierarchical regression. Each question was tested and compared to the demographic data. The demographics were compared between all questions to further determine if they factor into the mentoring relationship. As previously noted by Ragins and McFarlin (1990), cross-gender mentoring did not have a significant effect on relationship by only affecting two of the eleven roles.

Because the function of an academic advisor is broad, coupled with the differences of advising distance-based graduate students, it was interesting to note the outcome of the research questions:

1. To examine the role professional academic advisors serve in mentoring distance-based graduate students.
2. To examine the career development function professional academic advisors serve for distance-based graduate students.
3. To examine the psychosocial functions professional academic advisors serve for distance-based graduate students.

4. To examine the parental functions professional academic advisor serve for distance-based graduate students.
5. To examine the social functions professional academic advisors serve for distance-based graduate students.

Summative scale

Using a seven-point summative scale, the instrument examined the students' perceptions of the mentoring relationship between professional academic advisors and distance-based graduate students (Dillman, 2007). The MRI contained 33 questions, with the first fifteen listed on a seven-point summative scale from strongly agree to strongly disagree. The remaining eighteen questions were also listed on a seven-point summative scale ranging from strongly agree to strongly disagree. The reverse coding was meant to make sure participants were paying attention and closely reading each of the survey items.

The summative scale was divided into seven sections, with each section assigned a point value from one to seven from Strongly Disagree to Strongly Agree. The summative scale can be interpreted by means as follows: Strongly Disagree (1-1.5), Disagree (1.51-2.5), Somewhat Disagree (2.51-3.5), Neither Agree nor Disagree (3.51-4.5), Somewhat Agree (4.51-5.5), Agree (5.51-6.5), and Strongly Agree (6.51-7). Any mean over 4.51 was interpreted as tended to agree, while any mean below 3.51 was interpreted as tended to disagree.

Summary

Following the work of Kram (1985), Ragins and McFarlin (1990) and Ragins and Cotton (1999), the MRI was used to examine students' perceptions of the mentoring relationship between professional academic advisors and distance-based graduate students. Because the MRI is a validated and reliable instrument measurement, methodological problems typically associated with gauging mentoring relationships were reduced (Ragins & McFarlin, 1990). This study showed that academic advisors provide supplemental mentoring to distance-based graduate students related to some of the mentoring functions discussed by Kram (1985) and Ragins and McFarlin (1990). Although the mentoring provided by professional academic advisors is not intended to substitute for the mentoring provided by faculty in graduate education, professional academic advisors provide specific supplemental support to students are when they are open to and seek out this kind of social interaction and relationship.

The next chapter will present the findings and interpretations of the study as related to the research questions about the mentoring relationship between professional academic advisors and distance-based graduate students. In this chapter the response rate is reviewed along with the population description, the responses related to the research questions, and a summary of the findings.

CHAPTER IV

RESULTS AND FINDINGS

This chapter outlines the results of the study related to the perceived mentoring relationship between distance-based graduate students and professional academic advisors. The chapter is organized into nine sections. The first section reviews the purpose of the study, the second section reviews the response rate, and the third section reviews the description of the population. Section four of the chapter reviews the results related to the first objective, as to whether academic advisors play a role in the mentoring of distance-based graduate students, and the fifth section discusses the results as related to the second objective concerning the career development function of an academic advisor. The next sections review the results related to the remaining objectives. Finally, the last section offers a summary of the results *in toto*.

Purpose of Study

This aim of the dissertation study was to assess the perceived relationship between professional academic advisors and distance-based graduate students at a Tier One, research institution located in the Southern United States to determine whether this relationship resembles a mentoring relationship using the Mentor Role Instrument (MRI) (Ragins & McFarlin, 1990). Using both a descriptive and correlational design, the function of mentoring distance-based graduate students by academic advisors was assessed.

It is worth noting, that the functions and roles of professional academic advisors are not meant to replace the mentoring and advising roles of the program faculty in

traditional graduate education, but the relationships are meant to supplement the social interactions offered to distance-based graduate students to enhance their learning experience (Black, 2013; Garrison, 2018; Garrison & Cleveland-Innes, 2005; Garrison, et al., 2000; Grabowski, 2016; NACADA, 2010; Sloan C Consortium, 2004; Starks, 2011; Zachary, 2002). As such, the purpose of this study was to examine the graduate distance students' perceptions of the mentoring relationship between professional academic advisors and distance-based graduate students.

Description of Participants

Response rate

The survey targeted students in approved distanced-based degree programs at a Tier One, research institution located in the Southern United States in 2014. As there was no accurate way to determine the exact number of distance-based students, the survey was sent out to all students registered in distance-based sections of courses. Students were asked only to respond one time, even though they could have received invitations to participate in the study in all three semesters. Using the guidelines of Dillman (2007), the survey was sent out twice to the appropriately registered students. The first survey went twice to 10,119 students registered for the spring 2014 semester and the second was sent twice to 10,123 students for the summer and fall 2014 semesters. A total of 128 valid responses were used for analysis. The threshold of responses for this particular study was set at n=100 students with a 95% confidence level.

Demographics

Of the respondents, only 128 students chose to report on the demographic information. Of those students 52% were female and 48% were male (See Table 1). A vast majority (72%) were state residents, with the remaining 28% being non-residents (See Table 2). The non-residents were classified into both domestic (69%) and international (31%) to show further diversity of those responding (See Table 3). Overall, domestic students represented 89% of responses, with international students making up the remaining 11%. According to data released by the university in the fall of 2013, 47.3% of students were male and 52.8% were female, but the other demographic data is more in alignment with university demographic statistics (Data and Research Services, 2013).

Table 1.

Participants by Gender

Descriptive	*n*	*f*	%
Male	128	61	48
Female	128	67	52

Note. Participant Gender Demographics (N=128)

Table 2.

Participants by Residency

Descriptive	*n*	*f*	*%*
State Resident	*128*	*92*	*71.9*
Non-State Resident	*128*	*36*	*28.1*

Note. Participant Residency Demographics (N=128)

Table 3.

Participants by Citizenship

Descriptive	*n*	*f*	*%*
Domestic	129	115	89.1
International	129	14	10.9

Note. Participant Citizenship Demographics (N=129)

Based on the responses, Caucasians accounted for 61%, with the second largest demographic being Hispanic or Latinx at 13% (See Table 4). The next two highest response rates were Asian (10%) and Black or African American (9%). It is interesting to note that two responders chose "other" with one saying the question was not applicable and the other listing multiple races. A majority of respondents were born after 1980 (51%) with the highest percentages according to year being 1986 (9%), 1980 (7%), and 1972 (6%). [See Table 5 for more demographics on age.] As the academic programs were graduate level, there were no responses from 18-24-year old demographic.

Table 4.

Participants by Race

Descriptive	*n*	*f*	*%*
Caucasian	127	78	61.4
Hispanic or Latinx	127	16	12.6
Black or African American	127	12	9.4
Native American or American Indian	127	1	0.8
Asian	127	13	10.2
International	127	3	2.4
Other	127	4	3.1

Note. Participant Race Demographics (*N*=127)

Table 5.

Participants by Age

Descriptive	*n*	*f*	*%*
24-26	128	6	4.6
34-43	128	59	46.2
44-53	128	37	28.9
54-63	128	16	12.5
64-73	128	9	7.0
74-83	128	1	0.8

Note. Participant Birth Year Demographics (*N*=128)

Of the responses provided, 60% of students indicated they had visited campus as part of their program (See Table 6) with 55% indicating they had not met their professional academic advisor (not faculty advisor) in person (See Table 7). When those who were not required to come to campus for their program were removed, 72% of

students (*n*=78) had met their academic advisor in person. When looking at registration status, there was almost an even split between full-time (9 hours per semester) and part-time (1-8 hours per semester), where 51% indicated full-time, and 49% indicated part-time enrollment status (See Table 8).

Table 6.

Participants by Responses Regarding On-Campus Visit

Descriptive	*n*	*f*	*%*
Yes	129	78	60.5
No	129	51	39.5
Note. Participant Visited Campus as Part of Program (*N*=129)			

Table 7.

Participants by Responses Regarding Having Personally Met Academic Advisor

Descriptive	*n*	*f*	*%*
Yes	129	58	45
No	129	71	55
Note. Participant Met Academic Advisor in Person (*N*=129)			

Table 8.

Participants by Registration Status

Descriptive	*n*	*f*	*%*
Full Time	129	66	51.2
Part Time	129	63	48.8
Note. Participant Registration Status (*N*=129)			

A majority of the students (66%) who responded said they had never taken a face-to-face course as part of their program (See Table 9). Sixty percent of respondents were required to come to campus, with only 56% indicating they had taken a face-to-face course. When the campus visit requirement was removed, 66% of students had not taken an on-campus course. This is important because it clearly indicated that the students enrolling for distance courses primarily considered themselves to be online students. Given that the study focused on graduate programs, this is not surprising.

Every college that was offering a distance-based program at the time was represented in the results. Over half of the responses (65%) came from the College of Education and Human Development (44%) and the College of Agriculture and Life Sciences (21%), as these two colleges had the most distance-based programs and students. See Table 10 for more information related to the college classification. The two most represented colleges also reported having the most distance-based programs and students.

Table 9.

Participants by Taken Face-to-Face Course

Descriptive	*n*	*f*	*%*
Yes	129	44	34.1
No	129	85	65.9

Note. Participant Taken On-Campus Face-to-Face Course as part of the Program (*N*=129)

Table 10.

Participants by College

Descriptive	*n*	*f*	*%*
College of Agriculture and Life Sciences	128	27	21
College of Science	128	23	18
College of Education and Human Development	128	57	44
College of Engineering	128	16	12
School of Government	128	6	5

Note. Participant College Demographics (*N*=128)

The results represent a reasonably stratified sample across demographics. Although the actual size of the population could not be determined, due to the institution's record keeping practices at the time, and the sample was limited to one university, the results were still statistically significant for this one particular university.

Results

Findings related to research objective one

Objective One examined the role professional academic advisors serve in mentoring distance-based graduate students as a whole. Independent sample *t*-tests were used to test for Objective One to determine whether there were any significant results for participants' overall responses related to perceptions of professional academic advisors serving as mentors for distance-based graduate students. Findings were determined to be statistically significant if the coefficient alpha ($p<.05$) set as *a priori* was reached. Each participants' responses were compared against a mean of 3.51-4.5 (Neither Agree or Disagree) to determine the coefficient alpha to identify whether there were any

significant differences. Table 11 summarizes the overall participants' perceptions of mentoring by professional academic advisors. While participants generally neither agreed nor disagreed (*M*=4.08, *SD*=1.81), a few questions did provide a significant difference related to the social role of academic advisors.

Participants tended to agree with the following statements: "Frequently have one-on-one, informal social interactions outside the academic setting;" "Is like a father/mother to me;" "Frequently get together informally by ourselves;" "Treats me like a son/daughter;" and "Reminds me of my parents." All of these questions related to the social aspect of mentoring. An important component of higher education at the graduate level is social engagement, which is equally true for distance-based students. Social engagement helps students to feel connected and a part of something, which can be achieved through online communication with distance-based students. This support is often the most consistent support they receive as an online student with the professional academic advisor being the primary point of contact. The statistical findings support the assertion that distance-based graduate students value the social support provided by their professional academic advisors.

When an average is taken for all of the questions, the overall coefficient alpha is determined to be p=.055, M=4.08, and SD=1.81. This indicated that overall, the responses were close to the mean and there was little distribution in the responses provided. Based on the overall data, academic advisors were not generally perceived as mentors for distance-based graduate students, as indicated by the respondents in this population. With a mean of M=4.08, the average of the responses fell into the Neither Agree nor Disagree category on the summative scale provided on the survey and discussed in Chapter 3. As such, the item summation of roles was examined to see if there were any significant differences in the findings related to demographics.

Table 11.

Participants' Overall Perceptions

Questions	*n*	*M*	*SD*
Is like a father/mother to me	132	5.5	1.7
Frequently get together informally by ourselves	132	5.4	1.9
Treats me like a son/daughter	132	5.3	1.8
Reminds me of my parents	132	5.3	1.8
Frequently socialize one-on-one outside the academic setting	132	5.2	1.9
Frequently have 1 on 1, informal social interactions out of academia	132	5	2
Represents who I want to be	132	4.5	1.9
Uses his/her influence to support my advancement at the university	151	4.5	1.8
Serves as a role model for me	132	4.5	1.9
Serves as a sounding board for me to develop and understand myself	132	4.5	2
Uses his/her influence in the university to my benefit	151	4.5	1.8
Is someone I identify with	132	4.4	2
Guides my personal development	132	4.4	2
Helps me to attain desirable positions	151	4.4	1.7
"Runs interference" for me in the university	151	4.1	1.8
Suggests specific strategies for achieving career aspirations	151	4.1	1.5
Helps me learn about other parts of the university	151	3.8	1.8
Protects me from those who are out to get me	151	3.8	1.5
Gives me advise on how to attain recognition at the university	151	3.7	1.8
Shields me from damage contact with important people in the univ.	151	3.7	1.5
Assigns tasks to push me into developing new skills	151	3.6	1.9
Gives me tasks that require me to learn new skills	151	3.6	1.9
Provides me with challenging assignments	151	3.6	1.8
Guides my academic development	132	3.6	2
Creates opportunities for me to impress important people in the univ.	151	3.6	1.8
Brings my accomplishments to the attn of important people in univ.	151	3.6	1.9
Helps me be more visible in the university	151	3.5	1.8
Thinks highly of me	132	3.5	1.7
Sees me as being confident	132	3.3	1.7
Is someone I can confide in	132	3.3	1.7
Accepts me as a competent student	132	3.2	1.9
Provides support and encouragement	132	3.1	1.9
Is someone I trust	132	2.9	1.8

Note. *M*, 1-1.5=Strongly disagree; 1.51-2.5=disagree; 2.51-3.5=somewhat disagree; 3.51-4.5=neither agree nor disagree; 4.51-5.5=somewhat agree; 5.51-6.5=agree; 6.51-7=strongly agree; Overall *M*=4.08, *SD*=1.81

Based on the limited responses provided, distance-based graduate students who participated in this study indicated that, in general, they did not perceive professional academic advisors as serving in a mentorship role for them. That said, professional academic advisors can fulfil the role of mentor in the areas of career development. Nevertheless, participants indicated that professional academic advisors did serve as mentors when it comes to helping students achieve career aspirations, recognition at the university, in helping them learn about other parts of the university, running interference and actively advocating for them, and when it comes to "protecting them from those out to get them."

Findings related to research objective two

Objective Two examined the career development function professional academic advisors serve for distance-based graduate students. Independent sample *t*-tests were used to determine whether there were any significant findings for participants' responses related to academic advisors meeting the career development function of mentoring for distance-based graduate students. All findings were determined to be statistically significant if the coefficient alpha ($p<.05$) set as *a priori* was reached. The career development function was composed of fifteen questions divided between five roles. The Career Development function focused on the roles of sponsor, coach, protector, challenger, and exposer mentors play. Participants' responses were compared on each of the fifteen items of this functions to determine the coefficient alpha to see whether there were any significant differences. Table 12 summarizes these findings.

Table 12.

Participants' Perceptions of Academic Advisors' Influence on their Career Development

Constructs	*n*	*M*	*SD*
Sponsor	151	4.44	1.72
Uses his/her influence to support my advancement at the university.	151	4.50	1.82
Uses his/her influence in the university to my benefit.	151	4.48	1.83
Helps me to attain desirable positions.	151	4.35	1.74
Coach	151	3.85	1.70
Suggests specific strategies for achieving career aspirations.	151	4.05	1.85
Helps me learn about other parts of the university.	151	3.78	1.78
Gives me advice on how to attain recognition at the university.	151	3.74	1.77
Protect	151	3.86	1.39
"Runs interference" for me in the university.	151	4.07	1.75
Shields me from damaging contact with important people in the university.	151	3.74	1.53
Protects me from those who are out to get me.	151	3.77	1.45
Challenge	151	3.59	1.84
Gives me tasks that require me to learn new skills.	151	3.61	1.91
Assigns tasks that push me into developing new skills.	151	3.61	1.88
Provides me with challenging assignments.	151	3.58	1.85
Exposer	151	3.54	1.69
Creates opportunities for me to impress important people in the university.	151	3.55	1.75
Brings my accomplishments to the attention of important people in the university.	151	3.55	1.69
Helps me be more visible in the university.	151	3.53	1.75

Note. *M*, 1-1.5=Strongly disagree; 1.51-2.5=disagree; 2.51-3.5=somewhat disagree; 3.51-4.5=neither agree nor disagree; 4.51-5.5=somewhat agree; 5.51-6.5=agree; 6.51-7=strongly agree; Overall *M*=3.86, *SD*=1.50

The results indicated academic advisors, at least according to the responses provided, were not perceived to be serving as an overall career development function

(*M*=3.86, *SD*=1.50) for distance-based graduate students. When the individual roles were examined further, distance-based graduate students tended to disagree with academic advisors serving as mentors for all career development roles except for that of challenge and exposer (*M*=4.44, *SD*=1.72), where they neither agreed nor disagreed.

When examining the mean for individual questions, it is interesting to note that for questions relating to the Challenge (*M*=3.59, *SD*=1.84) and Exposer (*M*=3.54, *SD*=1.69) constructs, participants tended to neither agree nor disagree that academic advisors fulfilled these tasks. Participants also neither agreed nor disagreed on each individual question for both roles. For the challenge role, participants neither agreed nor disagreed that academic advisors gave them tasks to learn new skills (*M*=3.61, *SD*=1.91), pushed them to develop new skills (*M*=3.61, *SD*=1.88), and provided challenging assignments (*M*=3.58, *SD*=1.85), which are obviously not part of their job and pertain to the Teaching domain within the Community of Inquiry. For the exposer role, participants also neither agreed nor disagreed that academic advisors created opportunities for them to impress people at the university (*M*=3.55, *SD*=1.75), highlighted their accomplishments to important people (*M*=3.55, *SD*=1.69), and helped them to be more visible at the university (*M*=3.53, *SD*=1.75), again, roles which are not within the scope of their professional work.

Table 13 summarizes the Career Development function overall to determine whether any significant difference was noted. Participants' overall level of agreement with academic advisors' influence on their Career Development did not differ by Gender, $t(127)=1.44$, $p=.15$. Both males (M=4.36, SD=1.53) and females (M=3.85,

SD=1.47) tended to neither agree nor disagree with advisor's influence. Academic advisors' influence also did not differ statistically by Citizenship on participants' career development, $t(127)=1.73$, $p=.27$. Domestic students (M=3.86, SD=1.45), however, tended to neither agree nor disagree with advisors' influence, while international students (M=4.58, SD=1.66) tended to somewhat agree. There was also no statistical difference between a students' home college and their responses to the career development scale, $F(124)=1.86$, $p=.13$. Participants in Agriculture and Life Sciences (M=4.39, SD=1.71), Science (M=3.84, SD=1.12), Education and Human Development (M=3.67, SD=1.45), and the College of Engineering (M=4.46, SD=1.56) tended to neither agree nor disagree about the academic advisors' influence on their career development, while participants in the School of Government (M=3.4, SD=111.36) tended to somewhat disagree.

Participants' overall level of agreement with the influence professional academic advisors on their career development did not statistically differ by residency, $t(126)=.59$, $p=.55$. Both residence statuses, State (M=3.99, SD=1.47) and Non-State (M=3.82, SD=1.54) tended to neither agree nor disagree with academic advisors' influence. Participants' overall level of agreement with the influence academic advisors on their career development did not statistically differ by age, $F(124)=.81$, $p=.49$. All age groups, 22-29 (M=4.09, SD=1.52), 30-33 (M=4.25, SD=1.64), 34-41 (M=3.68, SD=1.35), and 42-74 (M=3.88, SD=1.47) tended to neither agree nor disagree. Participants' overall level of agreement with the influence academic advisors on their career development did not statistically differ by having met their academic advisor in

person $t(127)=4.91$, $p=.00$. Participants who had met their advisor in person (M=4.59, SD=1.52) tended to somewhat agree, while those who had not met their advisor in person (M=3.40, SD=1.23) tended to neither agree nor disagree. It is important to note that having met in person with a professional academic advisor mattered when it came to how they were perceived by distance graduate students.

Participants' overall level of agreement with the influence professional academic advisors have on their career development did not statistically differ by their student status, $t(127)=.06$, $p=.06$ on-campus or face-to-face, $t(127)=3.43$, $p=.00$. Students who had taken an on-campus, face-to-face course (M=4.53, SD=1.57) tended to somewhat agree about the academic advisors' influence on their career development, while those who had not taken a face-to-face course (M=3.62, SD=1.35) tended to neither agree nor disagree. Coming to campus could have increased the chances of meeting their professional academic advisor. It is also worth noting that even limited in-person interactions seemed to influence the students' perceptions of mentoring. Finally, participants' overall level of agreement with the influence of academic advisors on their career development, $t(127)=2.43$, $p=.02$, show a significant difference. Both students who had visited campus (M=4.19, SD=1.61) and students who had not visited campus (M=3.55, SD=1.20) tended to neither agree nor disagree that advisors influence their career development.

It is important to note that some elements of demographics, based on the participants' responses, played a role in influencing perceptions of the Career Development function, even though professional academic advisors do not appear to

facilitate this function overall. The descriptive analysis of the demographic questions, as related to this objective, did seem to reveal an influence on the career development of the participants. A significant difference was found for demographics relating to those who had met their professional academic advisor in person (p=.00), having visited campus in person (p=.02), and having taken a face-to-face course (p=.00). All of these indicated that even limited face-to-face social interaction with professional advisers and faculty on campus impacts students' impressions of the mentoring and learning process.

When examining the career development function as related to the self-reported ethnicity of the participants (See Table 14), the responses showed there was no perceived influence on this function. However, when you look at the individual ethnicities, it is important to note participants who self-identified as Asian (M=4.65, SD=1.56) tended to somewhat agree that academic advisors serve the career development function of a mentor. The remaining participants, Hispanic or Latin (M=4.24, SD=1.31), Caucasian (M=3.83, SD=1.40), Black or African American (M=3.82, SD= 2.13), Native American or American Indian (M=3.73, SD=0.00), and International (M=3.62, SD=1.28), tended to neither agree nor disagree with academic advisors serving this function of mentoring. Those who self-identified as Other (M=3.17, SD=1.82) tended to somewhat disagree with academic advisors serving this function of mentoring.

Table 13.

Participants' Descriptive Analysis of Career Development Construct by Personal Characteristics

Personal Characteristic	Levels	*n*	*M*	*SD*	*Test*	*p*	*df*
Gender	Male	21	4.36	1.53	$t = 1.44$	.15	127
	Female	108	3.85	1.47			
Citizenship	Domestic	115	3.86	1.45	$t = 1.73$	.27	127
	International	14	4.58	1.66			
College	Agriculture and Life Sciences	27	4.39	1.71	$F = 1.86$	.13	4, 124
	Science	23	3.84	1.12			
	Education and Human Development	57	3.67	1.45			
	College of Engineering	16	4.46	1.56			
	School of Government	6	3.4	1.36			
Residency	State Resident	92	3.99	1.47	$t = 0.59$	.55	126
	Non-State Resident	36	3.82	1.54			
Age	22-29	32	4.09	1.52	$F = .81$	.49	3, 124
	30-33	24	4.25	1.64			
	34-41	34	3.68	1.35			
	42-74	38	3.88	1.47			
Met Academic Advisor in Person	Yes	58	4.59	1.52	$t = 4.91$	.00	127
	No	71	3.40	1.23			
Student Status	Full Time	66	3.94	1.52	$t = .06$	.95	127
	Part Time	63	3.92	1.47			
Taken an on-Campus Face-to-Face Course as a part of the Program	Yes	44	4.53	1.57	$t = 3.43$	.00	127
	No	85	3.62	1.35			
Visited Campus as a Part of the Program	Yes	78	4.19	1.61	$t = 2.43$	.02	127
	No	51	3.55	1.20			

Note. *M*, 1-1.5=Strongly disagree; 1.51-2.5=disagree; 2.51-3.5=somewhat disagree; 3.51-4.5=neither agree nor disagree; 4.51-5.5=somewhat agree; 5.51-6.5=agree; 6.51-7=strongly agree

Table 14.

Participants' Descriptive Analysis of Career Development Construct by Ethnicity

Descriptive	*n*	*M*	*SD*
Asian	13	4.65	1.56
Hispanic or Latinx	16	4.24	1.31
Caucasian	78	3.83	1.40
Black or African American	12	3.82	2.13
Native American or American Indian	1	3.73	0.00
International	3	3.62	1.28
Other	4	3.17	1.82

Note. *M*, 1-1.5=Strongly disagree; 1.51-2.5=disagree; 2.51-3.5=somewhat disagree; 3.51-4.5=neither agree nor disagree; 4.51-5.5=somewhat agree; 5.51-6.5=agree; 6.51-7=strongly agree; Overall n=127, M=3.94, SD=1.49

Overall, the Career Development function was influenced by some of the demographic variables as previously indicated and shown in Tables 13 and 14. However, the results indicated professional academic advisors do not serve the overall career development function of mentoring for distance-based graduate students. The next section examines the results as related to the psychosocial development function of mentoring.

Findings related to research objective three

Objective Three examined the psychosocial development function academic advisors serve for distance-based graduate students. Independent sample *t*-tests were used to determine whether there were any significant findings for participants' responses related to professional academic advisors meeting the psychosocial development function of mentors for distance-based graduate students. All findings were determined to be statistically significant if the coefficient alpha (p<.05) set as *a priori* was reached. The psychosocial development function was composed of twelve individual questions

grouped into four categories (friend, role model, counsel, and accepts) that were reverse coded, divided equally between four roles. Table 15 summarizes these findings.

Table 15.

Participants' Perceptions of Academic Advisor's Influence on their Psychosocial Development

Constructs	*n*	*M*	*SD*
Friend	132	3.08	1.69
Is someone I can confide in.	132	3.26	1.87
Provides support and encouragement.	132	3.05	1.74
Is someone I trust	132	2.92	1.83
Role Model	132	4.47	1.83
Represents who I want to be.	132	4.51	1.88
Servers as a role model for me.	132	4.49	1.90
Is someone I identify with.	132	4.40	1.99
Counselor	132	3.23	1.86
Guides my personal development.	132	4.40	2.01
Guides my academic development.	132	4.16	1.83
Serves as a sounding board for me to develop and understand myself.	132	1.49	1.99
Accepts	132	3.36	1.68
Thinks highly of me.	132	3.51	1.66
Sees me as being competent.	132	3.34	1.73
Accepts me as a competent student.	132	3.23	1.87

Note. *M*, 1-1.5=Strongly disagree; 1.51-2.5=disagree; 2.51-3.5=somewhat disagree; 3.51-4.5=neither agree nor disagree; 4.51-5.5=somewhat agree; 5.51-6.5=agree; 6.51-7=strongly agree; *M*=3.71, *SD*=1.57

Overall, students neither agreed nor disagreed (*M*=3.71, *SD*=1.57) with professional academic advisors serving the psychological development function of a mentor on the whole. Of the four roles in the psychosocial development function, participants indicated three were not fulfilled. Participants did not believe academic advisors served the role of Friend (*M*=3.08, *SD*=1.69), Counselor (M=3.23, SD=1.86),

and “accepts me as a student” (M=3.36, SD=1.68) for distance-based graduate students. Participants neither agreed nor disagreed professional academic advisors served the role of Role Model (*M*=4.47, *SD*=1.83) for distance-based graduate students. When examining the individual questions, participants somewhat agreed that the professional academic advisor “represented who they want to be” (M=4.51, SD=1.88), while they somewhat disagreed that the academic advisor “is someone I can confide in” (M=3.26, SD=1.87), “provides support and encouragement” (M=3.05, SD=1.74), “is someone I trust” (M=2.92, SD=1.83), “sees me as being competent” (M=3.34, SD=1.73), and “accepts me as a competent student” (M=3.23, SD=1.87). Participants tended to strongly disagree that the professional academic advisor “serves as a sounding board for me to develop and understand myself” (M=1.49, SD=1.99).

When examining the psychosocial development function related to the self-identified ethnicity of the participant (See Table 16), the responses showed no significant differences on this function or for any individual ethnicity category. Participants who identified as Asian (*M*=3.22, *SD*=1.51) and Hispanic or Latinx (M=3.40, SD=1.31) tended to somewhat disagree that academic advisors fulfilled the psychosocial construct of mentoring. The remaining ethnicity responses, Other (M=4.20, SD=1.43), International (M=4.17, SD=1.33), Black or African American (M=4.03, SD=2.11), Native American or American Indian (M=4.00, SD=0.00), and Caucasian (M=3.77, SD=1.56), tended to neither agree nor disagree with academic advisors serving a psychosocial role. As such, ethnicity appeared not to have a positive bearing on participants’ responses related to the Psychosocial Development role, however, the

tendency to provide neutral responses or to disagree with the statements regarding positive social support by the students' primary contact on campus raises some questions and concerns. The tendency of minoritized students to either respond neutrally or negatively to the survey items may suggest that the ethnicity, of both the students and of the professional academic advisor, may be a factor in need of consideration when it comes to mentorship.

Table 16.

Participants' Descriptive Analysis of Psychosocial Construct by Ethnicity

Descriptive	*n*	*M*	*SD*
Other	4	4.20	1.43
International	3	4.17	1.33
Black or African American	12	4.03	2.11
Native American or American Indian	1	4.00	0.00
Caucasian	78	3.77	1.56
Hispanic or Latinx	16	3.40	1.31
Asian	13	3.22	1.51

Note. *M*, 1-1.5=Strongly disagree; 1.51-2.5=disagree; 2.51-3.5=somewhat disagree; 3.51-4.5=neither agree nor disagree; 4.51-5.5=somewhat agree; 5.51-6.5=agree; 6.51-7=strongly agree; *M*=3.72, *SD*=1.56

Table 17 summarizes the Psychosocial Development function as compared to each demographic variable to determine whether a significant difference was noted. Participants' overall level of agreement with academic advisors' influence on their psychosocial development did not show a significant difference from the mean, and did not differ by Gender, $t(127)=2.33$, $p=.02$. That said, males (M=3.00, SD=1.52) tended to somewhat disagree with academic advisors' influence on psychosocial development, while females (M=3.85, SD=1.53) tended to neither agree nor disagree regarding

advisors' influence. The fact that male students were more inclined to disagree with the statement may indicate a lack of gender alignment with the professional academic advisors on the whole. Academic advisors' influence did statistically differ by Citizenship on participants' psychosocial development, $t(127)=1.73$, $p=.56$. Domestic students (M=3.74, SD=1.55) tended to neither agree nor disagree, while international students (M=3.48, SD=1.60) tended to somewhat disagree with advisors' influence. Again, this inclination to disagree or designate a slightly negative perception could indicate a lack of cultural alignment between professional academic advisors and international distance graduate students.

There were also slight statistical differences between a student's home college and their perceptions of psychosocial development, $F(124)=2.17$, $p=.08$. Participants in the colleges of Agriculture and Life Sciences (M=3.14, SD=1.66), College of Engineering (M=3.39, SD=1.77), and School of Government (M=3.15, SD=1.76), tended to somewhat disagree, with the perception that professional advisers did not contribute to their psychosocial development, while participants in the colleges of Science (M=3.85, SD=1.02) and Education and Human Resources (M=4.07, SD=1.54) tended to neither agree nor disagree regarding academic advisor's influence on their psychosocial development. In this case, the perceptions may not be positive, but negative perceptions in these regards may be of concern to professional academic advisors in each of the respective colleges.

Participants' overall level of agreement with academic advisors' influence on their psychosocial development did not differ by residency, $t(126)=.42$, $p=.68$. Both

residence statuses, State (M=3.67, SD=1.56) and Out-of-State (M=3.79, SD=1.59), tended to neither agree nor disagree with academic advisor's influence. Participants' overall level of agreement with academic advisors' influence on their psychosocial development did differ by age, $F(124)=2.12$, $p=.10$. Age groups, 22-29 (M=3.51, SD=1.71), 34-41 (M=4.07, SD=1.43), and 42-74 (M=3.87, SD=1.32) tended to neither agree nor disagree, while age bracket 30-33 (M=3.12, SD=1.71) tended to somewhat disagree. Participants' overall level of agreement with academic advisors' influence on their psychosocial development did provide a significant difference for those who had met their academic advisor in person $t(127)=3.74$, $p=.00$. Participants who had met their advisor in person (M=3.17, SD=1.58) tended to somewhat disagree, while those who had not met their advisor in person (M=4.15, SD=1.39) tended to neither agree nor disagree. This is also a possible negative perception of student experiences while on campus that should be taken into further consideration by professional academic advisors. Participants' overall level of agreement with academic advisors' influence on their psychosocial development did not differ by their student status, $t(127)=2.6$, $p=.80$. Both students who were full-time (M=3.76, SD=1.65) and those where were enrolled part-time (M=3.75, SD=1.46) tended to neither agree nor disagree.

Participants' overall level of agreement with academic advisors' influence on their psychosocial development did show a significant difference when they had taken a face-to-face course, $t(127)=1.55$, $p=.12$. Students who had taken an on-campus, face-to-face course (M=3.42, SD=1.67) tended to somewhat disagree, while those who had not taken a face-to-face course (M=3.86, SD=1.48) tended to neither agree nor disagree.

Again, the negative perceptions based on on-campus interaction may be worth further investigation. Finally, participants' overall level of agreement with academic advisors' influence on their psychosocial development did not differ if they had visited campus as part of their program, $t(127)=1.36$, $p=.18$. Both students who had visited campus (M=3.56, SD=1.70) and those who had not (M=3.94, SD=1.28) tended to neither agree nor disagree that professional advisors met the psychosocial construct.

It is important to note that some demographic variables, based on the participants' responses, played a role in influencing the Psychosocial Development function, even though professional academic advisors do not directly facilitate this function overall. The descriptive analysis of the demographic questions, as related to this objective, did seem to indicate an influence on the psychosocial development of the participants. A significant difference was found relating to the demographic variable of gender ($p=.02$) and the variable of having met a professional advisor in person ($p=.00$). Again, demographic variables and the alignment or lack of alignment with the various demographics of the professional academic advisors may also be worth further exploring.

Overall, the Psychosocial Development function was influenced by some demographic variables as can be seen in Tables 16 and 17. However, the results did not show that professional academic advisors, overall, serve the function of supporting psychosocial development in mentoring of distance-based graduate students. The next section examines the results as related to the perceived parental development function of mentoring.

Table 17.

Participants' Descriptive Analysis of Psychosocial Construct by Personal Characteristics

Personal Characteristic	Levels	*n*	*M*	*SD*	*Test*	*p*	*df*
Gender	Male	21	3.00	1.52	*t*=2.33	.02	127
	Female	108	3.85	1.53			
Citizenship	Domestic	115	3.74	1.55	*t*=1.73	.56	127
	International	14	3.48	1.60			
College	Agriculture and Life Sciences	27	3.14	1.66	*F*=2.17	.08	4, 124
	Science	23	3.85	1.02			
	Education and Human Development	57	4.07	1.54			
	College of Engineering	16	3.39	1.77			
	School of Government	6	3.15	1.76			
Residency	State Resident	92	3.67	1.56	*t*=.42	.68	126
	Non-State Resident	36	3.79	1.59			
Age	22-29	32	3.51	1.71	*F*=2.12	.10	3, 124
	30-33	24	3.12	1.71			
	34-41	34	4.07	1.43			
	42-74	38	3.87	1.32			
Met Academic Advisor in Person	Yes	58	3.17	1.58	*t*=3.74	.00	127
	No	78	4.15	1.39			
Student Status	Full Time	66	3.76	1.65	*t*=2.6	.80	127
	Part Time	63	3.75	1.46			
Taken an on-Campus Face-to-Face Course as a part of the Program	Yes	44	3.42	1.67	*t*=1.55	.12	127
	No	85	3.86	1.48			
Visited Campus as a Part of the Program	Yes	78	3.56	1.70	*t*=1.36	.18	127
	No	51	3.94	1.28			

Note. *M*, 1-1.5=Strongly disagree; 1.51-2.5=disagree; 2.51-3.5=somewhat disagree; 3.51-4.5=neither agree nor disagree; 4.51-5.5=somewhat agree; 5.51-6.5=agree; 6.51-7=strongly agree

Findings related to research objective four

Objective Four examined the parental function academic advisors may serve for distance-based graduate students. Independent sample *t*-tests were used to determine whether there were any significant findings for participants' responses related to perceptions of academic advisors serving the parental function of mentors for distance-based graduate students. The parental role was composed of three questions regarding the mentor filling some of the traditional roles associated with being a parent.

Each individual question, as well as the overall role, all showed to be significant. These questions revealed means above average and were not dispersed, having an average M=5.36 and SD=1.75 (See Table 18). When examining the individual questions, a statistically significant difference was found for all questions related to this construct. For the first construct, "is like a father/mother" (M=5.27, SD=1.76), students tended to somewhat agree. Students also tended to somewhat agree with the second construct, "treats them like a son/daughter" (M=5.47, SD=1.67). The third construct "reminds them of their parent(s)" (M=5.33, SD=1.81) students tended to somewhat agree. All three questions were grouped closely together. This indicates academic advisors, based on the responses provided by this group of distance-based graduate students, do serve a parental role relating to mentoring for this study.

Table 18.

Participants' Perceptions of Academic Advisor's Influence on their Parent Development

Constructs	*n*	*M*	*SD*
Is like a father/mother to me.	132	5.47	1.76
Treats me like a son/daughter.	132	5.33	1.81
Reminds me of my parents.	132	5.27	1.76

Note. *M*, 1-1.5=Strongly disagree; 1.51-2.5=disagree; 2.51-3.5=somewhat disagree; 3.51-4.5=neither agree nor disagree; 4.51-5.5=somewhat agree; 5.51-6.5=agree; 6.51-7=strongly agree; *M*=5.36, *SD*=1.73

When examining the parental development function relating to ethnicity of the participants (See Table 19), the responses showed there was statistically significant influence on this function. Students who responded with the ethnicity of International (M=6.22, SD=.069) tended to agree that academic advisors fulfilled the parental role of mentoring. For the other ethnicities, Black or African American (M=5.50, SD=2.02), Caucasian (M=5.49, SD=1.63), Hispanic or Latinx (M=5.46, SD=1.87), Native American or American Indian (M=5.00, SD=0.00), and Asian (M=4.69, SD=1.72), tended to somewhat agree that academic advisor fulfill the role of parent for distance-based graduate students. Students who identified as Other (M=4.25, SD=2.36) neither agreed nor disagreed that advisors serve the mentoring role of parent. As such, ethnicity had a bearing on participants' responses related to the parental development role of the academic advisor, indicating that the guidance provided by professional academic advisors is perceived both as positive and is valued.

Table 19.

Participants' Descriptive Analysis of Parental Construct by Ethnicity

Descriptive	*n*	*M*	*SD*
International	3	6.22	0.69
Black or African American	12	5.50	2.02
Caucasian	78	5.49	1.63
Hispanic or Latinx	16	5.46	1.87
Native American or American Indian	1	5.00	0.00
Asian	13	4.69	1.72
Other	4	4.25	2.36

Note. *M*, 1-1.5=Strongly disagree; 1.51-2.5=disagree; 2.51-3.5=somewhat disagree; 3.51-4.5=neither agree nor disagree; 4.51-5.5=somewhat agree; 5.51-6.5=agree; 6.51-7=strongly agree; *n*=127, *M*=5.38, *SD*=1.71

Table 20 summarizes the Parental Development function as compared to each demographic to determine whether a statistically significant difference was noted. Participants' overall level of agreement with academic advisor's influence on their parental development differed by Gender, $t(127)=1.50$, $p=.01$ and there was a statistically significant difference. Males (M=4.27, SD=1.78) tended to neither agree nor disagree with advisors' influence, while females (M=5.35, SD=1.83) tended to somewhat agree with advisors' influence. This could be due to the fact that a majority of academic advisors are female, and the gender alignment of mentors and advisers can affect student perceptions. Academic advisors' influence also differed by Citizenship on participants' perceptions of parental development, $t(127)=1.40$, $p=.16$. Domestic participants (M=5.26, SD=1.87) tended to somewhat agree academic advisors influenced their parental development, while international participants (M=4.52, SD=1.68) tended to neither agree nor disagree with advisors' influence. Differences in or alignment with culture and nationality may strongly influence students' perceptions of this particular

mentoring role. Statistically, there was also a difference between students' home college and their perceptions of parental development, $F(124)=1.69$, $p=.56$. Participants' in Agriculture and Life Sciences (M=4.42, SD=2.02), tended to neither agree nor disagree regarding the academic advisors' influence on their parental development. Participants from the other colleges, Science (M=5.23, SD=1.87), Education and Human Development (M=5.53, SD=1.61), College of Engineering (M=5.17, SD=1.96), and the School of Government (M=5.06, SD=2.69), tended to somewhat agree when it comes to the professional academic advisors' influence on their parental development. Findings like these might indicate differences in college culture when it comes to providing student support, or alternatively that there are variations in students' expectations for parental support depending on field of study.

Participants' overall level of agreement with academic advisors' influence on their parental development did differ statistically by residency, $t(126)=.84$, $p=.40$. State residents (M=5.26, SD=1.86) and Non-State residents (M=4.96, SD=1.88) tended to somewhat agree when it came to professional academic advisors' influence regarding their parental development. Participants' overall level of agreement with academic advisors' influence on their parental development also differed slightly by age, $F(124)=2.12$, $p=.10$. Participants identified as 22-29 (M=5.36, SD=1.84) and 34-41 (M=4.87, SD=1.99) tended to somewhat agree, 42-74 (M=5.77, SD=1.45) tended to agree, while participants 30-33 (M=4.35, SD=1.99) tended to neither agree nor disagree. These patterns regarding expectations for support seem counterintuitive, where one might expect younger students to more positively perceive this support role.

Participants' overall agreement with academic advisors' influence on parental development did differ statistically when they had not met their academic advisor in person $t(127)=3.15$, $p=.00$. Participants who had met their advisor in person (M=4.63, SD=1.81) tended to only somewhat agree, while those who had not met their advisor in person (M=5.77, SD=1.45) tended to agree. These perceptions and responses also seem counterintuitive.

Participants' overall level of agreement with academic advisors' influence on their parental development did not differ statistically by their student status, $t(127)=.67$, $p=.50$. Both students who were full-time (M=5.07, SD=1.81) and part-time (M=5.29, SD=1.92) tended to somewhat agree. Participants' overall level of agreement with academic advisors' influence on their parental development did differ statistically between whether they had taken a face-to-face course, $t(127)=1.83$, $p=.07$. Both students who had taken an on-campus and face-to-face course (M=4.77, SD=1.90) and those who had not taken a face-to-face course (M=5.39, SD=1.81) tended to somewhat agree.

Table 20.

Participants' Descriptive Analysis of Parental Construct by Personal Characteristics

Personal Characteristic	Levels	*n*	*M*	*SD*	*Test*	*p*	*df*
Gender	Male	21	4.27	1.78	t=2.50	.01	127
	Female	108	5.35	1.83			
Citizenship	Domestic	115	5.26	1.87	*t*=1.40	.16	127
	International	14	4.52	1.68			
College	Agriculture and Life Sciences	27	4.42	2.02	*F*=1.69	.56	4, 124
	Science	23	5.23	1.87			
	Education and Human Development	57	5.53	1.61			
	College of Engineering	16	5.17	1.96			
	School of Government	6	5.06	2.69			
Residency	State Resident	95	5.26	1.86	*t*=.837	.40	126
	Non-State Resident	36	4.96	1.88			
Age	22-29	32	5.36	1.84	*F*=2.12	.10	3, 124
	30-33	24	4.35	1.99			
	34-41	34	4.87	1.99			
	42-74	38	5.77	1.45			
Met Academic Advisor in Person	Yes	58	4.63	1.81	*t*=3.15	.00	127
	No	78	5.63	1.76			
Student Status	Full Time	66	5.07	1.81	*t*=.67	.50	127
	Part Time	63	5.29	1.92			
Taken an on-Campus Face-to-Face Course as a part of the Program	Yes	44	4.77	1.90	*t*=1.83	.07	127
	No	85	5.39	1.81			
Visited Campus as a Part of the Program	Yes	78	4.89	1.95	*t*=2.22	.03	127
	No	51	5.62	1.63			

Note. *M*, 1-1.5=Strongly disagree; 1.51-2.5=disagree; 2.51-3.5=somewhat disagree; 3.51-4.5=neither agree nor disagree; 4.51-5.5=somewhat agree; 5.51-6.5=agree; 6.51-7=strongly agree

Finally, participants' overall level of agreement with academic advisors' influence on their parental development differed by whether they had visited campus as part of their program or not, $t(127)=2.22$, $p=.03$, and also showed a significant statistical difference. Students who had visited campus (M=4.89, SD=1.95) tended to somewhat agree, while students who had not visited campus (M=5.62, SD=1.63) tended to agree. Again, these perceptions seem to be counterintuitive, where one would expect students who had visited campus would have a more positive impression than those who had not.

It is important to note that demographic variables, based on the participants' responses, also influenced the Parental Development function, even though overall participants tended to agree that academic advisors facilitate this function. The descriptive analysis of the demographic variable questions, as related to this objective, did seem to have an influence on the parental development of the participants. A significant statistical difference was found for demographic variables relating to gender ($p=.01$), having met their advisor in person ($p=.00$), and having visited campus ($p=.03$).

Overall, the Parental Development function was influenced by demographic variables as can be seen in Tables 19 and 20. The results showed that professional academic advisors were perceived to serve the parental development function of mentoring for distance-based graduate students. The next section examines the results as they relate to the social development function of mentoring.

Findings related to research objective five

Objective Five examined the social function academic advisors serve for distance-based graduate students. Independent sample *t*-tests were used to determine

whether there were any significant findings for participants' responses related to academic advisors meeting the social development function of mentors for distance-based graduate students. The social function scale was composed of three questions related to the interaction between academic advisors and students outside the standard learning environment.

Both the individual questions and the overall role were statistically significant as social presence in distance education is an essential component. These questions revealed students tended to agree, garnering an average *M*=5.16 and *SD*=1.95 (See Table 21). When examining the individual questions, participants slightly agreed they frequently get together informally with their academic advisor (*M*=5.35, *SD*=1.87), socialize outside the academic setting (*M*=5.17, *SD*=1.92), and have one-on-on outside social interactions (*M*=4.95, *SD*=2.04) with their professional academic advisor. All three questions were grouped closely together. This indicates perceptions of professional academic advisors, based on the responses provided by this group of distance-based graduate students, do indicate that they serve a social role as related to mentoring.

Table 21.

Participants' Perceptions of Academic Advisors' Influence on their Social Development

Constructs	*n*	*M*	*SD*
Frequently get together informally by ourselves.	132	5.35	1.87
Frequently socialize one-on-one outside the academic setting.	132	5.17	1.92
Frequently have one-on one, informal social interactions outside the academic setting.	132	4.95	2.04

Note. *M*, 1-1.5=Strongly disagree; 1.51-2.5=disagree; 2.51-3.5=somewhat disagree; 3.51-4.5=neither agree nor disagree; 4.51-5.5=somewhat agree; 5.51-6.5=agree; 6.51-7=strongly agree; *M*=5.16, *SD*=1.88

The social development function as related to the self-reported ethnicity of the participants (See Table 22) showed there was an influence on this function for almost each ethnicity. Distance graduate students' perceptions of social support and mentoring differed by ethnicity. Two ethnicities, Other (M=4.50, SD=2.65) and Asian (*M*=4.33, *SD*=1.82), neither agreed nor disagreed that academic advisors fulfill the role of parent for distance-based graduate students. Students who identified as International (*M*=6.00, *SD*=1.45) and Black or African American (M=5.56, SD=1.85) tended to agree that their professional academic advisors fulfilled this role. The remaining ethnicities, Caucasian (M=5.30, SD=1.88), Hispanic or Latinx (M=5.04, SD=1.83), and Native American or American Indian (M=5.00, SD=0.00), also tended to somewhat agree. As such, ethnicity seemed to have a bearing on most participants' perceptions and responses related to the Social Development role.

Table 22.

Participants' Descriptive Analysis of Social Construct by Ethnicity

Descriptive	*n*	*M*	*SD*
International	3	6.00	1.45
Black or African American	12	5.56	1.85
Caucasian	78	5.30	1.88
Hispanic or Latinx	16	5.04	1.83
Native American or American Indian	1	5.00	0.00
Other	4	4.50	2.65
Asian	13	4.33	1.82

Note. *M*, 1-1.5=Strongly disagree; 1.51-2.5=disagree; 2.51-3.5=somewhat disagree; 3.51-4.5=neither agree nor disagree; 4.51-5.5=somewhat agree; 5.51-6.5=agree; 6.51-7=strongly agree; *M*=5.18, *SD*=1.87

Table 23 summarizes the Social Development function as compared to each demographic variable to determine whether a significant difference was noted.

Participants' overall level of agreement with academic advisors' influence on their social development differed statistically by Gender, t (127) =2.33, p=.02. Males (M=4.60, SD=1.86) tended to somewhat agree with advisors' influence, while females (M=5.53, SD=1.63) tended to agree with advisors' influence on their social development. It is noteworthy that female students perceived the social development support more positively than male students, which might have to do with the fact that the majority of professional academic advisors happen to be female.

Academic advisors' influence did not differ statistically by Citizenship for participants' perceptions of social development, t(127)=.39, p=.70. Both domestic (M=5.40, SD=1.72) and international (M=5.21, SD=1.56) participants tended to somewhat agree that professional academic advisors influenced their social development. There was not a significant statistical difference between a student's home college and their perceptions of social development, F(124)=1.69, p=.56. Participants in the colleges of Agriculture and Life Sciences (M=4.69, SD=1.97), Science (M=5.42, SD=1.76), and the School of Government (M=4.89, SD=2.57) tended to somewhat agree regarding professional academic advisors' influence on their social development. Participants from the other colleges, Education and Human Development (M=5.64, SD=1.49) and the College of Engineering (M=5.73, SD=1.23), tended to agree about the academic advisors' influence on their social development. This tendency to show stronger agreement pertaining to perceptions of social support may have to do with the cultures within specific colleges, or differences in expectations between differing fields of study.

Participants' overall level of agreement with academic advisors' influence on their social development did not differ statistically by residency, $t(126)=1.57$, $p=.12$. Both State residents (M=5.52, SD=1.66) and Non-State residents (M=5.00, SD=1.79) tended to somewhat agree with the social development influence of professional academic advisors. Participants' overall level of agreement regarding the influence of professional academic advisors regarding their social development differed statistically by age, $F(124)=1.76$, $p=.16$. Participants 30-33 (M=4.99 SD=1.89) and 22-29 (M=5.34, SD=1.76), 34-41 (M=5.11, SD=1.79) tended to somewhat agree, while participants 42-74 (M=5.86, SD=1.33) tended to agree about their academic advisors' influence on their social development. Again, these findings are counterintuitive, in that it would be expected for younger students to perceive social support more positively than older, more mature students. These findings may show that extra attention and support is necessary for non-traditional and professionally active distance students.

Participants' overall level of agreement regarding the influence of professional academic advisors on their social development did not statistically differ between whether students had met their professional academic advisor in person or not, $t(127)=1.43$, $p=.15$. Participants who had met their advisor in person (M=5.14, SD=1.64) tended to somewhat agree, while those who had not met their advisor in person (M=5.57, SD=1.73) tended to agree. This may show that the level of support for social development is perceived as more important to the students who study solely online, as compared to students who may occasionally physically study on or visit campus in person.

Participants' overall level of agreement with the influence of professional academic advisors on their social development did not differ by student status, $t(127)=.56$, $p=.58$. Both students who were full-time (M=5.30, SD=1.70) and part-time (M=5.47, SD=1.70) tended to somewhat agree with their advisors' influence on their social development. Participants' overall level of agreement regarding the influence of professional academic advisors on their social development differed statistically when students had taken a face-to-face course, $t(127)=1.10$, $p=.27$.

Students who had taken an on-campus face-to-face course (M=5.15, SD=1.71) tended to only somewhat agree, while students who had not taken a face-to-face course (M=5.50, SD=1.69) tended to agree, meaning that the social development dimension is perceived to be more important to students who study solely online. Finally, participants' overall level of agreement regarding the influence of professional academic advisors on their social development did not differ statistically when it came to whether they had visited campus as a required part of their program or not, $t(127)=.21$, $p=.84$. Both students who had visited campus (M=5.35, SD=1.72) and those who had not visited campus (M=5.42, SD=1.68) tended to somewhat agree as to its influence.

Table 23.

Participants' Descriptive Analysis of Social Construct by Personal Characteristics

Personal Characteristic	Levels	*n*	*M*	*SD*	*Test*	*p*	*df*
Gender	Male	21	4.60	1.86	t=2.33	.02	127
	Female	108	5.53	1.63			
Citizenship	Domestic	115	5.40	1.72	*t*=.39	.70	127
	International	14	5.21	1.56			
College	Agriculture and Life Sciences	27	4.69	1.97	*F*=1.79	.13	4, 124
	Science	23	5.42	1.76			
	Education and Human Development	57	5.64	1.49			
	College of Engineering	16	5.73	1.23			
	School of Government	6	4.89	2.57			
Residency	State Resident	92	5.52	1.66	*t*=1.57	.12	126
	Non-State Resident	36	5.00	1.79			
Age	22-29	32	5.34	1.76	*F*=1.76	.16	124
	30-33	24	4.99	1.89			
	34-41	34	5.11	1.79			
	42-74	38	5.86	1.33			
Met Academic Advisor in Person	Yes	58	5.14	1.64	*t*=1.43	.15	127
	No	71	5.57	1.73			
Student Status	Full Time	66	5.30	1.70	*t*=.56	.58	127
	Part Time	63	5.47	1.7			
Taken an on-Campus Face-to-Face Course as a part of the Program	Yes	44	5.15	1.71	*t*=1.10	.27	127
	No	85	5.50	1.69			
Visited Campus as a Part of the Program	Yes	78	5.35	1.72	*t*=.21	.84	127
	No	51	5.42	1.68			

Note. *M*, 1-1.5=Strongly disagree; 1.51-2.5=disagree; 2.51-3.5=somewhat disagree; 3.51-4.5=neither agree nor disagree; 4.51-5.5=somewhat agree; 5.51-6.5=agree; 6.51-7=strongly agree

It is important to note that some demographic variables, based on the participants' responses, played a role in influencing their perceptions of the Social

Development function, even though, overall, participants tended to agree that professional academic advisors facilitate this function. The descriptive analysis of the demographic items, as related to objective five, did seem to have an influence on the participants' perceptions of social development. A significant difference was found for the demographic variable of gender (p=.02), which again supports the notion that students' self-identified gender influenced their perceptions of social support and mentoring.

Overall, the Social Development function of mentoring was influenced by the demographic variables of ethnicity and gender, as can be seen in Tables 22 and 23. The results showed that professional academic advisors do serve the social development function of mentoring for distance-based graduate students of this particular Tier-One Research Institution. The next section will summarize the overall findings presented in this chapter.

Summary

Overall, the results reveal that professional academic advisors do not serve as mentors for distance-based graduate students *in toto*. They do, however, serve as mentors in particular subset roles within a mentoring relationship such as parental and social development, especially when you take differences in demographic variables into account. Statistically significant differences were found when examining the individual subset mentoring roles. Even when participants indicated there was no overall mentoring function taking place, a further examination of some of the individual survey items did indicate participants agreed that professional academic advisors fulfilled

important subset roles in mentoring, such as guiding the students and exposing them to new information and ideas.

Demographic variables seem to be important factors when it comes to how distance graduate students perceive professional academic advisors as mentors, both overall and for each of the different subset roles. These demographic differences, however, do not compensate for the overall perceived lack of mentoring relationships in the distance education environment. For all roles, except social development, meeting a professional advisor in person was the most common demographic influence. The difference between ethnicities sometimes varied between the roles. As such, the results showed that overall, professional academic advisors generally do not provide a holistic mentoring relationship to distance-based graduate students at this specific university. Professional academic advisors do, however, provide mentoring as related to specific subset mentoring areas for distance-based graduate students, more specifically related to social and parental functions.

The findings reveal that in some areas, distance-based graduate students value the social and parental support more than students who have the opportunity to take face-to-face courses or visit campus. The descriptive statistics also reveal that perceptions of professional academic advisors are also heavily dependent on the students' demographic variables, meaning that mentoring and social support are viewed differently by gender, age, ethnicity, nationality, and other demographic variables. All of these detected differences have implications for the practice of professional academic advisors, most especially when it comes to serving distance-based graduate and non-

traditional student populations. When it comes to variables of gender and ethnicity, the findings may also suggest that some students are further disadvantaged in the distance learning environment than are other student subsets. The implications of the findings for professional advising practice, suggestions for further research, and connections to developing meaningful Communities of Inquiry for graduate students enrolled in distance programs will be discussed in greater detail in the final chapter.

CHAPTER V

DISCUSSION, IMPLICATIONS, AND CONCLUSIONS

The final chapter outlines the implications and conclusions related to the mentoring of distance-based graduate students by professional academic advisors in relationship to building meaningful online Communities of Inquiry. The chapter is organized into four sections. The first section provides an overview of the study on the whole. The second section reviews and elaborates on the findings presented in the previous chapter. The third section discusses the implications for future professional academic advising practice and developing a more effective learning community for distance-based graduate students as related to the findings. The fourth section summarizes and reviews the limitations of the study, offers conclusions and implications, and provides suggested avenues for future research.

Purpose of Study

This study assessed the relationship between professional academic advisors and distance-based graduate students at a Tier One, research institution located in the Southern United States. In this study, I examined whether graduate students registered in online programs perceived a mentoring relationship with their professional academic advisors using the Mentor Role Instrument (MRI) developed by Ragins and McFarlin (1990). A descriptive and correlational quantitative design was employed to assess the function of professional academic mentoring in relationship to distance-based graduate students. Thus, research objectives were formulated to examine the defined relationship.

The functions and roles of professional academic advisors are not meant to replace the traditional mentoring and advising roles of the program faculty that is more commonly expected in traditional graduate education, but professional academic advisors can and do supplement the social, program guidance, and learning interactions experienced by distance-based graduate students who are not attending class on-campus (Black, 2013; Garrison & Cleveland-Innes, 2005; Garrison, et al., 2000; NACADA, 2010; Sloan C Consortium, 2004; Starks, 2011; Zachary, 2002). Accordingly, the purpose of this study was to more closely examine the mentoring relationship between professional academic advisors and distance-based graduate students.

Discussion

The function of professional academic advisors in graduate education is to serve as a point of contact and support system for students, and to supplement the faculty advising and mentoring roles for those students (local and distance) who desire additional social interaction and to develop further relationships within their program to help form a Community of Inquiry. It is important for both professional academic advisors as well as faculty to develop a more nuanced understanding of the value of these mentoring roles and relationships, especially within the distance learning environment to better help students.

This study was limited in scope and thus, unless a follow-up study is done, only observational data could be used to determine if this carries over to traditional graduate student mentoring and extrapolated to mentoring graduate students in general outside of this limited population. It would be worthwhile to follow-up and determine if the results

would be similar or completely different from this study. The professional academic advisor may serve as a mentor in some of the mentoring functions, under some circumstances, for distance-based graduate students. However, faculty are traditionally more apt and better prepared to serve the role of mentor (Pifer & Baker, 2016) when it comes to academic questions and matters related to research and career development. This mentoring relationship is dependent on many factors, mainly the student's desire to form a mentoring relationship with the professional academic advisor or a faculty member.

According to the results of this study, professional academic advisors, overall, do not provide a true, holistic mentoring relationship to distance-based graduate students. However, professional academic advisors can and do perform mentoring functions related to specific areas of mentoring for distance-based graduate students in support of the overall mentoring students receive while in their academic programs. Since this study focused on the supplemental mentoring functions provided by professional academic advisors, who are not content or industry experts, it is reasonable to assume the professional academic advisor would not serve as a mentor related to the more specific career development roles of mentoring as outlined by Ragins and McFarlin (1990). McLean (2004) found that students who were mentored were more apt to learn, and identified the mentors as role models, while the mentors underwent personal development as well. This symbiotic relationship suggests a beneficial interaction for both distance-based graduate students and advisors, whether they be professional advisors or faculty.

Informal mentoring and professional academic advising seem to coalesce together, as they are both voluntary choices and actions a professional advisor and graduate student can engage in. These choices do not necessarily pertain to who the professional academic advisor will be, but often occur when the graduate student participates in the academic advising process. Based on the perceptions of the participants of this study and the findings here, advising distance-based, graduate students is mainly relevant in the career development, psychological, and parent functions of mentoring. The career development function focuses on coaching, protection, and advocacy for students more than the other functions. For the psychosocial function of mentoring, academic advising focuses on all aspects, including friendship, role modeling, counseling, and building social acceptance. The parent function of mentoring within academic advising focuses on advisors serving as guidance and as a surrogate parent to students as they co-facilitate their virtual, educational journey. Most of the time, the social function of mentoring within academic advising is limited, at least when it comes to students and advisors interacting outside of an advising appointment.

Since most distance-based students in this study were not campus-based, there were limited opportunities for social interaction outside of the professional advising function or the occasional campus visit. As these were distance-based graduate programs, the academic advising mentorship would have entailed very limited social interaction with the students, so therefore it would not be ideal for them to try and fulfill a more holistic mentoring role either. With the decision and impetus to take the

academic advising relationship to the next level of mentoring remaining primarily in the hands of the student, the professional academic advisor's role principally remains to be present and to consistently offer support. Using the practice of "high touch" allows professional academic advisors of distance-based students to utilize the necessary institutional resources to actively support this population (Finaly & Chapman, 2011) and leave the more traditional aspect of mentoring to faculty.

When the distance graduate education population is more fully supported, the burden on program faculty advisors may also be reduced and complimented and the overall satisfaction with the academic experience increased for distance students. Faculty advisors are still perceived by students as the primary mentorship relationship, and they provide the high-quality information and guidance students seek related to careers, professional contacts and networks, and specific academic content and skillsets, while professional academic advisors can provide supplemental advising related to policies, procedures, forms and protocol and the litany of ever-changing bureaucratic details at universities. Thus, a professional academic advisor would be able to contribute to fulfilling some of the subset mentoring roles, mainly the psychosocial and parenting roles. When combined with the main mentoring provided by program faculty, a more holistic mentoring relationship can be provided to distance-based graduate students.

Higgins and Kram (2001) point out that people necessarily have multiple mentors and these combined relationships add up to a complete mentoring experience. One way to improve the mentoring capabilities for academic advisors is to provide training and teach mentoring techniques and communication strategies as suggested by Burke and

McKeen (1989) along with Kram (1985). Professional academic advisors serve a crucial and supplemental set of mentoring functions to help in more fully rounding out the overall mentoring experience. This is especially true for distance-based students who have limited social interaction with both professional academic advisors and program faculty advisors. By distributing and sharing these student support and mentoring responsibilities, both professional academic and faculty advisors are complimenting each other and helping to fill the socialization role of mentoring for distance-based graduate students.

In this particular context, academic advisors help fill in many gaps the student might experience by not being located on campus and help build the social interactions and learning experiences they accumulate throughout their program of study. Professional academic advisors help alleviate the strain currently placed on faculty from teaching, research, and grants, especially as online and distance program enrollment continue to grow. Faculty input, mentoring, and professional expertise are still the cornerstone of any successful academic program. Even so, the importance of the role of professional academic advisors in support of faculty continues to grow, and they can help support some of the mentoring roles associated with this specific distance, graduate student population.

Professional academic advisors cannot adequately fulfill the role of career development mentorship for many reasons, including, but not limited to industry knowledge, experience, subject matter knowledge, etc. Where academic advisors can help facilitate the career development role is through supporting students, challenging

them, and exposing the students to opportunities and information. Academic advisors are often responsible for distributing information to students from the department, faculty, or industry, and can effectively serve as a liaison between different entities. Coupled with the nature of academic advising, which is to play an ongoing supportive role for enrolled students, professional academic advisors can also provide a framework for students related to career development, which students can further build upon in relationship with faculty and content knowledge from the program.

A major factor related to career development is the gender of the professional academic advisor as related to their function as challenger (Pezzonio, Mairesse, Stephen & Lane, 2016). As the MRI was specifically designed to find mentoring relationships related to gender this was evident in the student's responses. The data from this study revealed differences in perception based on gender, where the gender of the distance-based graduate student played a significant role in how they perceived the mentoring relationship with their professional academic advisor. At the time of the study, most academic advisors on this particular campus were female. This is also true for academic advisors in general as they primarily tend to be female (NACADA, 2015). As such, a significant difference in the students' responses was revealed showed relating to the parental role of mentoring over that of other roles. The differences in perception based on the gender of the responding students, as well as the majority of professional academic advisors, is an important factor to take into consideration when developing social systems of support for academic programs, and for distance-based programs as well. Students with varying demographic characteristics will respond differently to the

available mentors and support systems. In distance graduate programs, it is important to consider both the diversity of the mentors available, as well as the diversity of the student community.

Another important factor in the career development function of the professional academic advisor, as revealed in the data, was the factor of whether the student had visited campus. It appears as though it is one thing to have a single person answer the majority of students' questions over the phone or through email, and yet another thing altogether for students to meet this person face-to-face and establish a more personalized connection. The social connections established between professional academic advisors and the distance-based graduate students was shown to carry over to the subset role of psychosocial mentorship. Even so, some of the mentoring functions revealed that in-person contact engendered more positive perceptions of mentoring. The results did indicate that social interaction and guidance were more important to distance students, diverse students, and nontraditional students, revealing that dominant social normatives are also active and are significant factors in the distance environment in graduate school.

The connection established between the mentor and the mentee mediates the psychosocial role of mentoring. For this role, the professional academic advisor contributes to the functions of friendship, role model, counseling, and social acceptance. There are many factors that affect the dynamics of this subset mentoring role, such as visits to campus, the quantity and quality of interpersonal interactions, perceived intentions, etc. This particular mentoring role specifically ties back into the Community of Inquiry model, where a student's feelings of personal and social connection within the

program community influences their motivation to perform better and try harder (Garrison, 2018; Pigliapoco & Boglio 2008; Tanis & Baker, 2017). Facilitating this sense of personal connection within the program community plays a central and extremely important role of professional academic advising within distance education programs (Grabowski, 2018; NACADA, 2016; Pasquini & Steele, 2016). The data collected in this study substantiates this claim of the COI model and the centrality of generating a sense of social presence and underscores the importance of helping students feel connected to the university and as though they are part of a larger community of learning.

One-way professional academic advisers can help students feel socially connected to their academic program is by performing the parental and guidance function within the mentoring model. The parental mentoring function is to offer guidance and advice to students, which can easily facilitate the role and perceptions of professional academic advisors as counselor, role model, or as a kind of family member in this way. The parental role overlaps with the other roles and incorporates many different aspects of mentoring. As with the career development role, the gender of the advisor can affect the relationship, but there is no correlation between the gender differences as was found with this study. As a parental figure, the advisor can serve as someone for students to look up to and from whom to seek advice on various matters. In this particular function, the role of professional academic advisers is heavily entwined with and related to programmatic logistics and navigating the bureaucracy of the higher education experience. Within this guidance function of mentoring graduate students, the

roles of the program faculty and professional academic advisor often overlap where they both serve complimentary mentoring roles, and the interpersonal interactions relate to the quantity, form, and intensity of the mentoring activities.

In contrast to what one might expect, even in relation to a distance-based student population where it might be assumed that professional academic advisors sustain only minimal social interaction with students, the data revealed that professional academic advisors also facilitate this social role. The findings show that each of the social functions of the mentoring role are facilitated by professional academic advisors. This could be attributed to the frequency of interactions between either parties, or perhaps may be related to other factors. The variables of having visited campus, the college students were enrolled in, and gender differences, as indicated by the respondents, also influenced perceptions of the functions of social interaction and mentoring. It was revealed that students in some colleges perceived or valued this social function more than students in other colleges, perhaps indicating differences in cultures between colleges, or possibly differences in students' expectations for social support based on their field of study. It is necessary to highlight that male and female students also perceived or valued this social support function differently. Also of note, older and more non-traditionally aged students perceived or valued this social support more than younger students. From a programmatic perspective, it is important to realize that the students who might be perceived to be most mature or independent might actually have fairly high needs and expectations for social support and interaction within the distance learning environment, and that both academic advisers and faculty should structure their

program and systems accordingly to better provide this support. Older and non-traditional students may feel nervous about learning in an online environment, may have been away from higher education for some time, might not be familiar with online learning practices, and may seek and want additional guidance and social interactions with several people with the academic program.

By establishing frequent social interaction, the social function of the mentoring role can be met. In order for the need for social interaction to be fully met, however, several of the other mentoring roles and social interactions are necessary to generate and sustain an active Community of Inquiry in the online learning environment. The purpose of developing this sense of community helps establish a "holding environment" and contribute to students' overall perception and level of satisfaction by adding intrinsic value by either professional academic advisors or faculty. The data also revealed that in addition to combining these frequent interpersonal interactions, students who were able to visit campus or take a class in person had an even more positive perception of social support. It seems like even a few doses of social interaction go a long way in socially supporting and mentoring distance graduate students. The data also revealed that the culture of the specific college seems to be an influencing factor as well, where colleges aim to offer a very welcoming and people-centered environment, which is important in traditional graduate education, but seems to be especially valued in distance-based programs.

Each function builds on the next for each mentoring role. Not every function needs to be fulfilled in order to successfully play the role of mentor, where meeting

some of the primary functions provides lasting benefits for the distance-based graduate students. The functions of a mentorship role naturally overlap one another, allowing for a mentoring relationship to exist, even if not all functions are met. When combined with other experiences and relationships within the program's COI, a more nuanced picture of professional academic advisor mentoring begins to develop. This picture can be discerned as the professional academic advisor works to support and mentor distance graduate students in various functions that actively supplement and compliment the mentorship program faculty provide to students.

Collectively, these relationships and social interactions help build a lively Community of Inquiry, where distance graduate students are more likely to feel connected. The literature reveals that when students feel connected to a community, their performance, satisfaction, and persistence to learning also improves (Garrison, 2018; Pigliapoco & Boglio 2008; Schroeder, Baker, Terras, Mahar, & Chiasson, 2016), attrition rates are reduced (Schroeder, et al., 2016), and a sense of belonging is created (Pigliapoco & Boglio 2008). Additionally, these findings can also be related to the corporate world, where if an employee feels engaged and as though they belong to their working community, they are also more apt to excel and stay engaged (Garrison, 2018; Gaytan, 2015). As such, advisors, in whatever capacity, add value to distance-based populations.

Implications Outside of Distance Education

The scope of this research completed within an academic context could also potentially be related to distance-based relationships and learning partnerships in other areas such as coaching and training and development in the corporate world. Distance and eLearning is the new norm, and it provides a way for companies to increase learning opportunities for employees through explicit knowledge transfer and virtual mentoring related to tacit knowledge transfer (Bierema & Hill, 2005, Goffin & Koners, 2011). The functions of virtual mentoring in higher education also relate to the professional world by increasing learning opportunities and knowledge transfer for geographically separated students. By helping graduate students become acquainted with the process and value of virtual mentoring, their experience can be replicated at various levels within differing contexts and can help expand the knowledge base of all involved parties. As such, this virtual mentoring will continue to grow, not only for distance-based students, but also for traditional students who have limited time to come in for an advising appointment (Dick, 2018; Grabowski, 2018; NACADA, 2016; Tanis & Baker, 2017).

Additionally, for mentoring in general there are many things that can be done to better help students. One of the easiest things to do would be to have faculty emeriti help to mentor students, especially distance-based graduate students. While many faculty remain close to campus after retirement, reaching out to those who have moved on and giving them a little connection to students might help them with their free time. For those still around, an off on campus could be created for them where they could not only mentor graduate students, but be available for both undergraduate and faculty mentoring as well. Academic advisors could sit in on sessions, where appropriate, and

learn from the experience as well. This way all parties would then gain from the experience.

Conclusions

The role of the professional academic advisor in mentoring distance-based graduate students is meant to supplement the mentoring traditionally provided by members of the program faculty, but cannot replace it. Academic advisors can help students in different ways ranging from navigating the ever-changing path to graduation (deadlines, forms, processes, criteria, etc.) to providing personal advice and social support. These functions compliment the role of the faculty who focus on imparting content and skills, career expertise, educational development, and any other discipline related issues, thus creating a more complete mentoring experience. Both mentoring roles provided by the academic advisor and faculty advisor are important in the distance-based graduate process with both advisors serving overlapping capabilities, but also having distinct functions. The professional academic advisor serves an auxiliary role in the mentoring process, and unless the academic advisor is also a subject matter expert, there is no way they can truly replace the mentoring provided by a faculty member. That said, they play a very critical role in building a more successful learning ecology for distance-based graduate students.

The distance-based graduate student, or any student, where more than one mentor contributes to these various functions, is at an advantage. By having multiple mentors, where the complimentary roles are distributed and shared between several people, the distance-based graduate student is able to maximize the input and enjoy increased

program, content, and social interaction (Schroeder, et al., 2016; Garrison, 2018). This would lead to a more satisfactory and successful learning experience for the student. Higgins & Kram (2001) postulate mentoring occurs through multiple relationships, not just one, with each supplementing the other. These relationships each offer different structures and processes (Hansford, Ehrrich, & Tennent 2004; Tanis & Baker, 2017).

For graduate students, they better know who to turn to for specific information, reducing the necessary steps to accomplish a task or access required information. Reducing the time needed to find information and having specific contacts for certain items can eliminate and mitigate obstacles for the student such as stress, missed deadlines and loss of time, or feelings of being disoriented or disconnected from their program. In a COI where supportive roles are distributed and shared among many members of the program, students have a healthier network to rely on and more opportunities for valuable social interaction and mentoring. Designed well, programs can also offer consistent messaging and support in a more programmatic way that reduces some of the inconsistencies and variability graduate students may experience.

Professional academic advisers also benefit professionally from mentoring, where these relationships allow both the faculty member and/or professional academic advisor to collaboratively help develop and co-mentor the academic identity and competence of students, which simultaneously provides professional academic advisers a deeper sense of professional purpose as they also feel more connected to a larger learning community (Kram, 1985; Erickson, 1963). Research also suggests that mentoring and offering advice to others has positive effects for the adviser (Dick, 2018; Menges, 2015).

There are added benefits for program faculty members as well. By working together with professional academic advisors, the faculty members can focus more on being subject matter experts and can also dedicate more time and energy to truly helping students (Garrison, 2018; Harandi, 2015; Pifer & Baker, 2016). Faculty then have a dedicated resource for the nuances of bureaucratic processes in higher education, which can change from year to year. This also allows the faculty to streamline their answers and save time by referencing a single resource instead for answers in multiple offices to find the needed information. The benefits are also reciprocated to the academic advisor. The professional academic advisor no longer needs to be a subject matter expert, and if specific subject matter questions arise the advisor knows where to get the answers or send the students. This also allows the academic advisor to focus their knowledge on the graduate studies process and be better able to answer questions of both the distance-based graduate students and faculty in a timely manner. Academic advisors are then able to learn from both the distance-based students and the faculty about the subject, thus expanding their professional knowledge.

In establishing clearer roles and specialized knowledge, each participant is able to help the others and thus save time and energy. A symbiotic relationship of sorts is established, however, because of the overlap the system still functions if one of the pieces is removed. This compartmentalization of roles and knowledge helps improve program function overall. Increasing the function of these roles adds value to all involved parties, creating a better mentoring experience and contributing to a lively

learning community. This is especially true and of value for distance-based graduate students as they face a unique set of challenges.

Being away from campus, especially for a graduate degree and having additional responsibilities, the professional academic advisor should do what they can to support the student as much as possible. There are many different advising styles, but as discussed earlier, a high-touch approach is ideal for this advising situation. Since these students are in different situations than those who can come to campus to complete their degrees, the frequency of interactions can be limited, and therefore the quality of support needs to be greater. This limited interaction does not mean mentoring cannot occur, but that it needs to be done with intentionality. Both the faculty and professional academic advisors should more purposively approach these mentoring roles. Research shows mentoring helps increase attendance, improve individuals' attitudes and motivation, reduce negative barriers, and help build relationships (Harandi, 2015f; Jekielek at al., 2002; Mavrinac, 2005; Angelique, Kyle, & Taylor, 2002). According to Herzberg's (1966) theory of motivation, meeting the needs of the individual helps increase overall satisfaction. The use of technology has allowed these non-traditional graduate students to thrive in higher education in ever-increasing numbers using asynchronous methods of participation (Allen & Seaman, 2017; Grabowski, 2016; Steele, 2005; Starks, 2011), it is important for the social interaction and guidance to follow.

Professional academic advisors supplement the one-on-one support, advice, and guidance graduate students receive from faculty, while providing encouragement, praise, and some much-needed social interaction (Gayton, 2015; Lyons et al., 1990; NACADA,

2016; Pasquini & Steele, 2016). Academic advisors do this by creating bonds between students, the school, peers, and instructors so students feel like they belong and are a part of a larger community (Buchanan, Myers, & Harding, 2005; Schroeder & Terras, 2015; Stein and Glazer, 2003). By meeting the individual needs of the student and making them feel connected by incorporating components of adult learning theory (Garrison, 2018; Grabowski, 2016; Houle, 1980; Knowles, 1990; Merriam and Caffarella, 1999), professional academic advisors help to create a Community of Inquiry for these distance-based graduate students (Garrison, 2018; Garrison & Cleveland-Innes, 2005; Gayton, 2015; Stein and Glazer, 2003).

Academic advising is a delicate balance, especially at the graduate level, as the professional academic advisor should not try to take the place of the faculty advisor while serving a similar, cut complimentary support function. This support function should be focused on the logistical and policy aspects of graduate education, while the subject matter and career functions are left to the faculty. The advisor/student, student/faculty, and faculty/advisor relationships are all interdependent. They all function together addressing various needs, and when each collaborative role functions properly it makes the whole system and learning community stronger.

This study has shed light on the faculty the student often have a hard time differentiating between faculty and academic advisors. This can also be said for the advisors themselves. Applying the traditional interventions to distance-based students does not work, but that does not mean the wheel has to be reinvented. Distance-based students want to feel connected and a sense of belonging; however, they often do not

take the time or put forth the effort to make this happen. This where having better training faculty and academic advisors with clear roles and a structure in place to help them would be useful. This structure could include online learning modules for the student, possible in-person meet ups, setting up distance-based and on-campus cohorts so the student can interact, and utilizing emeriti faculty to name a few.

The situation needs to be improved as this population continues to grow. This does not mean the same approach will be useful for all institutions, programs, students, etc., but effort needs to be put forth to trying. Faculty and academic advisors need to be intentional and frequent with their interactions, especially for distance-based graduate students, and students need to know and believe their input and contribution is valued. When all parties are working together the ecological view of mentoring and advising is complete. When everything is working, everyone involved benefits from the experience, but more importantly the student feels a part of a community has a best experience possible.

Implications for Practice Beyond Higher Education

This study also has practical application value for the corporate world as company's try to save money but still support training, and professional and career development. One-way companies can save money is by sending employees through both their undergraduate and graduate education while working. When a company does this and combines it with a mentoring/advising program, the company is then creating a role such as the academic advisor to track the process of the student and tie them back into the company. This person, then, can serve as a mentor in a combined role to not

only track the student, but also mentor them related to the subject, their education, and the field in which they will work.

Not only is this directly applicable to the corporate world, but also in working with any distance-based population. As the world becomes more global, there can be a greater physical separation between people. By knowing mentoring is not bound by location or time, is supplemental, can be both independent and dependent, and occurs from unlikely sources, people can be better prepared and open to these experiences. This knowledge would also help universities, colleges, departments, programs, faculty, and advisors (to name a few) update and tailor distance-based courses, degrees, and certificates to better support online students. This can help them by showing how professional academic advisors serve a unique and valuable role that compliments that of faculty advisors and should not be overlooked in program design and support. It can also show that better tracking and record keeping needs to be done so that campus resources can be shared with all distance-based students.

Students could be better aided in their higher education journey by receiving complimentary support and guidance from both faculty and professional advisors. By promoting a more intentional view of the socialization and mentoring experience in distance education, as opposed to the more conventional faculty-student dyad, distance-based students may be provided a more nuanced and layered experience and social engagement in their programs of study. Faculty could work with advisors, especially for distance-based students, to make sure all of the mentoring functions and roles are fulfilled and coordinate efforts to better assist the students. No longer would faculty and

professional advisors have to work independently or counterproductively in siloes, but both sides can now see the value that the other brings to the table related to mentoring distance-based graduate students.

Recommendations for Future Research

Additional research should be conducted on this subject as the body of literature related to mentoring graduate students and distance-based students by professional academic advisors is limited. The population for future research should be increased for follow-up studies and include more universities, majors, programs, and demographic factors to see whether the results from this study are replicable, generalizable, and more broadly applicable.

These additional studies should also be conducted over a greater amount of time, instead of just a one-time snap shot during a graduate student's career. It would be interesting to compare a larger population of students with greater diversity who are in their first semester, again later in their program of study, and also at graduation. A follow-up study to this could be to examine the mentoring relationships after the students have graduated and can reflect back on the process. Another follow up study could be focused on students as they go through the application process. There are many ways to conduct future research to expand the understanding and knowledge base of this subject matter, most importantly because the distance-based graduate student population will continue to grow. New advising and mentoring theories, philosophies, and practices will need to be created to better serve these students.

Ideally, a continued longitudinal study could be conducted on advising distance-based graduate students to determine whether they perceive mentoring to be occurring with their professional academic advisors throughout their studies. This data could then be compared to student perceptions of mentors, professional academic advisors, and faculty. This additional information, when compared, could help more clearly determine and distinguish between the mentoring roles of faculty academic advisors and a professional academic advisor, and show how both parties have complimentary roles in helping create an online Community of Inquiry.

Feeling a sense of belonging is important and beneficial to all students. Additional research focusing on how best to create this community for distance-based students focusing on not only mentoring, but the roles both faculty and academic advisors play and ways they can best work together. Both parties play an important role in graduation education and more research should focus on the new and expanding role of graduate advising from a staff perspective to help create theories and best practices as there is a difference between advising undergraduate and graduate students.

When this is couple with the distance education component, it is important to further expand the literature to incorporate this group of students as well. As more and more burden is placed on academic advisors there needs to be a firm foundation to make recommendations and best serve the students. A final study could be conducted on better defining the roles of faculty and staff advising and how best they can work together in the changing landscape of higher education. This clarification could better support students, faculty, and staff and help reduce conflicting advice students receive.

By delineating the roles more precisely both faculty and staff would have a better understanding of both the differences and similarities of their roles. It would be important to make sure that both roles were found to be important and serving a symbiotic function.

There should be a clear distinction between these roles, to remove redundancy and confusion. This information should be used to clarify the roles, responsibilities and duties of both faculty and staff advisors to find a reasonable combination of the roles. If both parties knew what was the boundaries were and both felt valued in the process, students would be better assisted. This new mutual understanding could eventually spread out to other roles so faculty do not feel advisors are overstepping or there to assist them, while also making the advisor feel valued and not feel like to have to do everything. By having more clearly defined and complementary roles everyone could benefit.

Additional researched focused on the variety of institutions that offer distance education (state, private, for profit, etc.), along with delivery methods/requirements (coming to campus, completely online, hybrid, etc.) and the types of programs (master, Ph.D., Eh.D., certificate, etc.) and see if there are any commonalities/differences. This would be important so the more specific generalization could be made for graduate-based distance education. This could later be expanded to undergraduate distance-based programs as well to find best practices/generalizations across all of distance-based higher education.

Summary

Professional academic advisors can serve as mentors for distance-based graduate students related to the functions of psychosocial development, social development, and the parental guidance role. A statistical difference was found between genders of the academic advisor, gender of the student, college (namely Agriculture and Education), and by the factor of whether the student had visited campus or met their advisor in-person. Many factors were shown to affect the mentoring relationship of distance-based graduate students and professional academic advisors. Professional academic advisors do not holistically serve as mentors to distance-based graduate students, but they do provide mentoring related to specific subset mentoring roles for distance-based graduate students.

The ideal experience of distance-based graduate students would be to see a program of study where professional academic advisors and faculty advisors collaboratively work together to provide more fully rounded, holistic support to students. This would be achieved by each advisor focusing on their strengths related to mentoring so students would receive a more complete and supportive experience with both sets advisors supplementing each other. This could be done through training on various mentoring techniques and the merits that both professions bring to the table to help students. Professional academic advisors need to know that they serve a valuable role in the mentoring process and support through training and encouragement should be given. It should also be discussed and made clear that all parties mutually need one another, and they all contribute to a meaningful Community of Inquiry for online students. It also needs to be made clear that professional academic advising is a recognized

profession that contributes valuable experience and knowledge to both higher education and graduate education. Academic advisors, on the other hand, need to understand that they are there to assist both the student and the faculty when needed.

Both sides need to be trained on not only mentoring but also coordinating and working together. This can be done through team building exercises, discussions, and professional development. Each advisor needs to not only know they are valued, but that the other party also brings an important piece of the puzzle to the educational process, not only for distance-based graduate students, but for all students. Professional academic advisors can find themselves in a tough position at times, not held to a higher standard nor appreciated like faculty. One way to overcome this is to invite them to attend some faculty events, where appropriate, and encourage multidimensional dialogue and interaction throughout the graduate programs. Once all sides are working together in a more harmonious way, the benefits to the students, whether distance-based or otherwise, will be increased.

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APPENDIX A

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
helps me to attain desirable positions.	❍	❍	❍	❍	❍	❍	❍
uses his/her influence in the university to my benefit.	❍	❍	❍	❍	❍	❍	❍
uses his/her influence to support my advancement at the university.	❍	❍	❍	❍	❍	❍	❍
suggests specific strategies for achieving career aspirations.	❍	❍	❍	❍	❍	❍	❍
gives me advice on how to attain recognition at the university.	❍	❍	❍	❍	❍	❍	❍
helps me learn about other parts of the university.	❍	❍	❍	❍	❍	❍	❍
"runs interference" for me in the university.	❍	❍	❍	❍	❍	❍	❍
shields me from damaging contact with important people in the university.	❍	❍	❍	❍	❍	❍	❍
protects me from those who are out to get me.	❍	❍	❍	❍	❍	❍	❍
provides me with challenging assignments.	❍	❍	❍	❍	❍	❍	❍
assigns tasks that push me into developing new skills.	❍	❍	❍	❍	❍	❍	❍
gives me tasks that require me to learn new skills.	❍	❍	❍	❍	❍	❍	❍
helps me be more visible in the university.	❍	❍	❍	❍	❍	❍	❍
creates opportunities for me to impress important people in the university.	❍	❍	❍	❍	❍	❍	❍
brings my accomplishments to the attention of important people in the university.	❍	❍	❍	❍	❍	❍	❍

	Strongly Agree	Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Disagree	Strongly Disagree
is someone I can confide in.	❍	❍	❍	❍	❍	❍	❍
provides support and encouragement.	❍	❍	❍	❍	❍	❍	❍
is someone I trust.	❍	❍	❍	❍	❍	❍	❍
and I frequently have one-on-one, informal social interactions outside the academic setting.	❍	❍	❍	❍	❍	❍	❍
and I frequently socialize one-on-one outside the academic setting.	❍	❍	❍	❍	❍	❍	❍
and I frequently get together informally by ourselves.	❍	❍	❍	❍	❍	❍	❍
reminds me of my parents.	❍	❍	❍	❍	❍	❍	❍
is like a father/mother to me.	❍	❍	❍	❍	❍	❍	❍
treats me like a son/daughter.	❍	❍	❍	❍	❍	❍	❍
serves as a role model for me.	❍	❍	❍	❍	❍	❍	❍
represents who I want to be.	❍	❍	❍	❍	❍	❍	❍
is someone I identify with.	❍	❍	❍	❍	❍	❍	❍
guides my personal development.	❍	❍	❍	❍	❍	❍	❍
serves as a sounding board for me to develop and understand myself.	❍	❍	❍	❍	❍	❍	❍
guides my academic development.	❍	❍	❍	❍	❍	❍	❍
accepts me as a competent student.	❍	❍	❍	❍	❍	❍	❍
thinks highly of me.	❍	❍	❍	❍	❍	❍	❍
sees me as being competent.	❍	❍	❍	❍	❍	❍	❍

Please answer the following demographic questions.

My academic advisor/program coordinator is...

- ❍ Male
- ❍ Female

Which college is your department/program in?

- ❍ Agriculture and Life Sciences
- ❍ Science
- ❍ Education and Human Development
- ❍ College of Engineering

What is your gender?

- ❍ Male
- ❍ Female

What is your residency?

- ❍ Texas resident
- ❍ non-Texas resident

What is your citizenship?

- ❍ Domestic student
- ❍ International student

Would you describe yourself as:

- ❍ Caucasian
- ❍ Hispanic or Latino
- ❍ Black or African American
- ❍ Native American or American Indian
- ❍ Asian
- ❍ Pacific Islander
- ❍ International _____
- ❍ Other _____

What year were you born?

_____

What is your student status?

- ❍ full-time
- ❍ part-time

Have you taken an on-campus, face-to-face course as part of your degree/current program?

- ❍ Yes
- ❍ No

Have you visited campus as part your program?

- ❍ Yes
- ❍ No

Have you ever met your academic advisor in person?

- ❍ Yes
- ❍ No

APPENDIX B

May 7, 2014

Dear Distance-Based Student:

My name is Felix Arnold and I am a Ph.D. student in EHRD and former Academic Advisor at TAMU. I need your help with my dissertation, which focuses on the mentoring relationship between distance-based graduate students and academic advisors. This study will help expand the current knowledge of mentoring as it pertains to academic advisors and hopefully help provide better service to distance-based students. It should only take you about 10 minutes to complete the survey.

Please only respond if you are a participant in one of the recognized distance-based programs at TAMU (degree or certificate). For more information on these programs you can visit this link or ask your department if you qualify. This research focuses on the relationship between you, a distance-based graduate student and your academic advisor. You can think of your academic advisor as someone with a title of program coordinator/manager or with advisor in their title. This person will typically not have the title of Dr., Ph.D. or professor and will not be on your graduate committee, if your program requires one. Their purpose is to help you with the day-to-day administration of the program (registering for courses, financial aid, processing/submitting forms, delivering documents around campus, etc.).

Your answers are completely confidential and will not be shared. Your participation in this study is completely voluntary. However, you can help us by taking a few moments of your time and share with us your experiences as they related to your

academic advisor. If you prefer not to participate thank you for your time. Choosing to participate in this study or not, will in no way affect your status with your graduate program or Texas A&M University. If you would like to participate in this research please click on this link.

This research study has been reviewed and approved by the Institutional Review Board–Human Subjects Research, Texas A&M University. For research-related problems or questions regarding subjects' rights, the Institutional Review Board may be contacted at (979) 458-4067 (irb@tamu.edu). (IRB# 2014-0152D)

If you have any questions or comments about this study, I would be happy to talk with you. My phone number is (979) 324-6668 or you can email me at fwarnold@tamu.edu. My advisor Dr. Jia Wang can also be contacted at (979) 862-7808 or jiawang@tamu.edu should you have any questions.

It is only with the help of people like you that this research can be done. I would like to thank you for helping with this important study. By participating in this study you understand your information will be kept confidential and will not be shared with your program or with Texas A&M University. Thank you for your time.

Sincerely,

Felix Arnold

Graduate Student

Texas A&M University

APPENDIX C

May 27, 2014

Dear Distance-Based Student:

This email to being sent to follow-up with an email sent on May 7 about a study being conducted on distance-based graduate students. If you have already participated in this study or are not a distance-based graduate student I apologize for the additional email and you can disregard this message. If you are a distance-based graduate student and have not participated in the study please keep reading.

For those of you who did not see the previous email my name is Felix Arnold and I am a Ph.D. student in EHRD and former Academic Advisor at TAMU. I need your help with my dissertation, which focuses on the mentoring relationship between distance-based graduate students and academic advisors. This study will help expand the current knowledge of mentoring as it pertains to academic advisors and hopefully help provide better service to distance-based students. It should only take you about 10 minutes to complete the survey.

Please only respond if you are a participant in one of the recognized distance-based programs at TAMU (degree or certificate). For more information on these programs you can visit this link or ask your department if you qualify. This research focuses on the relationship between you, a distance-based graduate student and your academic advisor. You can think of your academic advisor as someone with a title of program coordinator/manager or with advisor in their title. This person will typically not have the title of Dr., Ph.D. or professor and will not be on your graduate committee, if your program requires one. Their purpose is to help you with the day-to-day

administration of the program (registering for courses, financial aid, processing/submitting forms, delivering documents around campus, etc.).

Your answers are completely confidential and will not be shared. Your participation in this study is completely voluntary. However, you can help by taking a few moments of your time and sharing your experiences as they related to your academic advisor. If you prefer not to participate thank you for your time. Choosing to participate in this study or not, will in no way affect your status with your graduate program or Texas A&M University. If you would like to participate in this research please click on this link (https://tamucehd.qualtrics.com//SE/?SID=SV_6Exr3vwOj6UZ6L3).

This research study has been reviewed and approved by the Institutional Review Board-Human Subjects Research, Texas A&M University. For research-related problems or questions regarding subjects' rights, the Institutional Review Board may be contacted at (979) 458-4067 (irb@tamu.edu). (IRB# 2014-0152D)

If you have any questions or comments about this study, I would be happy to talk with you and can be contacted at fwarnold@tamu.edu. My advisor Dr. Jia Wang can also be contacted at jiawang@tamu.edu should you have any questions.

It is only with the help of people like you that this research can be done. I would like to thank you for helping with this important study. By participating in this study you understand your information will be kept confidential and will not be shared with your program or with Texas A&M University. Thank you for your time.

Sincerely, Felix Arnold

APPENDIX D

Howdy:

My name is Felix Arnold and I am a Ph.D. student in Education and Human Resource Development. Yesterday an email was sent out to all students registered in distance-based sections of majors with approved distance-based degrees registered for the spring, summer, and fall 2014 semesters. Being a former academic advisor, I wanted to let you know what was going on and hope that you could encourage your distance-based students to participate.

The purpose of my student is to determine the mentoring relationship between distance-based graduate students and academic advisors. When I refer to academic advisors I do not mean faculty members, committee chairs, etc., but the staff member responsible for helping these students. The distance-based students I am looking for are either in a degree granting or certificate program. There was no easy way to distinguish the truly distance-based students from those registered for distance-based (700 and 720) sections. After contacting the university at various levels it was easier to send the email to a larger pool and let student self-select if they meet the criteria I am looking for. This way was easier so I did not have to both advisors to send my email to their students.

Students can access the survey here https://tamucehd.qualtrics.com//SE/?SID=SV_6Exr3vwOj6UZ6L3 and I appreciate any help you can give to encourage your distance students to participate. If you are able, I would appreciate it if you could give how many distance students you have. I know when I was an advisor the only way to know who a distance-based student was was to

keep track of it myself. Some of you might not have this problem as your major might only be offered via distance education.

Thank you for your time and I hope the semester ended well for you and your students. If you should have any questions please let me know.

Sincerely,

Felix Arnold

APPENDIX E

Howdy:

My name is Felix Arnold and I am Ph.D. student in Education and Human Resource Development. Earlier this month I contact you about a study I am conducting on distance-based graduate students. An email was sent to all students registered in sections of majors with approved distance-based degrees in the spring, summer, and fall 2014 semesters. Students should have received the original email on May 7 and the reminder on May 27. Being a former academic advisor, I wanted to let you know what was going on and hope that you could encourage your distance-based students to participate. If you have encouraged your students to participate, thank you. I would ask that even if you have, please encourage them one last time.

The purpose of my student is to determine the mentoring relationship between distance-based graduate students and academic advisors. When I refer to academic advisors I do not mean faculty members, committee chairs, etc., but the staff member responsible for helping these students. The distance-based students I am looking for are either in a degree granting or certificate program. There was no easy way to distinguish the truly distance-based students from those registered for distance-based (700 and 720) sections. After contacting the university at various levels it was easier to send the email to a larger pool and let student self-select if they meet the criteria I am looking for. This way was easier so I did not have to both advisors to send my email to their students.

Students can access the survey here https://tamucehd.qualtrics.com//SE/?SID=SV_6Exr3vwOj6UZ6L3 and I appreciate any help you can give to encourage your distance students to participate. If you have not already done so, please send me the number of students in your distance-based program so I can try to gauge the population size as the university does not keep track of this population. I know when I was an advisor the only way to know who was in my distance program was to keep track of it myself. Some of you might not have this problem as your program might only be offered via distance education.

Thank you for your time and I hope the summer goes well for both you and your students. If you should have any questions please let me know.

Sincerely,

Felix Arnold

APPENDIX F

DATE: April 17, 2014
MEMORANDUM
TO: Jia Wang
TAMU - College of Education - Educational Adm & Human Resource Develop
FROM: Human Subjects Protection Program
Institutional Review Board
SUBJECT: Expedited Approval

Study Number: IRB2014-0152
Title: Mentoring Distance-Based Graduate Students: The Role of Academic Advisors
Approval Date: 04/17/2014
Continuing Review Due: 03/15/2015
Expiration Date: 04/15/2015
Documents Reviewed and Approved:

Title	Version Number	Version Date	Outcome
letter	Version 1.0	03/18/2014	Approved
instrument	Version 1.0	03/17/2014	Approved
Proposal	Version 1.0	03/17/2014	Approved
Information Letter	Version 1.0	04/04/2014	Approved
Consent	Version 1.0	03/18/2014	Approved

Provisions:
Comments: 1. Investigator was responsive to requests of the Reviewer.