An Examination of Mentoring Mindsets of Faculty (Mentors) and Graduate Students (Protégés): An Exploratory Study of a Mentoring Framework

by

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Abstract

The purpose of this study was to examine the characteristics consisting of attitudes, behaviors, and competencies of protégés in a mentoring relationship. The study examined the presence or absence of a protégé mentoring mindset from the mentor's viewpoint. It also examined the presence or absence of a protégé mentoring mindset from the protégé's viewpoint. The mentoring mindset consists of five major categories: 1) takes initiative/lacks initiative [behavior], 2) learning orientation/lacks learning orientation [attitude], 3) skillful & organized/lacks skill and organization [competency], 4) relational skills/lacks relational skills [behavior, competency], and 5) reflective/unreflective [attitude, behavior]. The framework indicators of the presence of a protégé mentoring mindset are that the protégé takes initiative, has a learning orientation, has a goal orientation, is relational, and is reflective. The research questions were:

1. What are the mentoring mindset characteristics of protégés, as identified by mentors?

2. What are the mentoring mindset characteristics of protégés, as identified by protégés?

3. What are the differences, if any, between mentor and protégé mentoring mindset characteristics?

The established mentoring mindset framework (Searby, 2014) provided the background for testing relevant variables existing in the natural relationship between mentor (faculty) and protégé (PhD candidate). The faculty and students recruited to test the framework were members

of two national organizations closely associated with one another. An analysis of online survey data was performed using Repeated Measure ANOVA and mixed method ANOVA, and Cronbach alphas.

The mixed ANOVA results showed three significant effects. First, there was an overall effect. The groups consisting of mentors and protégés differed on average within all five mentoring scales. This overall effect yielded an F ratio of $F(165) = 13.78$, $p < .001$. Second, there was an overall effect for mentoring factors as there were differences among all five factors. This overall effect yielded an F ratio of $F(165) = 28.92$, $p < .001$. Third, there was an interaction effect. There was an indication that the interaction differences among the five factors may be different for each group (mentor and protégé). This interaction yielded an F ratio of $F(110) = 32.159$, $p < .001$ for research question one. The simple effects interaction yielded an F ratio of $F(55) = 7.401$, $p < .001$ for research question two.

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Table of Contents

List of Tables

List of Figures

CHAPTER I: INTRODUCTION

Mentoring has many definitions although a unifying definition of mentoring has not yet been identified (Dawson, 2014). From a faculty-student perspective within a higher education setting, mentoring is defined as a pairing of a more experienced adult learner and an unrelated, younger protégé learner (Allen, Eby, Poteet, Lenz, & Lima, 2004; Blake-Beard, Bayne, Crosby, & Muller, 2011; Eby, Rhodes, & Allen, 2007; Ragins & Kram, 2007). And although mentoring research has primarily been reviewed using protégé perspectives and not mentor perspectives (Archbold, 2015; Beyene, Anglin, Sanchez & Ballou, 2002; Eby, McManus, Simon, & Russell, 2000; Ensher, Thomas, Murphy, 2001), mentoring from the mentor perspective can add value to the mentoring relationship and simultaneously benefit the mentor in terms of belonging, career optimism, competence, professional growth, security, and leadership readiness (Jakubik, Eliades, & Weese, 2016). In higher education, mentoring that impacts graduate students' positively is analogous to employees in the workplace who achieve promotions and pay incentives (Kram, 1985; Pamuk & Thompson, 2008). This interaction implies that mentoring can contribute significantly to graduate student accomplishment in higher education (Clark, Harden & Johnson, 2000; Tenenbaum, 2001; Williams, 2009). Mentors can also benefit from graduate student and faculty mentor relationships in terms of job satisfaction, organizational commitment, turnover intent, job performance, and career success (Ghosh & Reio, 2013).

Graduate student and faculty mentor relationships in higher education institutions develop into intricate and energetic relationships in comparison to conventional business

mentoring relationships (Hall & Burns, 2009; Sambrook, Stewart & Roberts, 2008) where mentoring was based on characteristics lists (Darwin, 1999; Olian, Carroll, Giannantonio, & Feren, 1988). Intricate mentoring relationships for graduate students were found indispensable for graduate student achievement (Devos, Boudrenghein, Linden, Azzi, Frenay, Galand, & Klein, 2017; Lyons & Scroggins, 1990). For example, doctoral students gauged their success based on whether or not they felt excessive distress (Devos, Boudrenghein, Linden, Azzi, Frenay, Galand, & Klein, 2017). Also, protégés overall academic and long term development into the academy is positively impacted by the higher-level graduate student and faculty relationships (Devos, Boudrenghein, Linden, Azzi, Frenay, Galand, & Klein, 2017; Green, 1995; Hall & Burns, 2009; Kram 1985; Rose, 2005; Russo, 2011). Negative graduate student and faculty mentor relationships were found to contribute to the dropout process (Devos, Boudrenghein, Linden, Azzi, Frenay, Galand, & Klein, 2017; Nyquist, 2000).

Mentoring based on the use of characteristic lists was found insufficient and has led to more in-depth mentoring practices related to protégé attitudes and behaviors in higher education scenarios (Cho 2011; Enz 1995; Haggard, 2011; Olian, 1988; Rose, 2003). According to Allen (2007) using mentors as the fundamental cornerstone of mentoring analysis is essential from both a realistic and academic perspective. Research found on protégé attitudes, behaviors, and competencies was limited. However, some research indicated that student protégés should develop more proactive strategies in initiating and vigorously managing mentor relations (Clark, 2000; Searby, 2014). Moreover, Devos, Boudrenghein, Linden, Azzi, Frenay, Galand, and Klein, (2017) found that support was central to the participants' stories of Ph.D. completion or dropout. As a result, mentoring was assumed to play a role in the process of staying or leaving a Ph.D. program (Gelso 2006, Russo, 2011). Quintessentially, Searby (2014) articulated that protégé

attitudes, behaviors, and competencies can serve as measures of a mentoring mindset and can extend beyond a list of protégé characteristics. Protégé characteristics include reciprocity, developmental benefits, and regular/consistent interaction over time (Haggard, Dougherty, Turban, & Wilbanks, 2011).

Regular and consistent interactions over time progress into benefits for mentors. For example, in areas where the graduate student protégé is better skilled than the mentor, the protégé can provide guidance and assistance (Smith, 2000). And given the important need for higher education institutions to represent an integrated society, there is an overarching necessity to create an effective environment where mentors and doctoral protégés can both pursue professional and academic success (Enz, 1995; Finch, 2014; Primé, Bernstein, Wilkins, & Bekki, 2015). Allen (2004), Goodwin and Graebe (2017), and Noe (1988) offered the idea that when mentoring is configured, tested, and redesigned for mutual benefit it generates success. Moreover, successful mentoring relationships can last a lifetime (Faison, 1996). While Dweck (2008) believes that a mindset is an individual's confidence in abilities heretofore demonstrated and exhibited, Vaughn, Saint, and Chopra (2017) proposed that protégés forget the fact that learning is an ongoing process. By using the mentoring mindset framework, the protégé is reminded of this ongoing process and is exposed to the mentor viewpoint and can subsequently consider and use this information in the formation of approaches to meet mentor expectations. During the development of a framework the term mentoring mindset was used to illustrate skill sets, temperaments, and behaviors that a protégé requires which empowers the protégé during the mentoring process (Searby, 2008). Potential strategies can be developed by using a mentor viewpoint and answering the question, what does the mentor want to see in a protégé in terms of a mentoring mindset? Also, answers to this all-embracing question will offer meaningful data

and information not only to the protégé in order to strengthen mentor-protégé relations but will also provide educators and administrators a clearer view of how to structure and design higher education mentoring programs.

Statement of the Problem

Mentoring is an accepted tool used to meet educational needs in varied settings, including the college and university setting (Brady & Dolan, 2009; Chaudhuri & Ghosh, 2012; Geeraerts, Tynjälä, Heikkinen, Markkanen, Pennanen, & Gijbels, 2015; Ismail & Arokiasamy, 2007). Mentoring relationships are naturally present in the faculty and Ph.D. candidate relationship in higher education institutions. While there is an abundance of research from the protégé viewpoint about desired characteristics in a mentor, there is a lack of research regarding desired protégé characteristics from the mentor's perspective (Eby, Butts, Durley, & Ragins, 2010; Eby, McManus, Simon, & Russell, 2000; Kim, Stallings, Merlo, and Lin, 2015).

This lack of research regarding desired protégé characteristics from the mentor's perspective should be researched in that it would be useful if the mentor could identify a mentoring mindset (Searby, 2014). Most importantly, Searby (2012) considered it is a sign of strength if a protégé seeks out a mentor. Mentors can also seek out a protégé. Searby identified ten steps to become a great protégé. Mentors and future protégés could benefit by knowing what the qualities desired in a successful protégé are (see Table 1). Zachary (2011) revealed that the evolution of mentoring has grown into effective learning relationships that progress into traveling together and far, and that benefit both the mentor and protégé. Tripses and Searby (2008) indicated that forthcoming leaders in educational leadership programs require encouragement and mentorship as they commence their journeys into the beginning periods of their professions. Likewise, Ph.D. candidates could use guidance at the beginning stages of their

programs. Ph.D. candidates benefit from the guidance that they receive from their advisors as they cross the threshold of their academic work. Mentoring relationships are not only for traditional protégés but also for mature protégés who possess considerable experience (Kram, 1983). Mentoring is potentially important as a strategic tool and knowledge transfer (Harvey, 2009). More importantly, mentoring individualized through a process may be more effective (Leaver, 2000).

Purpose of the Study

The purpose of this study was to examine the characteristics consisting of attitudes, behaviors, and competencies of protégés in a mentoring relationship. The study examined the presence or absence of a protégé mentoring mindset from the mentor's viewpoint. It also examined the presence or absence of a protégé mentoring mindset from the protégé's viewpoint. The mentoring mindset consists of five major categories: 1) takes initiative/lacks initiative [behavior], 2) learning orientation/lacks learning orientation [attitude], 3) skillful & organized/lacks skill and organization [competency], 4) relational skills/lacks relational skills [behavior, competency], and 5) reflective/unreflective [attitude, behavior].

Research Questions

The following research questions were used in this study:

1. What are the mentoring mindset characteristics of protégés, as identified by mentors?

2. What are the mentoring mindset characteristics of protégés, as identified by protégés?

3. What are the differences, if any, between mentor and protégé mentoring mindset characteristics?

Significance of Study

The significance of this study encompasses identifying whether or not mentoring mindsets exist from the viewpoints of protégé and mentors. As a result, the study serves in identifying attitudes, behaviors, and competencies important in developing mentoring relationships. The results of this study will provide meaningful data and information to educators and administrators of higher education mentoring programs. These results will foster a better understanding about how protégé attitudes, behaviors, and competencies align so that adjustments can be made during the mentoring process. Results will aid in educating policy makers as they strive to develop policy important to mentoring in higher education settings.

Understanding the presence or absence of a protégé mentoring mindset is important in evaluating the mentoring mindset framework. This framework potentially could serve to set standards at the beginning of a mentoring relationship and serve as a guide throughout mentoring relationships. More notably, the framework could serve as a guide to anchor relationships that grow into lifetime connections. Further, an understanding of the foundations upon which mentoring relationships are established and maintained can better inform higher educational institutions and other organizations about structuring effective mentoring programs. Ultimately, successful mentoring programs could improve graduation rates in higher education institutions and retain more organizational employees in corporations.

Limitations

1. This study was limited to faculty mentoring Ph.D. candidates and graduate-level Ph.D. candidate protégés. Moreover, at least two meetings between mentor and protégé qualified the relationship for inclusion in this research study.

2. This research study examined a specific population from only two membership organizations (the Association for Information Systems and the Ph.D. Project). Therefore, this limited sample may not allow generalizability of the results to other populations.

Assumptions

1. The study participants will understand the instrument administered for data collection and will answer all questions presented as truthfully and honestly as possible. Further, the study participants will accurately, and honestly report their perceptions about the mentoring mindset.

2. Participants were able to identify and report their perceptions accurately during the entire process. The participants of the study will understand the questions asked for data collection purposes and will answer all questions posed as accurately and honestly as possible.

Definition of Terms

Attitudes: An established way of thinking or feeling about people, things, and situations.

Behaviors: How one conducts their actions in a given situation.

Competencies: A behavioral characteristic that can predict performance (McClelland, 1973).

Mentoring: Mutual advising and training among or between individuals for the advancement of knowledge and career aspirations.

Mentor (Faculty): In a mentoring relationship, the doctorate committed to reinforcing the requisite attitudes, behaviors, and competencies in protégés who desired to earn a doctorate.

Mentoring Framework: A graphical representation of the presence or absence of a protégé mindset. The framework balances five factors in assessing the presence of a protégé mindset: 1 Takes Initiative, 2) Learning Orientation, 3) Skillful & Organized, 4) Relational and 5) Reflective. The framework balances five factors in assessing an absence of a protégé mindset: 1) Lacks Initiative, 2) Lacks learning orientation, 3) Lacks Skill & Organization, 4) Lacks Relational Skills and 5) Unreflective.

Mentoring Mindset: A protégé that takes the initiative, possesses a learning orientation, has a goal orientation, is relational and reflective. As a result, a protégé embraces the mentoring process and maximizes the benefits of the mentoring relationship (Searby, 2014).

The state of mind that enables an individual to take the initiative, possess a learning orientation, have a goal orientation, is relational and reflective that enable the protégé to embrace the mentoring process and maximize the benefits of the mentoring relationship (Searby, 2014).

Mentoring relationship: The interaction of mentor and protégé at least twice before this study. These contacts include but are not limited to not only existing attitudes, behaviors and competencies, but also adjustments to attitudes, behaviors, and competencies.

Mentor viewpoint: The perspective of the directing force in a mentoring relationship that encourages change and development.

Protégé (graduate student): In a mentoring relationship the individual who strived to acquire the attitudes, behaviors, and competencies important to earn a doctorate.

Protégé perspective: The viewpoint of a directed individual in a mentoring relationship as understood through the eyes of the mentor.

Organization of the Study

Chapter I consists of the study introduction, describing the problem statement, conceptual framework, study purpose, research questions, study significance, limitations, and definitions. Chapter II consists of a review of the related literature concerning mentoring historically up to the present day. Additionally, the literature review examines mentoring benefits and challenges as well as the different types of mentoring relationships. Chapter III details the specific research procedures involved in this study, including a pilot study, instrumentation, data collection progression, and data analysis, Chapter IV contributes to this study by explaining how the data were examined and provides the findings. Chapter V consists of a summary, conclusions, implications, and future research recommendations.

CHAPTER II: REVIEW OF THE LITERATURE

Purpose of the Study

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Overview of Mentoring

Mentoring has even been part of Greek mythology. According to Homer's *Odyssey*, a mythological epic poem, Odysseus delegated the guardianship of his family to Mentor before leaving to fight in the Trojan War (Homer, 2011; Hagenow, 1994). Mentor was a teacher and trusted friend to Odysseus' wife Penelope and son Telemachus. Telemachus also looked to Mentor in general as a teacher and advisor. After the ten-year Trojan War, Odysseus was condemned to wander for ten years before being allowed to return home. Given that Odysseus had been gone so long, Telemachus had grown into a man and went off to search for his father. To assist Telemachus in his journey, Athena, the Greek Goddess of War, intervened and impersonated Mentor, the family guardian. With the help of Athena, in the form of Mentor, Telemachus finds Odysseus and the father and son reunite. Upon their return to Ithaca, they reclaim Odysseus' kingdom and Telemachus' legacy.

In addition to Athena, the Greek Goddess that served to mentor Telemachus, there have been other important historical mentoring relationships. For example, Socrates and Plato (Lane, 2015), Max Talmey and Albert Einstein (Clark, 2011), Senator Richard Russell and President Lyndon Baines Johnson (Mann, 1996), and Maya Angelou and Oprah Winfrey (Rhodes, 2015). Moreover, Dr. Benjamin Mays and Dr. Martin Luther King (Rhodes, 2015), and Minister Louis Farrakhan and Muhammad Ali (Marqusee, 2005). These mentoring relationships from ancient to modern have shaped lives and events and mentoring will continue to be part of relationships. According to Levinson (1978), there are several overlapping universal stages of human development over time ranging from an infancy stage to an elderly stage. Levinson's model assumes that human development continues throughout life and does not end in adolescence. Mentoring relationships can also continue throughout a lifetime.

According to Zachary (2011), the progression of mentoring has evolved into effective learning relationships that develop into traveling together and far, that benefit both the mentor and protégé (Clawson, 1979; Hunt & Michael, 1983). Kram, (2007) further advocated that 21st century mentoring encompassed various forms of mentoring combinations that included not only traditional mentoring but also extended to cross-cultural mentoring. Moreover, mentoring was defined by what is now referred to as "developmental networks" (p. 659) which is the concept of reciprocity and diversity.

Kram (2007) contributed to the landscape of mentoring by providing an example of how diversity and reciprocity could work within a developmental network to enable mentoring even when a mentor is not available to provide effective mentoring. "A mentor who is entering a new career learning cycle may be unable to assist a protégé who is striving to move into the same learning cycle simultaneously. When individuals have diverse developmental networks, they can enlist help from others and will, therefore, be less vulnerable to a particular mentor's limited ability to provide the help needed at a critical juncture in a career learning cycle (p. 664-665)".

In a dissertation study conducted by Carter (2012) that was conducted to describe and explore from the mentor's viewpoint what a mentoring mindset is for doctoral students of Research I institutions, several findings surfaced as follows:

1) Mentors desired that relationships start and progress at a satisfactory pace and thus desired protégés who possessed prerequisite knowledge and skills, especially knowledge skill sets in the studied graduate field of study,

2) Mentors wished for protégés who demonstrated critical thinking and were open to constructive criticism and who could see viewpoints from different perspectives,

3) Mentors aspired to interact with personable doctoral candidates who also exhibited collaborative work habits. Mentors favored protégés who integrated well in group settings (i.e. conferences, etc.).

4) Mentors wanted protégés that viewed failure as learning opportunities and treated those opportunities as such. Additionally, doctoral students who exhibited self-confidence and who were risk takers were desirable from the viewpoint of the mentor. Drive, determination, motivation, and a willingness to attempt new things were important to mentors. Also, important to mentors were protégés who demonstrated a strong desire for a mentoring relationship key, and

5) Mentors coveted protégés who possessed a mentoring mindset. The qualities valued included being able to use advice to meet goals. Even most important was the ability to develop a learning relationship and transform from a doctoral student into a doctoral candidate to eventually graduate. Included in this capability from the mentor perspective was the self-motivated capability to succeed.

For the Nyquist and Woodford study (2000) in higher education, several groups surveyed about land-based and online mentoring included doctoral students, the higher education governing boards who approve Ph.D. programs and relevant accrediting agencies. For the overall study, Nyquist conducted over 300 interviews and Woodford conducted 25. Concerning both land-based and online mentoring programs Nyquist and Woodford (2000) suggest that mentoring begin earlier, regularly, and be based on a networked model where several mentors are available to protégés. Concerns identified by doctoral students included inadequate training dedicated to the power to effect meaningful change for doctoral students. Further, some doctoral students wanted their mentors to deliver better overall structure to their Ph.D. journey. Moreover, some Ph.D. candidates articulated vehemently that fuzzy communications from mentors were tantamount to

13

being unscrupulous behavior on the part of mentors. Based on these comments it is possible that a more defined mentoring framework in place similar to the framework under review for this study would help.

According to Darwin (1999), classifying the value of the job that mentors perform as important enough for promotion, reward and tenure is crucial. Since mentoring is reciprocal and beneficial for the parties that are involved there should be significance assigned to mentoring pursuits. The reasoning behind this argument was best articulated by Murray & Owen (1991), "people tend to repeat those activities that result in some reward, and therefore, even though it takes some effort and creativity, rewards for the mentors can and must be present." Therefore, those dedicated to mentoring others should re inclined to mentor if a reward is imminent.

Mentoring research from the perspective of the mentor, though sparse, appears in recent research. Kim, Stallings, Merlo, and Lin (2015) viewed mentoring relationships from the mentor's perspective and intended to identify a profile in mentorships in criminal justice programs. This study is important given that it sought to develop a thorough description of mentoring patterns and mentoring types in criminal justice doctoral education. The study is especially significant in that it investigated the value of and experience in mentoring programs from the viewpoint of the mentor. Although generalizing on mentoring to other academic field is imperfect (Paglis, Green & Bauer 2006), this criminal justice study suggested that mentors viewed publication output and professional planning as important mentoring objectives. Pragmatically, "mentoring to their doctoral students, mentors anticipated that the protégés would benefit by learning how to publish and performing it regularly as well as learning about being socialized into academia" (Kim et al., 2015 p. 402).

Mentoring has been a substantive topic for decades and in various ways dependent on the environment where used. The most used definition indicates that mentoring is a special support offered, typically by more experienced experts, to beginners (Allen, Eby, Poteet, Lenz, & Lima, 2004; Blake-Beard, Bayne, Crosby, & Muller, 2011; Eby, Rhodes, & Allen, 2007; Ragins & Kram, 2007; St-Jean & Mathieu, 2015). Moreover, Forrett and De Janasz (2005) described mentoring from the perspective of the worker as the process of supporting the career advancement of less experienced workers in the workplace by more experienced and powerful individuals. Van Emmerik, Baugh, and Euwema (2005) referred to the work environment and how a mentor was a significant member of the work environment possessing an advanced status with also forward-thinking knowledge that directs, assists, and supervises protégé development. In line with this thinking and from an organizational standpoint, mentoring is when there is a liaison between a newly minted employee and a seasoned organizational veteran willing to work together on a one to one basis (Ragins & Cotton, 1991; Ragins & Scandura, 1994; Scandura & Ragins, 1993; Scandura & Williams, 2001). Mentoring means different things to different people (Kram, 1985). Mentoring, like any definition, varies with the passage of time and technology. Therefore, we look to the needs of the current generation in guiding our thoughts in determining how to mentor the protégés of today. This viewpoint and thinking have led to the consideration of frameworks that assist in classifying mentoring relationships. Accordingly, in light of the range of mentoring relationships and compositions, there has not been an encompassing definition on common framework considerations (Dawson, 2014).

In higher education, mentoring definitions range from the simple to the complicated and are similarly prone to not being precisely defined. Earlier literature centered on attributes and on attributes that protégés considered most important in potential mentors (Merriam, 1983).

Mentoring Mindset Framework

A conceptual framework for a protégé mentoring mindset was used in this study (Searby, 2014). As an original conceptual framework, it is a new definition that describes the protégé mentoring mindset. The mentoring mindset was not only defined in word but also depicted graphically in picture form (see Figure 1). Acording to Searby (2014) the mentoring mindset of a protégé is a construct arising from protégé attitudes, behaviors, and competencies that enable the protégé to embrace the mentoring process and maximize the benefits of mentoring relationship (see Figure 1). The mentoring mindset framework assumes that development does not end with adolescence. Just as individuals learn and grow throughout their lives, mental growth and learning is a primary assumption that underlies the protégé mentoring mindset framework (Bandura, 1977; Erikson, 1959; Freund & Baltes, 1998; Kegan, 1982; Levinson, 2011).

The mentoring mindset framework (Searby, 2014) was used for this study. There are five mentoring mindset states that exist for a protégé to maximally benefit from a mentoring relationship from the viewpoint of the mentor. Moreover, these five states of a mentoring mindset should be evident from the viewpoint of the mentor or the protégé. Searby's (2014) examined five categories that set the stage to contemplate the existence/absence of a mentoring mindset in protégé. Two categories and five themes within each category emerged from the nine interviews. The two categories were labeled as the Presence or Absence of a Mentoring Mindset. The five themes were specifically related back to observable protégé attitudes, behaviors, and competencies. The mentoring mindset graphic shows the presence of a mentoring mindset in the left column. The mentoring mindset graphic shows the absence of a mentoring mindset in the right column. In summary, here are the specific mindset attributes:

Table 1

Presence or Absence of a Mentoring Mindset

Indicators of the Presence of a Mentoring Mindset

Takes the Initiative	Learning Orientation	Skillful & Organized	Relational	Reflective
Initiates contact with mentor	Exhibits curiosity	In setting goals; Has a vision	Can build relationships	Can self-assess
Self-starter; Confident	Asks good questions	In organizational matters	Knows how to network	Learns from mistakes
Takes Mentoring seriously	Adequately knowledgeable about concepts, content of one's field	In time management; Prioritizing	Picks up on social cues	Articulates reflection out loud
Intentional; Action-oriented	Admits to not knowing everything	In seeing the big picture	Approachable; Positive	Transparent; Forthcoming
	Seeks & accepts feedback from mentor; Accepts advice graciously		Keeps lines of communication open with mentor	
			Active Listener	
			Can keep confidences	
			Trusts and can be trusted	
			Honest	

Source:
Linda Searby © 2014

Table 1

Presence or Absence of a Mentoring Mindset

Indicators of the Absence of a Mentoring Mindset

Lacks Initiative	**Lacks a Learning Orientation**	**Lacks Skillful & Organization**	**Lacks Relational Skiills**	**Unreflective**
Only responds when mentor initiates or when in crisis	No real curiosity	In goal setting; Lacks vision	No attention to building relationships	Lack of self-knowledge
Lacks drive and motivation	Wants "quick fix" answers "Know it all"	In organizational matters	Avoids opportunities to network	Inability to learn from mistakes
Just goes through the motions of mentoring	Does not take advantage of opportunities for further learning	In time management	Does not pick up on social cues	Cannot articulate reflection
Wants mentor to tell what to do	Rejects feedback or takes personally	In seeing the big picture	Withdrawn	Withholds sharing
	Cannot admit weaknesses; Stubborn		Satisfied with one way communication from mentor	
			Does not listen well	
			Talks too much	

Source:
© 2014 Linda Searby

Presence of a Mentoring Mindset	Absence of a Mentoring Mindset
The protégé	The protégé
1) Takes the Initiative,	1) Lacks Initiative,
2) Is Learning Oriented,	2) Lacks learning orientation,
3) Is Skillful & Organized,	3) Lacks Skill & Organization,
4) Possesses Relational Skills, and	4) Lacks Relational Skills, and
5) Is Reflective.	5) Is Unreflective.

The descriptors of the mentoring phenomenon of a mentoring mindset in the protégé were derived from interviews of trained principal mentors that were asked the following questions: "What attitudes did the protégé display?", "What behaviors told you that the protégé was embracing/not embracing the mentoring process?", and "What skills did the mentor exhibit or lack?" (Searby, 2014). During the interviews the researcher was sure not to use the term "mentoring mindset".

Based on research and phenomenological interviews, Searby (2014) developed a paragraph description of the essence of the mentoring mindset as follows:

> The mentoring mindset of a protégé is a construct made visible to the mentor in the mentoring relationship by the demonstration of attitudes, behaviors and competencies which indicate that the protégé is embracing the mentoring process. The protégé who possesses a mentoring mindset takes initiative (behavior), has a learning orientation (attitude), has a goal orientation (competency), is relational (behavior, competency), and is reflective (attitude, behavior). Conversely, there are observable attitudes, behaviors, and lack of competencies that indicate the absence of a mentoring mindset in a protégé. That protégé lacks initiative (behavior), lacks a learning orientation (attitude), lacks a goal orientation (competency), lacks relational skills (behavior, competency), and is unreflective (attitude, behavior). (Searby, 2014, p. 263)

According to Searby (2014), "the mentoring mindset of a protégé is a construct arising from protégé's attitudes, behaviors, and competencies that enable the protégé to embrace the mentoring process and maximize the benefits of the mentoring relationship" (see Figure 1). This definition was the resulting definition after the researcher had concluded the study.

The Mentoring Mindset Framework embraces learning theories (Levinson, 1978) about adult human development and how, through several stages, human beings transform throughout life. This concept is foundational and important in helping to identify a mentoring mindset in protégés. Based on an age-linked progress, Levinson's learning theory life cycles describes the developmental motives that supports mentoring as an important part of the maturity process. Levinson (1978) based his research on forty chosen men from several segments of society. Although the research was limited to male study participants, Levinson's theories extended to the female gender in a subsequent study (Levinson, 2011). The life cycle stages were as follows:

1) First Stage Ages (0-17) Childhood and Adolescence

2) Second Stage (Ages 17-22) - Early Adult Transition

3) Third Stage Ages (17-40) Early Adult Era

4) Fourth Stage (Ages 40-45) – Mid-Life Transition

5) Fifth Stage (Ages 40-60) - Middle Adult Era

6) Sixth Stage (Ages 60-65) - Late Adult Transition

7) Seventh Stage Late Adulthood (Age 65 and Beyond)

The first stage, Childhood and Adolescence includes development through middle school and high school. This stage is important since mentoring sometimes starts early on in a child's life. The second stage Early Adult Transition covers the period when a young adult asserts independence and strikes out on his own away from his family. It is at this point that life goals

and objectives develop. The third stage, Early Adult Era covers the period when a man establishes his societal identity, marries, and actively pursues the goals set in second stage. The fourth stage, Mid-Life Transition includes a time of questioning prior decisions, a recognition of mortality, and therefore an effort to establish a legacy. The fifth stage, Middle Adult Era includes a lifestyle change prompted by the fourth stage. Changes in the fifth stage could range from selecting a new spouse to making peace with enemies to forgiving oneself for setting past indiscretions to forgiving others. The sixth stage, Late Adult Transition encompasses the reflection of how the dream has been or has not been achieved and, perhaps, step-wise actions in a last-ditch effort to bring closure to the dreams that have driven the individual throughout all the stages. The seventh stage, Late Adulthood incorporates the modification and selection of the dream that has been lived. There may be some regret and some happiness (see Figure 2).

Benefits of Mentoring

According to (Elliott, Beltman & Lynch, 2011) mentoring benefits not only protégés but also mentors in substantive ways. Mentors experienced a strong sense of achievement and found mentoring fulfilling to assist students in reaching their full potential. Moreover, Beltman and Schaeben (2012) reported that the specific benefits of mentoring that accrue to mentors include social and personal, philanthropic, and intellectual growth. Moreover, mentors developed their leadership aptitudes and acquired knowledge about university resources that previously were unknown to them. Benefits also accrued to organizations and in the case of higher educational institutions when mentors (faculty) and protégés (students) interacted. Beneficiary entities were those that actively supported and encouraged mentoring. And in general school districts that invested in comprehensive formal mentoring programs reaped a return on investment within a five-year period (Villar & Strong, 2007). Typically, right at about the four or five-year mark, a

Indicators of the Presence of a Mentoring Mindset

Takes Initiative
- Initiates contact with mentor
- Self-starter; confident
- Takes mentoring seriously
- Intentional; action-oriented

Learning Orientation
- Exhibits curiosity
- Asks good questions
- Adequately knowledgeable about concepts, content of one's field
- Admits to not knowing everything
- Seeks & accepts feedback from mentor;
- Accepts advice graciously

Skillful & Organized
- In setting goals; has a vision
- In organizational matters
- In time management; prioritizing
- In seeing the big picture

Relational
- Can build relationships
- Knows how to network
- Picks up on social cues
- Approachable; positive
- Keeps lines of communication open with mentor
- Active Listener
- Can keep confidences
- Trusts and can be trusted
- Honest

Reflective
- Can self-assess
- Learns from mistakes
- Articulates reflection out loud
- Transparent; forthcoming

The mentoring mindset of a protégé is.....

a construct arising from

those protégé attitudes, behaviors, and competencies

that enable the protégé to embrace the mentoring process

and

maximize the benefits of the mentoring relationship

Indicators of the Absence of a Mentoring Mindset

Lacks Initiative
- Only responds when mentor initiates or when in crisis
- Lacks drive and motivation
- Just goes through the motions of mentoring
- Wants mentor to tell what to do

Lacks a Learning Orientation
- No real curiosity
- Wants "quick fix answers"
- "Know it all"
- Does not take advantage of opportunities for further learning
- Rejects feedback or takes it personally
- Cannot admit weaknesses; stubborn

Lacks Skill & Organization
- In goal setting; lacks vision
- In organizational matters
- In time management
- In seeing big picture

Lacks Relational Skills
- No attention to building relationships
- Avoids opportunities to network
- Does not pick up on social cues
- Withdrawn
- Satisfied with one way communication from the mentor
- Talks too much, does not listen well

Unreflective
- Lack of self-knowledge
- Inability to learn from mistakes
- Cannot articulate reflection
- Withholds sharing

Source: © 2014 Linda Searby

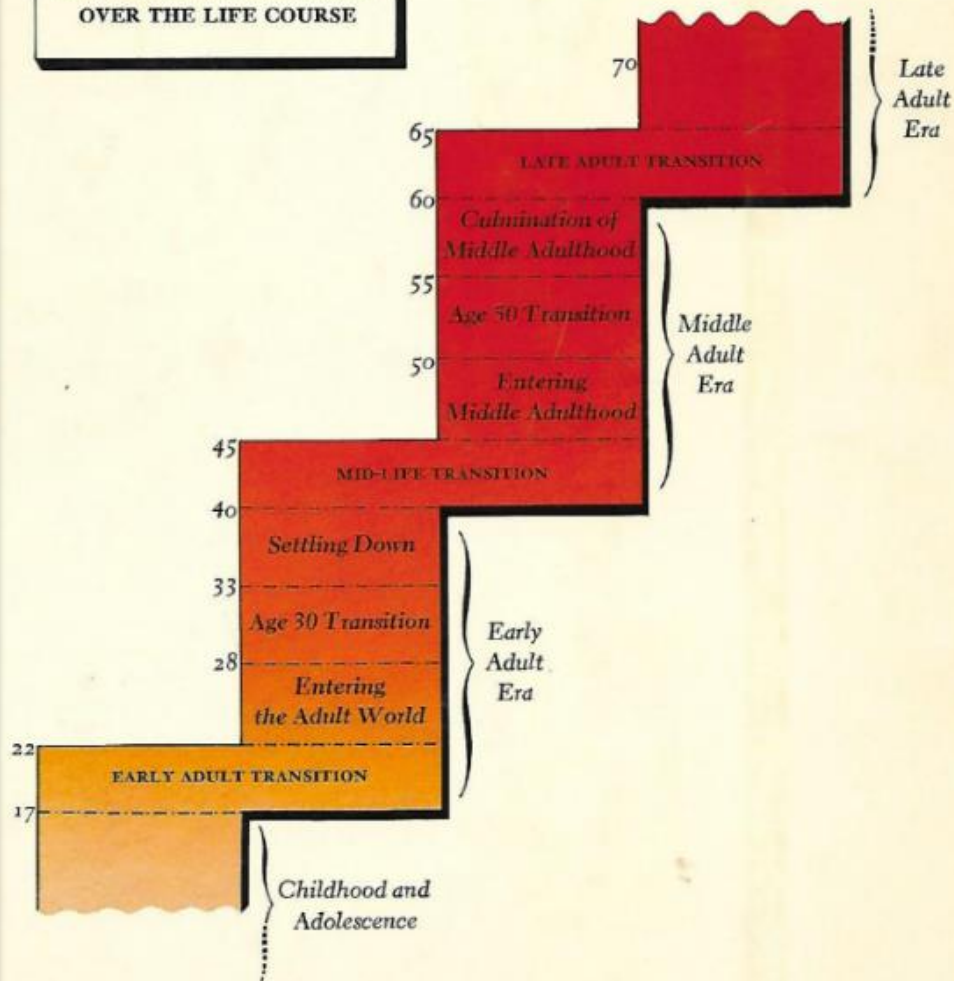*Figure 1.* Mentoring Mindset Framework

22

Figure 2. Source: © 1978 and 2011 Levinson - Seasons of a man's life
Notes: Levinson developmental periods over the life course

doctoral candidate is preparing to graduate. Therefore five years for a return on investment is

relevant and applicable to this study (Wingfield, 2010).

Sometimes a bond between protégé (student) and mentor (faculty) is continuous if there is

a constant effort to research and write together. Zey (1984) used a mutual benefit model to

articulate this point to underscore theory underlying induction theory. In the case of the doctoral

student protégé and faculty mentor, the return on investment may stretch well beyond five years.

Ingersoll and Strong (2011) found that for beginning teachers/protégés their commitment and

retention, classroom instruction practices, and student achievement was positively impacted.

Fifteen empirical studies starting in the mid-1980s referred to a mentoring process called

induction. The results of these studies emphasized that induction or mentoring for teachers had a

positive bearing on 1) retention and dedication, 2) lecture practices and 3) student success (See

Table 2).

The Mentor in the Mentoring Relationship

Although there are many standards and theories, mentor-protégé selection frequently is

linked to the similarity-attraction standard and social exchange theory. The social exchange theory

articulates that a mentor enters relationships when the benefits outweigh costs (Blau, 1964). In

other words, mentors will invest time and energy into protégés that show future promise and

where long lasting associations are likely. According to Kram (1985), mentors are appreciative of

protégés that possess technical skills. For example, protégés that see the big picture, who are

creative, and can fill in the missing pieces to manage a large project. Further, Allen, Poteet &

Burroughs (1997) discovered that mentors said that they were attracted to protégés who possessed

relational/people skills and that took the initiative. Moreover, mentors were attracted to protégés

Table 2

Studies on The Effects of Mentoring Induction Programs

Overview	Data	Outcomes	Findings
Effects of Mentoring Programs			
1. Kapadia et al. (2007) Evaluated districtwide induction programs in Chicago Public Schools for 2005; looked at data from 1,737 novice teachers (72% of all 1- to 2-year teachers); identified weak, average, and strong intensity of induction	Teacher questionnaires	How positive was first year; intentions to stay in teaching and/or in same school	Survey that included one yes-no question about induction
2. Fuller (2003); Cohen and Fuller (2006) Evaluation for 1999–2003 of TxBESS, a statewide program to provide support for beginning teachers, of which mentoring was a major component	Annual questionnaire to mentees; state database on teacher retention	Teacher retention compared with other teachers in the state	TxBESS teachers were retained at significantly higher rates over first 3 years compared to other teachers in the state
3. Henke et al. (2000) Secondary analysis of Baccalaureate and Beyond Survey that followed a nationally representative sample of 7,294 college graduates who entered teaching after 1992–1993 school year; follow-ups in 1994 and 1997	Survey that included one yes-no question about induction	Attrition	Significantly lower attrition (15% vs. 26%) for beginning teachers who participated in induction program *(continued)*

25

Table 2

Overview	Data	Outcomes	Findings
4. Smith and Ingersoll (2004); Ingersoll and Smith (2004a, 2004b) Secondary analysis of nationally representative sample from the Schools and Staffing Survey and Teacher Follow-up Survey of 3,235 first-year teachers in 1999-2000 school year	Mailed surveys	Attrition after first year	Significantly lower attrition for teachers having different types of induction supports such as helpful mentor in the same subject area or participation in collaborative activities with other teachers; no decrease in attrition for teachers receiving a reduced teaching load or a teacher
5. Hahs-Vaughn and Scherff (2008) Secondary analysis of subsample of English teachers from the 1999-2000 Schools and Staffing Survey	Mailed surveys	Individual/ school characteristics on attrition, mobility, and retention	No effects for induction, but authors failed to limit analysis to first-year teachers; therefore, results are problematic
6. Duke et al. (2006) Secondary analysis of subsample of 1999-2000 Schools and Staffing Survey	Mailed surveys	Amount of induction; teacher intentions to stay	Induction had positive effect on teacher intentions to stay, but authors failed to limit analysis to first-year teachers; therefore, results are problematic
Effects of teacher induction on beginning teachers' classroom practices			
7. Evertson and Smithey (2000) Compared trained versus untrained mentors; randomly assigned 46 teachers to each group	Classroom observations	Classroom practice	Teachers with trained mentors had better classroom organization and management early in the year, and students were more engaged
8. Roehrig et al. (2008) Case studies of six novice teachers and their mentors	Surveys, observations using AIMS	Classroom practice	Ambiguous findings; both more and less effective teachers declined in use of effective practices over the year

(continued)

26

Table 2

Overview	Data	Outcomes	Findings
9. Davis and Higdon (2008) Two groups of five teachers were studied; one group had a university-supplied mentor as well as district support; the other group had district support only	Two half-day observations in fall and spring; survey looked at mentor support	Classroom practice	School-university induction partnerships "may" contribute to teacher effectiveness
10. Stanulis and Floden (2009) Two matched groups of 12 starting teachers; treatment group had intensive mentoring; comparison group had district only support	Classroom observation early and late in year using AIMS instrument	Classroom practice	Experimental group showed gains in AIMS scores over year that were greater than the comparison group

Effects of teacher induction on student achievement

Overview	Data	Outcomes	Findings
11. Thompson et al. (2004) Studied California BTSA program among 1,125 third to fifth grade teachers from 107 school districts during their third teaching year	Survey of all teachers, interviews and observations of subsample	Engagement in BTSA and teaching practice; student achievement	Found high engagement in BTSA was associated with higher scores on most measures of teaching practice; students of teachers with higher engagement had higher test scores
12. Fletcher (2008) Compared beginning teachers from three California school districts with different levels of BTSA induction support	Student test data; school district data; induction program data	Student achievement gains	Found teachers in the most intensive induction program had greater gains in reading; also, teachers in the intensive program showed class gains equal to those of experienced teachers in the same district *(continued)*

Table 2 (*continued*)

Overview	Data	Outcomes	Findings
13. Fletcher and Strong (2009) Compared two groups of beginning teachers in an urban school district: those full-time mentors and those with part-time mentors; all mentors had the same training	Student test data; district data; induction program data	Student achievement gains	Teachers supported by full-time mentors showed greater achievement gains over 1 year than those with part-time mentors
14. Rockoff (2008) Studied the effects of a comprehensive mentoring program provided by the mentoring program; payroll data; NY DOE survey; standardized test data	Survey and other data from the mentoring program; payroll data; NY DOE survey; standardized test data	In-school retention; teacher self-report on effectiveness; student achievement	Retention a function of previous experience in that school; teachers claimed mentoring affected teaching; more time with mentor showed higher achievement in math and reading
15. Mathematica Policy Research (four reports): Glazerman et al. (2006); Glazerman et al. (2008); Isenberg et al. (2009); Glazerman et al. (2010). Randomized controlled study of comprehensive induction support (adapted from two prominent induction programs) versus standard district support; recruited 17 large school districts with at least 50% low-income students; initial sample of 1,009 teachers; subsample followed for a second year; some analysis after 3 years	Observation, interview, questionnaire, and student test data; outside agency monitored treatment implementation	Intensity of induction support; teacher retention; teacher practice; student achievement	Treatment group received significantly more intensive induction support; no effects on retention, practice, or student achievement after 1 year; no on retention or achievement after 2 years; student achievement of treatment group teachers significantly higher after 3 years (for small subsample)

Note: TxBess = Texas Beginning Educator Support Systems; AIMS = The Atmosphere, Instruction/Content, Management, and Student Engagement measure; BTSA = Beginning Teacher Support and Assessment program; NY DOE = New York City Department of Education

that possessed a learning orientation. According to Allen (2004), a learning orientation was an essential factor for a mentor in selecting a protégé. Further, the type of learning orientation was key for mentors in that they distinguished between abilities already acquired and willingness to learn. In Allen's 2004 study, mentors motivated by self-enhancement preferred protégés who had already acquired certain abilities, while mentors driven by intrinsic satisfaction selected protégés with qualities related to willingness to learn.

The similarity-attraction standard explains that mentors tend to select protégés of similar circumstances and background (Bryne, 1971). For example, mentors said that they saw themselves in the protégés they ended up selecting and allowing into their circle of associates. Allen and Eby (2003) examined mentor satisfaction levels and found that there was a positive relationship between mentor/protégé similarity and relationship quality. In other words, mentors who perceived their respective protégés as similar to themselves experienced a higher quality relationship in comparison to relationships with protégés who were less similar to themselves. Interestingly, the longer the relationship lasts, the less the similarity factor matters as the complementarity factor rises, from the mentor viewpoint.

The Protégé in the Mentoring Relationship

According to Young and Perrewe (2000), protégés benefit from being open to guidance and coaching because mentors value these attributes in the mentoring relationship. The import of this is that protégés who desire a mentor could demonstrate this ability and willingness to learn but might be rejected due to due to low skill level. In a ranking and rating process study conducted by Allen (2004), experienced mentors preferred mentoring protégés with both high ability and willingness to learn compared to protégés with both low ability and willingness to learn. Further, the interaction of Allen's study found that from the mentor's perspective, a protégé with low skill

ability could be counterbalanced by a sincere willingness to learn. Also, according to Allen's 2004 study mentors preferred the trait willingness to learn in comparison to high ability and showed no preference for mentoring a protégé of the same gender. This despite the observation that most of the pairings of mentor and protégé were of the same gender (Sosik & Godshalk, 2000).

Aryee, Chay, and Chew, (1996) found that that there was a direct relationship between organization incentives and mentoring protégés   Also, mentors provided mentoring to protégés given organizational support (Allen, Poteet, & Burroughs, 1997; Allen et al., 1997). Thus, protégés benefit in environments where mentors are acknowledged and rewarded for their mentoring endeavors (Kram, 1985). Based on the (Allen et al., 1997) study protégés should educate themselves regarding what motivates mentoring in mentors. For instance, self-focused mentors found a sense of self-satisfaction and opportunities to enhance their reputations. Moreover, the study further discovered that other-focused mentors found satisfaction in assisting others. Interestingly, according to Allen (2003) motives and type of mentoring relationship are linked. For example, it is probable that underlying motivations to mentor are related to protégé type. For instance, mentors motivated by self-enhancement soundly preferred high ability protégés. Consequently, important to protégés is the idea that mentor motivation is a significant factor in the protégé selection process.

The Mentor, Protégé, and Institution/Advising Doctoral Students

Mentoring has been explored in the business literature as an operational affiliation that influences personal development and central managerial processes (Kram, 1985). Generally, there are similarities to mentoring in business settings, however mentoring in higher education reflects an emphasis on degree attainment and progress toward this goal. If progress toward degree attainment is considered analogous to business world pay raises and promotions, then findings in

business literature can be related to higher education. However, mentoring in higher education does differ from business since formal guiding principles are basically nonexistent leaving faculty the flexibility to mentor as they see fit based on a trial and error approach (Eby, Rhodes & Allen, 2010; Ford, Polush, & Brooks, 2016; Yun, Baldi, & Sorcinelli, 2016). In the study conducted by Valdez & Duran (1991) four primary themes emerged from mentorship teams related to protégé learning in mentoring relationships. The four major themes that facilitated protégé learning were as follows: (1) commitment and teamwork, (2) faculty participation, (3) hands-on research, and (4) structure and consistency. However, learning also happens for mentors and organizations according to (Jakubik, Eliades & Weese, 2016) . . . the triad that benefits from mentoring include not only the protégé but also the mentor and the organization. Moreover, Mullen (1993) implies that mentors possibly use protégés as information and social feedback sources. Therefore, mentors and organizations and in this case higher education institutions learn through obligation and collaboration, faculty contribution and input, practical research, and structure and consistency.

Although research is profuse with examples that speak to the well-defined finding that doctoral students who had worked closely with faculty members experienced success as protégés as their careers progressed (Gotian, Raymore, Rhooms, Liberman, & Andersen, 2017; Li, 2016; Lyons, Scroggins, & Rule, 1990; Wanberg, Welsh, & Hezlett, 2003, research found on how protégé attitudes, behaviors, and competencies empower mentoring relationships is limited. To address these issues Ford, Polush, and Brooks (2016) articulated crucial elements to undergird doctoral study planning that included shifting curricula focus to embrace inclusive education and nurture the educational researcher mindset.

Types of Mentoring Relationships: Informal and Formal

Overall informal mentoring and formal mentoring aim for similar objectives and desired outcomes Crawford (2011), but fundamentally are viewed differently according to (Baugh & Fagenson, 2007). Informal and formal relationships differ along the lines of visibility and duration (Janssen, Vuuren, and Jong, 2015). For example, since formal mentoring is for a certain designated period, the duration is limited. A time limitation factor does not curb informal mentoring. Second, informal mentoring is less visible since both participants often do not immediately or even ultimately identify their relationship as a mentoring one. Informal relationships differ in initiation procedures Blake-Beard, O'Neill, and McGowan (2007) and intensity (Ragins and Cotton, 1999). For instance, informal relationships traditionally begin with professional development and then extend through to personal growth. These relationships are considered more action-oriented and include more career opportunities and psychosocial functions in comparison to formal mentoring which emphasizes professional growth (Ragins & Cotton, 1999).

Whether formal or informal, mentoring presents several advantages for mentors, protégés, and associated institutions. According to Huling (2001), mentors are presented with opportunities to; (1) reevaluate their classroom instructing procedures and values, (2) design better learning experiences, (3) augment self-confidence, (4) enhance teamwork collaborative efforts, and (5) develop leadership skills. According to Mathews (2003), in a mentoring relationship protégés accomplish substantive achievements. Protégés notably acquire a sponsor, enhance communication skills, and develop poise and composure. Further, protégés obtain an understanding of institutional culture, gain new skills, grasp strategic knowledge, develop an enlightened vision, and achieve better institutional standing and empowerment.

Characteristics that Protégés Desire in Mentors

Britton (2014) articulated characteristic attributes that protégés desired in their mentors. In the study the ensuing questions were addressed:

1. What mentor behaviors result in successful mentoring?

2. What characteristics distinguish successful mentors?

The project focus was on the examination of effective mentor-protégé relationships in order to identify effective mentor characteristics that emerge during the dynamics of successful mentoring relationships. The study shed light on the main mentor characteristics that fostered success and generated further success.

For this study, six individuals provided the answers to questions related to their respective mentoring experiences. The composition of the interviewees included three current faculty members and three current students, all in university settings in the southeast United States. The interviews, considered abbreviated and semi-structured in nature, relied upon a questionnaire developed by the John Hopkins University School of Nursing.

The questionnaire was composed of several components. At the top of the questionnaire, directions defined its purpose. The purpose included using a scale to evaluate mentoring characteristics. Each participant was asked to report the extent to which they agreed or disagreed with each of twelve statements. Since this was a paper instrument, respondents were asked to circle a number (1-6). The directions also delivered a statement of confidentiality.

The first page of the questionnaire presented twelve statements and used a seven-point Likert scale. The Likert scale included: 0 = Strongly Disagree (SD), 1 = Disagree (D), 2 = Slightly Disagree (SID), 3 = Slightly Agree (SIA), 4 = Agree (A), 5 = Strongly Agree (SA), and 6 = Not Applicable (NA). The twelve questions of the survey included: 1. My mentor is accessible, 2. My

mentor demonstrated professional integrity, 3. My mentor demonstrated content expertise in my area of need, 4. My mentor was approachable, 5. My mentor was supportive and encouraging, 6. My mentor provided constructive and useful critiques of my work, 7. My mentor motivated me to improve my work product, 8. My mentor was helpful in providing direction and guidance on professional issues (i.e. networking), 9. My mentor answered my questions satisfactorily (e.g., timely response, clear, comprehensive), 10. My mentor acknowledged my contributions appropriately (e.g. committee contributions, awards), 11. My mentor suggested appropriate resources (e.g., experts, electronic contacts, source materials), and 12. My mentor challenged me to extend my abilities (e.g., risk taking, try a new professional activity, draft a section of an article) professional activity, draft a section of an article).

Part I (Description of Relationship) and Part II (Outcomes Measures) of the second page of the questionnaire required the protégé and mentor names. Part I asked four open-ended questions as follows: 1. What is the role of your mentor? (e.g. teacher, counselor, advisor, sponsor, advocate, resource), 2. How often did you communicate? (e.g., e-mail, in person, telephone). 3. How long have you had this relationship, and 4. How would you characterize the strengths and weaknesses of your relationship?

Part II (Outcomes and Measures) asked that the participants describe the results of their interaction with their mentor via a checklist of ten descriptions. The ten descriptions are as follows: 1. Publication, 2. Presentation or Poster, 3. New teaching method or strategy, 4. Clinical Experience, 5. Conducting Research, 6. Service activities (e.g., community service, political activity, professional organization), 7. Development of a program (e.g., educational/clinical course or new program of study), 8. Job change/promotion, 9. Grant writing/submission, and 10. Other.

Additionally, the Darwin inventory list intended for paper and pencil administration was converted into an open-ended instrument. This instrument contains one hundred words in alphabetical order which may or may not describe a mentor. Britton (2014) used this instrument at the end of the interview and meticulously requested the interviewees to respond verbally with a "no" or "yes" answer to each descriptive. If given a response of "yes" to a particular descriptor, the researcher required further explanation and asked the interviewee to elaborate by providing an example of how a mentor exhibited that particular characteristic. For example, if an interviewee responded with a "yes" to the "commitment" descriptor, then an interviewee response explained mentor commitment by indicating that "the mentor always arrived early for a meeting."

Britton (2014) used grounded theory procedures defined by Strauss and Corbin (2008). Immediately after each interview, the interviewee's answers provided the opportunity to start the process of open, axial, and selective coding. The constant comparative approach provided a way for identifying a thematic pattern to generate a beginning theory. Accordingly, immediately after each of the first two initial interviews, open coding began, and beginning theory started to emerge with subsequent establishment of key terms. Further, this process guided the subsequent interview decisions and techniques. Axial coding facilitated an opportunity to regroup the data in new ways to develop better insight into theory development and a unifying theme after selective coding. The unifying theme that emerged centered on a deliberate and mutual effort to bond as mentor and protégé.

Faculty and students had provided verbal consent for interviews conducted between September 2014 and November 2014. Closed door interviews facilitated this project along with an assurance of anonymity throughout the process. These one-on-one semi-structured interviews provided the opportunity to obtain free-flowing and honest answers. The participants ranged in

age from 20 to 64 years and were all selected based on sampling and availability. The analysis

resulted in the Emergent Mentor Characteristics Model depicted below (Figure 3). The major

components of the Emergent Mentor Characteristics Model are 1. PRE-Mentoring Characteristics,

2. Educational Characteristics, 3. Interpersonal characteristics, and 4. POST-Mentoring

Characteristics. Within each of the major categories the survey participants defined characteristics
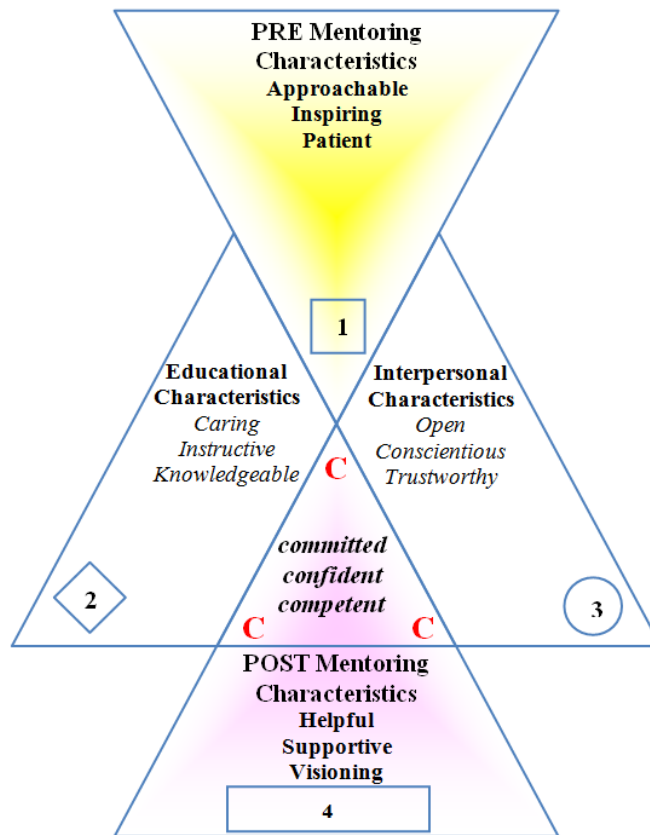
important to them as part of mentoring.

Figure 3. Encompassing comprehensive model emergent mentor characteristics

In order for mentoring to occur, protégés had to feel that mentors potentially possessed the

quality of approachability (Weidner & Hemming, 2002). Based on the interviews conducted with

the six participants, being approachable preeminently ranked high because protégés required

mentors to be available to answer questions and supply information at critical junctures. Further, protégés in this study sought mentors that appeared inspiring and patient, who at the same time maintained professionalism and who were not aloof. For example, an interviewee stated,

I so much desired a mentor, but I wanted someone that was friendly and professional, but not standoffish. I wanted someone I guess, who always had time for me. I am not a person that wants or needs lots of time and attention, but when I do require counsel I need it. So, in short order, I want someone who is verifiably open and approachable, but very professional and knowledgeable. (Britton, 2014, p. v)

Lacking the approachability characteristic, a protégé felt uncomfortable beginning a relationship with a potential mentor. Protégés viewed inspiration as a motivating factor when selecting a mentor. There appeared to be the attitude that if a mentor can achieve lofty accomplishments, the potential respective protégé felt the same way, concomitant with the idea that a guiding mentor will supply the necessary tools and perspectives to do so. For example, an interviewee stated,

I saw my mentor serving effectively on highly sought-after committee assignments at the university level, and that is something that I truly understood as valuable to advancement up the ranks at the university. I took inventory of the additional skills that I needed based on observing my mentor. I am determined to be ready when there is an opportunity for me to serve. (Britton, 2014, p. v)

Mentors viewed as patient along the lines of being empathetic scored extremely well with protégés. Potential mentors that possessed these qualities easily scored points as candidates for consideration during the process of mentor selection. Not being patient-empathetic, the potential mentor was considered distant and not likely for selection. In an educational setting, a scenario

exists for protégés to become familiar with potential mentors through instructional interactions or department connections. For faculty, the interaction likely transpires regarding similar interests, same department, same committee assignments or similar research interests. Students often learn of future instructors via other students that have previously enrolled in courses of a potential faculty mentor.

In this study, faculty reported as caring to a fault for students developed into powerful mentors from the protégés viewpoint. This characteristic, when extended to protégé family members, resulted in powerful bonds that highly motivated students. For example, an interviewee stated,

I heard lots of positive stories about a particular professor, especially that of caring to a fault and expressing that quality in various ways. What highly impressed me is that my mentor extended the caring attitude beyond me to my mother who is a single mother trying very hard to see her children including me through college. This particular professor took the time out of a very busy schedule to visit our home and speak extensively with my mother, me, and my siblings about the college experience. Explanations about the differences among grants, scholarships, and financial aid helped us a lot. Moreover, this professor advised us very carefully in navigating the pitfalls of a large university based on our financial situation. Not only did my mentor lead us through the financing aspects of a large university, but also my mentor led us spiritually. I cannot say enough about the positive mentoring and caring that my family and I received. (Britton, 2014, p. v)

 In Britton's (2014) study, faculty that were considered good instructors by students evolved into valuable mentors for protégés. Faculty members who had evaluated student work with corresponding higher grades, considered these students willing to be instructed. With

reciprocity regarding this characteristic, both the mentor and protégé acquired information about each other that served as a foundation for future relations.

This mentor and protégé foundation was also set when new faculty were willing be instructed and mentored at the inception of their faculty employment. Colleagues viewed as knowledgeable usually perform the honors of ushering around new faculty for the first few weeks in the term. The prime opportunity for new faculty to begin to form opinions related to whom to defer to and consult with in their new position presents itself right away. Given that an established faculty member consents to do so, an opportunity for a mentoring relationship exists immediately, at the outset. Students enrolled in a class with the faculty member realize the level of knowledge that they possess. Moreover, this assessment expands to whether or not this knowledge exists as relevant to the goals and aspirations of the student protégé.

A multiplicity of factors exist that hamper effective faculty and student mentorship. Successful mentorship remains fundamental to faculty and students. Students view successful mentoring as essential and fundamental in navigating through a large university setting to graduation and also continuing into the work-setting. Alternatively, faculty view mentorship as a way to establish a successful career in the university setting. Therefore, future studies that address effectively characteristics should necessarily include a greater number of participant interviewees (Britton, 2014).

Studies and articles that lend credibility to the continue examination of the mentorship relationships are encouraged (Sambunjak, Straus, & Marusic, 2010) as they reported on the positive impact of mentoring for faculty. Mentored faculty obtained promotion earlier than unmentored faculty. Mentored faculty showed improved productivity concerning publishing and grants in comparison to unmentored faculty. Additionally, mentored faculty tended to continue at

the institution where mentored for longer periods of time. Likewise, students were able to find

success in navigating through a large university to graduation, thereby meeting their short-term

goals with a view towards achieving longer term goals.

Chapter Summary

Previous research investigations have concentrated on mentor characteristics from the

viewpoint of the protégé (Eby, Butts, Durley, & Ragins, 2010; Eby, McManus, Simon, & Russell,

2000; Kim, Stallings, Merlo, and Lin, 2015). The review of literature addresses research

characteristics from protégé viewpoints as well as from the standpoint of the mentor. An

examination of the mentoring mindset established by Searby (2014) provides a framework to

identify characteristics that benefit mentors and protégés.

CHAPTER III: METHODS

Introduction

Given the increased need to extend and preserve learning not only in education but also in other venues, mentoring is explored as a possible answer to reinvent and enrich mentoring relationships so that graduate students learn how to relate to faculty and network in the larger world (Kim, 2015). Organizations including higher education institutions that want to meet the challenge of mentoring students so that protégés overcome shock and act as expected (Caspersen & Raaen, 2014) would do well in developing mentors who are aware of their mentor roles through mentor education (Lejonberg, Elstad, & Christophersen, 2015). Pursuing mentoring education to this end is important. Various prominent individuals, mentored by some of the most renowned historical figures, influence society significantly (Rhodes, 2015).

Purpose of the Study

The purpose of this study was to examine the characteristics consisting of attitudes, behaviors, and competencies of protégés in a mentoring relationship. The study examined the presence or absence of a protégé mentoring mindset from the mentor's viewpoint. It also examined the presence or absence of a protégé mentoring mindset from the protégé's viewpoint. The mentoring mindset consists of five major categories: 1) takes initiative/lacks initiative [behavior], 2) learning orientation/lacks learning orientation [attitude], 3) skillful &

organized/lacks skill and organization [competency], 4) relational skills/lacks relational skills [behavior, competency], and 5) reflective/unreflective [attitude, behavior].

Research Questions

The following research questions were used in this study:

1. What are the mentoring mindset characteristics of protégés, as identified by mentors?

2. What are the mentoring mindset characteristics of protégés, as identified by protégés?

3. What are the differences, if any, between mentor and protégé mentoring mindset characteristics?

Design of the Study

An electronic survey developed from the five, primary mentoring mindset framework components included twenty-seven mentoring mindset subcategories. After each set of sub-factors, a summative question asks: "How important are these factors in contributing to my effectiveness with the mentoring relationship?" Consequently, this specific summative question is used five different times in the survey, once for each major mentoring mindset components. Each major category lists its several sub-factors. There are four subcategories for takes initiative/lack initiative [behavior]. There are six subcategories for learning orientation/lacks learning orientation [attitude]. There are four subcategories for skillful & organized/lacks skill and organization [competency]. There are nine subcategories for relational [behavior, competency]. There are four subcategories for reflective/unreflective [attitude, behavior]. Descriptively listed below are the subcomponents under each major category along with the repeated summative question. Please see the table entitled Design of the Study Summary below.

42

Table 3

Design of the Study Summary

1	2	3	4	5
Takes the initiative/Lacks initiative [behavior]:	Learning orientation/lacks learning orientation [attitude]:	Skillful & organized/lacks skill and organization [competency]:	Relational [behavior, competency]:	Reflective/ unreflective [attitude, behavior]:
Takes the initiative/Lacks initiative [behavior]: Initiates contact with mentor/Only responds when mentor initiates or when in crisis, Self-starter; confident/ Lacks drive and motivation, Takes mentoring seriously/Just goes through the motions of mentoring, and Intentional; action-oriented/ Wants mentor to tell what to do.	Exhibits curiosity/No real curiosity, Asks good questions/Wants "quick fix answers," Adequately knowledgeable about concepts, content of one's field/ Does not take advantage of opportunities for further learning, Admits to not knowing everything/ "Know it all," Seeks & accepts feedback from mentor/ Rejects feedback or takes it personally, and Accepts advice graciously/ Cannot admit weaknesses; stubborn.	In setting goals; has a vision/ In goal setting; lacks vision, In organizational matters/Lacks skill and organization in organizational matters, In time management; prioritizing/Lacks skill and organization in time management, and In seeing the big picture/Lacks skill in seeing the big picture.	Can build relationships/ No attention to building relationships, Knows how to network/ Avoids opportunities to network, Picks up on social cues/ Does not pick up on social cues, Approachable; positive/ Withdrawn, Keeps lines of communication open with mentor/ Satisfied with one way communication from the mentor, Active Listener/ Talks too much and does not listen well, Can keep confidences, Trusts and can be trusted, and Honest.	Can self-assess/ Lack self-knowledge, Learns from mistakes/Inability to learn from mistakes, Articulates reflection out loud/ Cannot articulate reflection, and Transparent; forthcoming/ Withholds sharing.

Due to the nature of the study and the structure of the established mentoring mindset framework in tandem in with survey administration, reliability analysis using Cronbach's Alpha was performed on the five mentoring mindset stems (takes the initiative, learning orientation, skillful and organized, relational, and reflective). Also, a mixed subject ANOVA was generated to measure whether scales differ for the protégé and mentor. The IBM SPSS Statistics 21 analysis program, was used to examine participant raw data collected for this research dissertation study.

Protection of Participants

Special precautions and procedures were followed to protect the privacy of the study participants for this research study (see Appendix A). The information letter, research protocol, invitational email and reminder email, and survey instrument were evaluated and accepted by the researcher's dissertation committee and Auburn University's Institutional Review Board for the Protection of Human Subjects in Research (IRB). Full authorization to collect data from the AIS Association and Ph.D. Project membership was obtained (Appendices B and C). The subsequent invitation emails to the AIS association membership and Ph.D. Project affiliates were used to start data collection (Appendices D and E). Follow-up reminder emails to both groups were sent to continue data collection (Appendices F and G).

Research study contributors viewed and read the information letter developed in Appendix A which functioned as Consent and Waiver of Documentation during the process of collecting data. Importantly, the online survey provided the participants with the option to click to continue with the survey or opt out at the very beginning of the survey. Further, online survey participants were either automatically opted into or out of the survey. If potential participants answered "no" to the question: Are you 18 years or older, then they were automatically opted out

of the survey. If potential participants answered "no" to the question: "As a mentor at your

institution have you met with and counseled the same protégé on at least two occasions," then

they were also automatically opted out of the online survey. If potential participants answered

"no" to the question: "As a protégé at your respective institution have you met with and been

counseled by a mentor (s) on at least two occasions," then they were also automatically opted out

of the online survey. Specifically, each must participant must be of age and participants in the

mentoring process. In each of the cases when a potential participant did not meet minimum

requirements, they did not participate in the survey without access to any part of the online

survey instrument.

When participants opted into the electronic survey as either mentor or protégé, then the

applicable set of questions presented and the respondent answered the appropriate set of

questions. Appendix H displays the mentor branch of the electronic survey. Appendix I displays

the protégé branch of the electronic survey.

Sample Selection

For the AIS Association and The Ph.D. Project a research study request email was sent to

the appropriate authority. After receipt of approval for both research requests (Appendices B &

C), approval from the Auburn University Institutional Review Board was sought and obtained

(Appendix A). The sample used in this study was composed of Ph.D. mentors and graduate

student protégés. Due to the nature of the AIS Association and The Ph.D. Project, the mentoring

relationships happened in collegiate settings.

The headquarters for the AIS Association is in Atlanta, GA. The AIS Association is a

professional organization whose purpose is to serve as the foremost worldwide organization for

academicians specializing in Information Systems. The AIS assists society by using the

advancement of knowledge and the promotion of excellence in the practice and scholarship of information systems. The headquarters for The Ph.D. Project is in Montvale, New Jersey. The mission of The Ph.D. Project is to augment workforce diversity by increasing diversity in business school faculty who inspire, lead, mentor, sustain, and develop the leaders of tomorrow.

The sample for this research study consisted of college professor mentors and graduate student protégés. Emails were sent to 4,340 potential participants. The electronic survey instrument went to all fall 2015 members in the respective databases of the two organizations. The AIS Association and the Ph.D. Project were chosen based on its diverse professor and student populations. In addition to a central North American membership, there is also strong international membership presence.

Data Collection Procedures

After full approval to conduct the research study from the IRB had been received (see Appendix A), invitational emails were mailed (see Appendices D & E). Included with the invitational emails was a link to the electronic survey sent to approximately 4340 actively involved members of the AIS Association and The Ph.D. Project. The invitational emails offered an overview of the purpose of the research study, electronic survey links, and information related to the benefits of the research study. The email invitation also concisely discussed associated risks of confidentiality and how those risks were addressed to preserve anonymity and confidentiality of research study respondents. All participants had the opportunity to review the Information letter at the beginning of the survey (see Appendix A). The information letter functioned as Consent to participate in the research study. Invitation reminder emails were sent to both groups (AIS Association and The Ph.D. Project) on the 6th and 14th survey days (see

46

Appendices F & G). The survey was open for approximately 50 days for an accumulation of enough responses.

The survey consisted of two gateway questions at the beginning: 1) to signify consent to participate and 2) to ensure that participants were at least 18 years old. An additional gateway question tested whether participants counseled with the same protégé or with the same mentor on at least two occasions. These three questions screened participants so that certain minimum qualifications became fulfilled for the research study. One hundred sixty-one respondents of the 179 completed the survey. Respondents that did not meet the minimum criteria screened out of the survey. Of the 179 survey participants, all of the participants met the age requirement. However, 18 respondents had not met on at least two occasions with the same individual as mentor or protégé. These participants ended the survey without participation. The survey instrument was conducted using Qualtrics, with no personal identifiers. As is customary, the respondent had the opportunity to discontinue participation at any time during the research process.

The survey instrument for this study was based primarily on the Mentoring Mindset Framework (Searby, 2014) (see Appendix J). This intellectual framework summarizes mentors' perceptions of mentoring mindset indicators of what a protégé should and should not possess. During translation of the Mentoring Mindset Framework for the development of the survey instrument (see Appendices H & I), summary questions and open-ended questions were included in the survey to gain better insight into respondent survey responses. The framework graphic contains eighteen components. A defining and striking sentence runs vertically, down the middle, from the top of the graphic down to the bottom of the mentoring mindset graphic. The sentence contains six components that define the mentoring mindset. The definition reads as

follows: "The mentoring mindset of a protégé is a construct arising from those protégé attitudes, behaviors, and competencies that enable the protégé to embrace the mentoring process and maximize the benefits of the mentoring relationship" (Searby, 2014, p. 263).

The mentoring mindset survey (see Appendices H and I) is a two-branch instrument, one for the mentor and one for the protégé. A participant answers questions dependent on which function they serve for the study. The questionnaire is designed to gather data either from the viewpoint of the mentor or the protégé. For each branch, the survey is a ten-part questionnaire.

The first portion of the survey instrument asks the demographic question which determines if the study respondent is an adult. For this investigation study, anyone who was 18 years of age or older at the time of the study was considered an adult. The second portion of the study asks the role question: "Is the participant a mentor or a protégé?" This question determines which branch of inquiries the participant will answer, and is dependent upon if the criteria in the third portion of the survey is met. The third portion of the study asks if, in the defining study role, the participant had met with the same person on at least two occasions. If the participant is a mentor, there must have been a meeting with the same protégé on at least two occasions. If the respondent is a protégé, there must have been a meeting with the same mentor on at least two occasions. If not, then the study participant is taken to the end of the study.

Table 4

Summary of Mentoring Mindset Framework

Indicators of the Presence of a Mentoring Mindset	The mentoring mindset of a protégé is …	Indicators of the Absence of a Mentoring Mindset
Takes the initiative [behavior]: Initiates contact with mentor, Self-starter; confident, Takes mentoring seriously, and Intentional; action-oriented.	a construct arising from	*Lacks initiative [behavior]:* Only responds when mentor initiates or when in crisis, Lacks drive and motivation, Just goes through the motions of mentoring, and Wants mentor to tell what to do.
Learning orientation [attitude]: Exhibits curiosity, Asks good questions, Adequately knowledgeable about concepts, content of one's field, Admits to not knowing everything, Seeks & accepts feedback from mentor, and Accepts advice graciously.	those protégé attitudes, behaviors, and competencies that enable the protégé to embrace the mentoring process and	*Lacks a learning orientation [attitude]:* No real curiosity, Wants "quick fix answers," Does not take advantage of opportunities for further learning, "Know it all," Rejects feedback or takes it personally, and Cannot admit weaknesses; stubborn.
Skillful & organized [competency]: In setting goals; has a vision, In organizational matters, In time management; prioritizing, and In seeing the big picture.	maximize the benefits of the mentoring relationship	*Lacks skill and organization [competency]:* In goal setting; lacks vision, Lacks skill and organization in organizational matters, Lacks skill and organization in time management, and Lacks skill in seeing the big picture.
Relational [behavior, competency]: Can build relationships, Knows how to network, Picks up on social cues, Approachable; positive, Keeps lines of communication open with mentor, Active Listener, Can keep confidences, Trusts and can be trusted, and Honest.		*Relational [behavior, competency]:* No attention to building relationships, Avoids opportunities to network, Does not pick up on social cues, Withdrawn, Satisfied with one way communication from the mentor, Talks too much and does not listen well,
Reflective/ *unreflective [attitude, behavior]:* Can self-assess, Learns from mistakes, Articulates reflection out loud, and Transparent; forthcoming.		*Reflective/* *unreflective [attitude, behavior]:* Lack self-knowledge, Inability to learn from mistakes, Cannot articulate reflection, and Withholds sharing.

If the participant qualified as a mentor, then the participant is ushered to the fourth portion of the survey instrument. These survey sections consist of questions about the overall five indicators and sub-indicators of the presence or absence of a mentoring mindset from the viewpoint of the mentor. For the first overall indicator, initiative, there are four related survey questions (1-4) followed by a summary question, query 5. For the second overall indicator, learning orientation, there are five related survey questions (6-10) followed by question, query 11. For the third overall indicator, skillful and organized, there are four (12-15) related survey questions followed by a summary question, query 16. For the fourth overall indicator, relational, there are nine related survey questions (17-25) followed by a summary question, query 26. For the fifth overall indicator, reflective, there are four related survey questions (27-30) followed by a summary question, query 31. Research study participants responded to questions using a five-point Likert-style scale for each of the five main indicators and the summary questions. The five major factor indicator questions were scored on an ordinal scale using the following options: Strongly agree (5), Agree (4), Neither agree or disagree (3), Disagree (2), and Strongly Disagree (1). Summary queries (5, 11, 16, 26, 31) that are respectively tied back to the five main indicators were scored on an ordinal scale using the following options: Extremely Important (5), Important (4), Neither important or unimportant (3), Mostly unimportant (2), and Extremely Unimportant (1).

Open-ended questions were present in the ninth portion of the survey instrument. A set of demographic questions was the tenth portion of the survey instrument. The mentor demographic questions asked were gender, race/ethnicity, country, and institution location by region. Finally, the participant received a notice of thanks for participating in the survey.

If the participant qualified as a protégé, then the same process described for the mentor was repeated, and the participant as protégé answered subsequent questions to the fourth through tenth portions of the survey. These survey sections consisted of questions about the overall five indicators and sub-indicators of the presence or absence of a mentoring mindset from the viewpoint of the protégé (see Table 4). These questions, based on summary questions tied to the five indicators and sub-indicators [questions 5, 11, 16, 26, and 31], compose the fourth through eighth portions of the survey instrument. Research study participants responded to questions using a five-point Likert-style scale for the sub-indicators of each of the five main indicators. Factor indicator questions were scored on an ordinal scale using the following options: Strongly agree (1), Agree (2), Neither agree or disagree (3), Disagree (4), and Strongly Disagree (5). Research participants responded to questions using a five-point Likert-style scale for the summary sub-indicators questions that also tied back to the five main indicators. Factor indicator questions were scored on an ordinal scale using the following options: Extremely Important (1), Important (2), Neither important or unimportant (3), Mostly unimportant (4), and Extremely Unimportant (5). The ninth portion of the survey instrument contains the open-ended questions. The tenth portion of the survey instrument includes a set of demographic questions. The protégé demographic questions asked were gender, race/ethnicity, country, and institution location by region. Finally, the participant received a notice of thanks for participating in the survey.

Data Collection and Coding

Two invitational emails (see Appendices D & E) along with the link to the survey instrument were sent to the email address of 4340 active members of both the AIS Association and The Ph.D. Project. These invitational emails afforded the participants the opportunity to learn about the purpose of the mentoring mindset research. The invitational emails also provided

51

clickable and copy/paste links, and information regarding the benefits of mentoring mindset research. Moreover, the invitational email concisely summarized the associated risks for the research study participants as well as the steps taken to reduce manageable risks, so as to better preserve anonymity and confidentiality for the research study respondents. The research participants were also advised to review the accompanying information letter for supplementary material concerning the mentoring mindset study (see Appendix A). The information document functioned as the Waiver of Documentation of Consent. An invitation reminder email was sent on the 6th and 14th day after the initial email was sent to potential study participants (see Appendices F & G).

The electronic survey was administered using Qualtrics and no personal identifiers were used. After the data collection was complete, all responses were downloaded from Qualtrics directly into the SPSS statistical analysis program and securely stored for computational purposes. Moreover, participation was completely voluntary and participants received reminders about this aspect throughout the survey. There was an option to discontinue participation in the study at any time.

Data Analysis

For Research Question One, a repeated measures ANOVA was used to compare groups (mentor and protégé) and mentoring scales. Also, mean descriptive outcomes were generated. For Research Question Two, a repeated measures ANOVA was used to identify the characteristics important for a mentoring mindset from the viewpoint of the protégé. For Research Question Three, a repeated measures and mixed ANOVA was used to identify the characteristics important for a mentoring mindset from the viewpoint of both the mentor and protégé.

The ANOVA revealed significant differences between mentor and protégé rankings and therefore differences in perceptions of a mentoring mindset. Specifically, there was an interaction between factors as follows: Initiative [1] and Learning Orientation [2], Initiative [1] and Relational [4], Learning Orientation [2] and Skillful and Organized [3], Learning Orientation [2] and Reflective [5], Skillful and Organized [3] and Relational [4], and Relational [4] and Reflective [5] (see Table 9) where F (28.92), p < .001. Tables 10 and 11 explain the mean rankings for mentor and protégés. For mentors, the mean rankings from highest to lowest showed as follows: learning orientation, relational, initiative, reflective, and skill & organization. For protégés, the mean rankings from highest to lowest presented as follows: relational, learning orientation, reflective, initiative, and skill & organization.

A mixed ANOVA revealed significance for all factors for good homogeneity of variance (the variance within each of the mentor and protégé populations is equal). This is an assumption of analysis of variance (ANOVA). Further analysis using mixed ANOVA indicated that protégés found everything more important, especially factors for learning orientation, skillful and organized, relational, and reflective. Table 9 reflects summary information.

After the survey officially ended, all survey responses were gathered using Qualtrics and then securely warehoused in the SPSS statistical analysis program. Each subset of the twenty-seven sub-indicators indicators was averaged to analyze the research respondent data for a presence/absence of a mentoring mindset. For both mentor and protégés this translated into five averages for indicators labeled as follows: 1) takes the initiative/lacks initiative [4], 2) learning orientation/lacks learning orientation [6], 3) skillful & organized/lacks skill and organization [4], 4) relational skills/lacks relational skills [9], and 5) reflective/unreflective for both mentor and protégés [4]. The brackets indicate the associated number of sub-indicators. These sub-indicators

53

were generated using SPSS data reduction procedures. Scaled scores for the twenty-seven sub-indicators resulted in five categories. Also, internal consistency reliability analysis was conducted using Cronbach's Alpha.

For the overall analysis, within subjects, ANOVA performed on summary questions 5, 11, 16, 26, and 31 helped to answer research questions one and two. An ANOVA analysis on the new scaled scores was also performed to compare with the analysis on the summary questions for questions one and two. For research question three there was the question of how mentors and protégés differed and if so on what scale.

Chapter Summary

This Chapter III comprised the introduction, design of the study, protection of participants, sample selection, data collection procedures, instrument development, and data collection and coding. The methods used in this research study concentrated on collecting data from mentors and protégés, as defined in the study. Finally, this chapter described the survey instrument and methods used to analyze the data. Chapter IV examines the results of the statistical analyses from the gathered participant data.

CHAPTER IV: FINDINGS AND RESULTS

Purpose of the Study

The purpose of this study was to examine the characteristics consisting of attitudes, behaviors, and competencies of protégés in a mentoring relationship. The study examined the presence or absence of a protégé mentoring mindset from the mentor's viewpoint. It also examined the presence or absence of a protégé mentoring mindset from the protégé's viewpoint. The mentoring mindset consists of five major categories: 1) takes initiative/lacks initiative [behavior], 2) learning orientation/lacks a learning orientation [attitude], 3) skillful & organized/lacks skill and organization [competency], 4) relational skills/lacks relational skills [behavior, competency], and 5) reflective/unreflective [attitude, behavior].

Research Questions

The following research questions were used in this study:

1. What are the mentoring mindset characteristics of protégés, as identified by mentors?

2. What are the mentoring mindset characteristics of protégés, as identified by protégés?

3. What are the differences, if any, between mentor and protégé mentoring mindset characteristics?

This study had three primary goals: (1) to examine and describe the mentoring mindset characteristics of protégés from the viewpoint of mentors; (2) to examine and describe the

mentoring mindset characteristics of protégés from the viewpoint of protégés; and (3) to assess the differences, if any, between mentor and protégé viewpoints. At present, there is a lack of research addressing the mentoring mindset in protégés from the viewpoint of the mentor. Consequently, there is a need for a full exploration and analysis. By examining the mentoring mindset framework factors on a more in-depth basis, institutions, where mentoring is practiced, are better served. Focusing on the results of this study will provide meaningful data and information to educators and administrators and higher education mentoring programs to understand how mentor and protégé attitudes, behaviors, and competencies align so that adjustments are accomplished during the mentoring process. Importantly, results will aid in educating policy makers as they strive to develop strategy important to mentoring in professional organizations and higher education.

Chapter IV explores the research data analysis results. This chapter will initially begin with a short narrative of the sample characteristics, and then a description of the internal consistency reliability and validity data for the electronic survey used to gather participant data. Subsequently, the sample description is presented. Finally, the quantitative data results from the research analysis is explored. The final part of Chapter IV will present a summary of the study.

Sample Characteristics

The mentor sample for this research study consisted of 161 mentors and 85 protégés who were over the age of 18 years old, while also meeting the criteria of being in a mentoring relationship. If the participant was a mentor, there must have been a meeting with the same protégé on at least two occasions. If the respondent was a protégé, there must have been a meeting with the same mentor on at least two occasions.

The sample characteristics are provided (see Table 5). The overall sample was 246. Some respondents skipped the demographic questions. However, there were 153 participants who identified their gender. There were 98 male participants (64.1%) and 55 female participants (38.5%). Of the 153 participants, 101 (66.0%) identified as a mentor and 52 (34.0%) identified as a protégé. Of the 101 mentors, 66 (65.3%) identified as male and 35 (34.7%) identified as female. Of the 52 protégés 32 (61.5%) identified as male and 20 (38.5%) identified as female.

As for ethnicity, overall there were 153 participants who reported race. There were 65 White participants. Of these, 50 identified as mentor and 15 identified as protégé. There were 41 African American participants. Of these 19 identified as mentor and 22 identified as protégé. There were 25 Asian participants. Of these 17 identified as mentor and 18 identified as protégé. There were 11 Hispanic participants. Of these 8 identified as mentor and 3 identified as protégé. There were 11 classified in the other ethnicity category. Of these 7 identified as mentor and 4 identified as protégé.

As for country of origin, 147 reported on this characteristic. Seventy participants originated from the United States. Of these 45 identified as mentor and 25 identified as protégé. Seventy-seven participants originated from outside the United States. Of these, 52 identified as mentor and 25 identified as protégé. As for institution location, 152 reported on this characteristic. Ninety-seven participants indicated locations in the United States. Of these 65 identified as mentor and 32 identified as protégé. Fifty-five participants indicated locations outside of the United States. Of these 35 identified as mentor and 20 identified as protégé.

Table 5

Participant's Characteristics

	Mentor		Protégé		Overall Sample	
	n	(%)	n	(%)	n	(%)
Gender						
Male	n (66)	65.3%	n (32)	61.5%	n (98)	64.1%
Female	n (35)	34.7%	n (20)	38.5%	n (55)	35.9%
Total	n (101)	100.0%	n (52)	100.0%	n (153)	100.0%
Race						
White	n (50)	49.5%	n (15)	28.8%	n 65)	42.5%
Black	n (19)	18.8%	n (22)	42.3%	n (41)	26.8%
Asian	n (17)	16.9%	n (8)	15.4%	n (25)	16.3%
Hispanic	n (8)	7.9%	n (3)	5.8%	n (11)	7.2%
Other	n (7)	6.9%	n (4)	7.7%	n (11)	7.2%
Total	n (101)	100.0%	n (52)	100.0%	n (153)	100.0%
Country of Origin						
United States	n (45)	46.4%	n (25)	50.0%	n (70)	47.6%
International	n (52)	53.6%	n (25)	50.0%	n (77)	52.4%
Total	n (97)	100.0%	n (50)	100.0%	n (147)	100.0%
Institution Location						
United States	n (65)	65.0%	n (32)	61.5%	n (97)	63.8%
International	n (35)	35.0%	n (20)	38.5%	n (55)	36.2%
Total	n (100)	100.0%	n (52)	100.0%	n (1)	100.0%

N=246 (153 participants completed the survey and demographic sections)

Instrumentation of Reliability and Validity

The survey used for this study was developed from the Mentoring Mindset Framework (Searby, 2014). This framework was used to assess the mentor viewpoint and to evaluate the protégé viewpoint. The unique characteristic of the framework is that it is used to help the protégé consider the viewpoint of the mentor. In other words, what does the mentor want to see in a protégé in terms of a mentoring mindset? Qualified individuals were invited to participate in the pilot study. Those who qualified indicated that they had met at least twice as either a mentor

or protégé. Ultimately, the instrument was pilot tested by five individuals who were

knowledgeable about mentoring. Feedback from these participants was used to develop the

survey instrument into its final form. The final survey was presented in several sections instead

of one section as originally planned. An all at once format was cumbersome and confusing to

some survey participants. This conceptual framework helps to summarize mentors' perceptions

of mentoring mindset indicators for protégés. The internal consistency reliability of the survey

was ascertained using Cronbach's alpha. Results showed a Cronbach's alpha of .895 for the

relational factor, .603 for the learning orientation factor, .717 for the initiative factor, .606 for the

reflective factor, and .726 for skillful and organized factor (see Table 6). Overall, the estimate of

the internal consistency associated with the scores that can be derived from a scale or a

composite score was identified. Reliability is present for the scales in this study because the

alpha scores were mostly acceptable. Next, it is appropriate to commence with analysis of the

aggregated data.

Also, in Table 7 a detailed factor item table shows means and standard deviation

measures. Information for these items was collected through the Qualtrics survey. There were

four questions related to initiative, five questions associated with learning orientation, four items

linked to skillful and organized, nine items pertinent to relational, and four items connected to

reflective. There were 26 items altogether represented in the table of means and standard

deviations. The overall scale means (3.80 and 4.07) and standard deviations (0.522 and 0.438)

for mentor and protégé are shown in Table 7.

Table 6

Means and Cronbach Alphas

	# of Items	Mentor Mean M	Mentor Cronbach (N= 124)	Protégé Mean M	Protégé Cronbach (N=61)	Overall Mean M	Overall Cronbach Alpha
1 Relational	9	3.69	.903	3.93	.848	4.41	.895
2 Learning Orientation	5	4.00	.614	4.20	.539	4.05	.603
3 Initiative	4	3.48	.779	3.87	.559	3.76	.717
4 Reflective	4	3.97	.555	4.22	.578	3.74	.606
5 Skillful and Organized	4	3.58	.711	4.05	.714	3.61	.726

Quantitative Data Findings

In this section, the research study outcomes in relation to the earlier discussed research questions will be explored. To analyze the data, repeated measures ANOVA and mixed ANOVAs were used to identify factor importance and examine the potential differences in opinion between mentor and protégés for the research questions in this study. Finally, the results of the respondent data analyses in relation to the research questions are discussed.

Research Question One was, "What are the mentoring mindset characteristics of protégés, as identified by mentors?", Research Question Two was, "What are the mentoring mindset characteristics of protégés, as identified by protégés?" and Research Question Three was, "What are the differences, if any, between mentor and protégé mentoring mindset characteristics?" To further analyze the data, the 26 items were reduced to 5 main

Table 7

Mentoring Factor Details

Factors and Items	Mentors		Protégés	
1 Initiative	Mean	SD	Mean	SD
Initiates contact with mentor	3.07	1.27	3.11	1.240
Self-starter; confident	3.69	0.997	4.25	0.850
Takes mentoring seriously	4.05	0.795	4.33	0.944
Intentional; action-oriented	3.95	0.844	3.95	1.071
2 Learning Orientation	Mean	SD	Mean	SD
Exhibits curiosity	4.11	0.754	4.27	0.691
Asks good questions	4.07	0.753	4.27	0.715
Adequate knowledge; concepts and one's field	3.67	0.990	4.14	0.681
Admits to not knowing everything	3.93	1.051	3.88	1.052
Seeks & accepts feedback from mentor graciously	4.14	0.792	4.41	0.619
3 Skillful and Organized	Mean	SD	Mean	SD
In setting goals; has a vision	3.74	0.974	4.14	0.782
In organizational matters	3.67	0.943	3.88	0.860
In time management; prioritizing	3.49	1.079	3.83	0.901
In seeing the big picture	3.05	1.016	3.55	1.046
4 Relational	Mean	SD	Mean	SD
Can Build Relationships	4.00	0.805	4.29	0.803
Knows to Network	3.70	0.966	3.95	0.796
Picks up on Social Cues	3.56	0.947	3.86	0.883
Approachable; Positive	4.06	0.797	4.43	0.599
Keeps communication open	4.14	0.746	4.25	0.694
Active Listener	3.98	0.816	4.32	0.575
Can Keep Confidences	3.88	0.803	4.21	0.803
Trusts and can be trusted	4.08	0.784	4.30	0.630
Honest	4.24	0.797	4.39	0.562
5 Reflective	Mean	SD	Mean	SD
Can self-assess	3.41	0.898	4.16	0.781
Learns from Mistakes	3.68	0.809	4.25	0.694
Articulates reflection out loud	3.36	0.922	3.80	0.961
Transparent; Forthcoming	3.87	0.973	3.96	0.934
	Overall Scale Mean	SD	Overall Scale Mean	SD
	3.80	0.522	4.07	0.438

measurements using the mean function in SPSS. The overall component means were used as reported in Table 6.

RQ1-What are the mentoring mindset characteristics of protégés, as identified by mentors?

For Research Question One, "What are the mentoring mindset characteristics of protégés, as identified by mentors?", a repeated measures ANOVA was employed to compare groups (mentor and protégé) and mentoring scales. The Repeated Measures ANOVA was used to analyze the data with statistical significance set at 0.05. The mean descriptive outcomes showed that mentors ranked Learning Orientation [3.995] slightly higher than Relational [3.972]. Initiative [3.691] was ranked third, Reflective [3.581] was ranked fourth, and Skillful and Organized [3.477] was ranked fifth (see Table 8).

RQ2-What are the mentoring mindset characteristics of protégés, as identified by protégés?

For Research Question Two, "What are the mentoring mindset characteristics of protégés, as identified by protégés?", a repeated measures ANOVA was employed to identify the characteristics important for a mentoring mindset from the viewpoint of the protégé. The Repeated Measures ANOVA was used to analyze the data with statistical significance set at 0.05. The ANOVA helped compare groups (mentor and protégé) and mentoring scales. The mean descriptive outcomes showed that protégés ranked Relational [4.222] slightly higher than Learning Orientation [4.196]. Reflective [4.045] was ranked third, Initiative [3.933] was ranked fourth, and Skillful and Organized [3.866] was ranked fifth (see Table 8).

RQ3-What are the differences, if any, between mentor and protégé mentoring mindset characteristics?

For Research Question Three, "What are the differences, if any, between mentor and protégé mentoring mindset characteristics?" a repeated measures and mixed ANOVA was employed to identify the characteristics important for a mentoring mindset from the viewpoint of both the mentor and protégé. The Repeated Measures mixed ANOVA was used to analyze the data with statistical significance set at 0.05. The ANOVA helped compare groups (mentor and protégé) and mentoring scales. The mean descriptive outcomes showed that overall the mentor and protégés ranked Relational [4.097] and Learning Orientation just about equally [4.096]. Reflective [3.813] and Initiative [3.812] ranked just about equally also. Skillful and Organized [3.672] was ranked fifth (see Table 8).

The mixed ANOVA revealed significant differences between mentor and protégé rankings and therefore differences in perceptions of a mentoring mindset. Specifically, there is an interaction between factors as follows: Initiative [1] and Learning Orientation [2], Initiative [1] and Relational [4], Learning Orientation [2] and Skillful and Organized [3], Learning Orientation [2] and Reflective [5], Skillful and Organized [3] and Relational [4], and Relational [4] and Reflective [5] (see Table 9) where F (28.92), p < .001. Tables 10 and 11 explain the mean rankings for mentor and protégés. For mentors, the mean rankings from highest to lowest showed as follows: learning orientation, relational, initiative, reflective, and skill & organization. For protégés, the mean rankings from highest to lowest presented as follows: relational, learning orientation, reflective, initiative, and skill & organization.

A mixed ANOVA revealed significance for all factors for good homogeneity of variance. Further analysis using mixed ANOVA indicated that protégés found everything more important,

especially factors for learning orientation, skillful and organized, relational, and reflective. Table 9 reflects summary information.

Table 8

Mentors and Protégé Means and Deviations

	Initiative	Learning	Skillful	Relational	Reflective
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Mentor	3.691 (0.789)	3.994 (0.556)	3.478 (0.746)	3.972 (0.617)	3.581 (0.591)
Protégé	3.933 (0.678)	4.196 (0.465)	3.866 (0.667)	4.222 (0.479)	4.045 (0.564)
Overall Sample	167	167	167	167	167

The mixed ANOVA results in Table 9 show three significant effects. First, there is an overall main effect for group. The mentors and protégés differed on the average of all five mentoring scales. This overall effect yielded an F ratio of $F(165) = 13.78$, $p < .001$. Second, there was an overall effect for mentoring factors, there were differences among the five factors for the overall sample. This overall effect yielded an F ratio of $F(165) = 28.92$, $p < .001$. Third, there was an important interaction effect. There is an indication that the interaction differences among the five factors may be different for each group (mentor and protégé).

Table 9

Mixed ANOVA

	MS	df	F	Sig
Between Subjects				
Group (Mentor and Protégé)	17.789	1	13.781	< .001
Error	1.291	165		
Within Subjects				
Mentoring Factors	5.376	4	28.916	< .001
MFX Group	.463	4	2.488	.042
Error	.186	660		

Figure 4 is a graph of the interaction between mentors and protégé ratings. The differences among the five factors are different for the mentor and protégé groups. Also, a

comparison of the two groups for each of the five factors showed differences. On the mentoring

scale protégés ranked each factor higher than did mentors.

Estimated Marginal Means of MEASURE_1

Q01 - Are you a mentor or mentee at your respective institution?
- Mentor
- Protégé
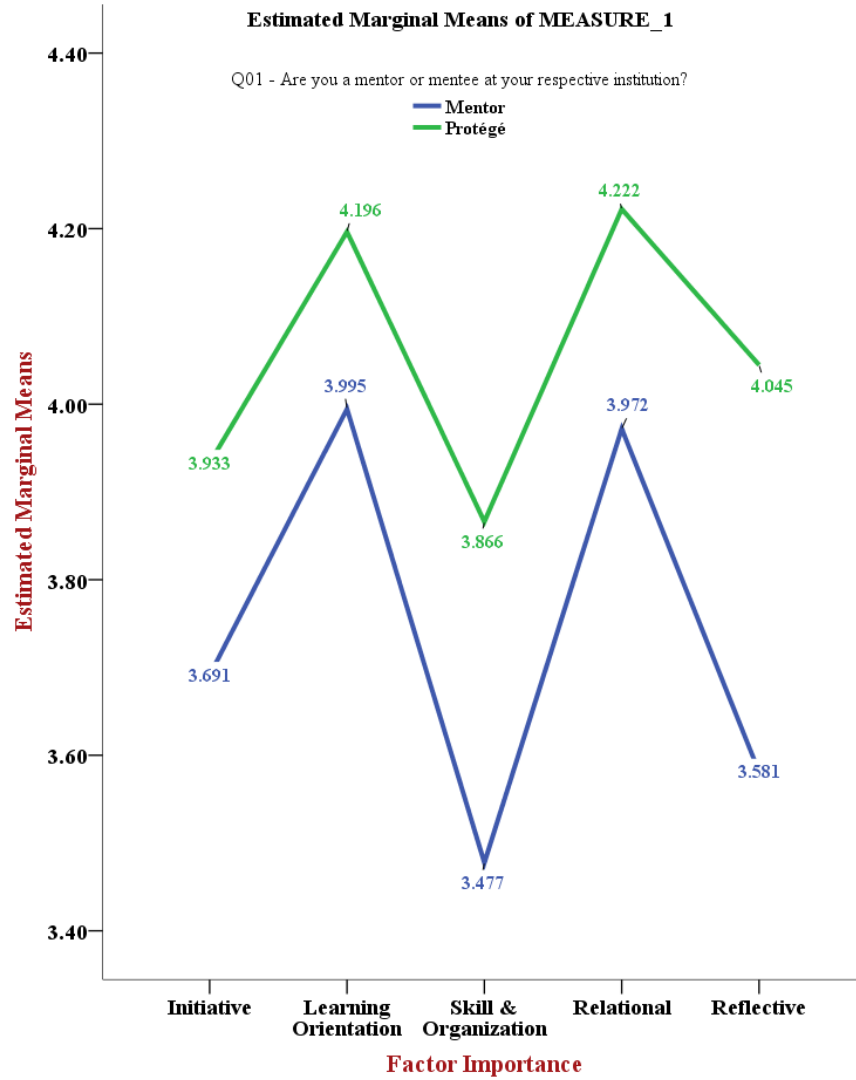
Figure 4. Interaction – Differences among five factors by group (Mentors and Protégés)

Simple Effects Analysis by Group

To further examine the nature of the interaction effect, analyses of the simple effects

levels were performed. Specifically, the five-mentoring factor means were compared for each

group and the two groups were compared on each mentoring factor. At the simple effects level,

repeated measures show an F ratio of $F(1, 110) = 32.159$, $p < .001$ for research question one. At

the simple effects level, repeated measures show an F ratio of $F(1, 55) = 7.401$, $p < .001$ for

research question two. This is depicted in Table 10 and Table 11, respectively. For mentors, the

mean rankings from highest to lowest showed as follows: learning orientation, relational,

initiative, reflective, and skill & organization. For protégés, the mean rankings from highest to

lowest presented as follows: relational, learning orientation, reflective, initiative, and skill &

organization. In Table 12 pairwise comparisons determine which factors differ from each other.

Table 10

Research Question One Repeated Measures

	Initiative	Learning	Skill & Org	Relational	Reflective		
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	F	Sig.
Rank	Rank 3	Rank 1	Rank 5	Rank 2	Rank 4		
Protégés	3.691 (0.789)	3.994 (0.556)	3.478 (0.746)	3.972 (0.617)	3.581 (0.591)	32.159	<.001

Table 11

Research Question Two Repeated Measures

	Initiative	Learning	Skill & Org	Relational	Reflective		
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	F	Sig.
Rank	Rank 4	Rank 2	Rank 5	Rank 1	Rank 3		
Protégés	3.933 (0.678)	4.196 (0.465)	3.866 (0.667)	4.222 (0.479)	4.045 (0.564)	7.401	<.001

The pairwise comparisons for mentors in Table 12 show that a pairwise comparison

revealed significance between seven sets of factors. The table reflects mentor significance for the

following factors: Factor 1 (initiative) and Factor 2 (learning orientation), Factor 1 (initiative)

and Factor 3 (skillful & organized), Factor 1 (initiative) and Factor 4 (relational), Factor 2

(learning orientation) and Factor 3 (skillful & organized), Factor 2 (learning orientation) and

Factor 5 (reflective), Factor 3 (skillful & organized) and Factor 4 (relational), and Factor 4

(relational) and Factor 5 (reflective). The pairwise comparisons for protégés in Table 12 show

that a pairwise comparison revealed significance between three sets of factors. The table reflects protégé significance for the following factors: Factor 1 (initiative) and Factor 2 (learning orientation), Factor 2 (learning orientation) and Factor 3 (skillful & organized), and Factor 3 (skillful & organized) and Factor 4 (relational).

In Table 13 the mentor group was associated with factor importance ratings or mentoring scales. To test the hypothesis that the mentors and protégés were associated with statistically significantly different factor importance ratings or mentoring scales, an independent samples t-test was performed. There were statistically significant differences on all but the "initiative" mentoring factor. Protégés means were higher for all factors.

Table 12

Significant Differences as Shown – Pairwise Comparisons by Group

Mentors					
	Learning Orientation (3.994)	Relational (3.972)	Initiative (3.691)	Reflective (3.581)	Skillful and Organized (3.478)
Learning Orientation (3.994)	X				
Relational (3.972)	.023	X			
Initiative (3.691)	.303***	.281***	X		
Reflective (3.581)	.414***	.391***	.11	X	
Skillful and Organized (3.478)	.517***	.494***	.214*	.104	X

*p < .05, **p < .01, ***p <.001

Protégés					
	Relational (4.222)	Learning Orientation (4.196)	Reflective (4.045)	Initiative (3.933)	Skillful and Organized (3.866)
Relational (4.222)	X				
Learning Orientation (4.196)	.026	X			
Reflective (4.045)	.178	.152	X		
Initiative (3.933)	.289	.263*	.112	X	
Skillful and Organized (3.866)	.356**	.33***	.179	.067	X

*p < .05, **p < .01, ***p <.001

Table 13

Group Means, Standard Deviations, T-Tests, and P values

	Mentor			Protégé			
Cohen's d = .56	Mean (SD)	t	Effect	Mean (SD)	t	Effect	Sig.
1 Initiative	3.691 (0.789)	1.96	.14	3.933 (0.678)	1.88	.20	.052
2 Learning Orientation	3.994 0.556)	2.34	.35	4.196 (0.465)	2.54	.27	.021
3 Skillful & Organized	3.478 (0.746)	3.29	.43	3.866 (0.667)	3.16	.31	.001
4 Relational	3.972 (0.617)	2.66	.28	4.222 (0.479)	2.75	.32	.009
5 Reflective	3.581 (0.591)	4.86	.37	4.045 (0.564)	4.86	.04	.000

Chapter Summary

This chapter explored the results of the statistical analyses from the collection of respondent data. When Repeated Measure ANOVA assessments were performed to examine the potential differences based on mentor, protégé, gender, race, country or origin, and institution location, there were some significant relationships. Chapter V discusses the conclusions of this research study in detail and at the same time also expounds on the implications for professional setting and institutions of higher learning. Chapter V will also examine areas for further research and summarize the study.

CHAPTER V: IMPLICATIONS AND RECOMMENDATIONS FOR FUTURE STUDY

Purpose of the Study

The purpose of this study was to examine the characteristics consisting of attitudes, behaviors, and competencies of protégés in a mentoring relationship. The study examined the presence or absence of a protégé mentoring mindset from the mentor's viewpoint. It also examined the presence or absence of a protégé mentoring mindset from the protégé's viewpoint. The mentoring mindset consists of five major categories: 1) takes initiative/lacks initiative [behavior], 2) learning orientation/lacks a learning orientation [attitude], 3) skillful & organized/lacks skill and organization [competency], 4) relational skills/lacks relational skills [behavior, competency], and 5) reflective/unreflective [attitude, behavior].

Research Questions

The following research questions were used in this study:

1. What are the mentoring mindset characteristics of protégés, as identified by mentors?

2. What are the mentoring mindset characteristics of protégés, as identified by protégés?

3. What are the differences, if any, between mentor and protégé mentoring mindset characteristics?

This study had three primary goals: (1) to examine and describe the mentoring mindset characteristics of protégés from the viewpoint of mentors; (2) to examine and describe the mentoring mindset characteristics of protégés from the viewpoint of protégés; and (3) to assess the differences, if any, between mentor and protégé viewpoints. At present, there is a lack of

research addressing the mentoring mindset in protégés from the viewpoint of the mentor. Consequently, there is a need for a full exploration and analysis. By examining the mentoring mindset framework factors on a more in-depth basis, institutions, where mentoring is practiced, are better served. Focusing on the results of this study will provide meaningful data and information to educators and administrators and higher education mentoring programs to understand how mentor and protégé attitudes, behaviors, and competencies align so that adjustments are accomplished during the mentoring process. Importantly, results will aid in educating policy makers as they strive to develop strategy important to mentoring in professional organizations and higher education.

Chapter V explores the implications and recommendations. This chapter will initially begin with an implication of the findings and then a discussion for recommendations for further research.

Implications

The sample for this study was based on the mentoring relationship. Either the participant qualified as a mentor or protégé. Designation of this role was dependent on whether the participant had met with a protégé on at least two occasions to qualify as mentor or met with a mentor on at least two occasions to qualify as protégé. A participant who met the required number of meetings was deemed as a mentor or protégé for the purposes of this study (Searby, 2014). The likelihood that the mentor and protégé who met a minimum two times together showed strongly that a mentoring relationship existed. Also, there is the implication that mentoring is a reciprocal two-way give and take multidimensional relationship. The relationship is give and take in that participants expect to benefit from participation in the relationship through mutual identification (Eby & Lockwood, 2005). Also, the relationship is

multidimensional in that surface attributes are not the major criteria upon which protégés select

mentors. Instead attitudes, behaviors, and competencies are used in finding and cementing a

productive relationship (Searby, 2014). Importantly, it is what is happening internally for both

the mentor and protégé that counts as the relationship is developed and continuously measured.

Generally, informal mentoring and formal mentoring achieve similar goals and desired

outcomes but do so differently (Crawford, 2011. Methods differ along the lines of prominence

and time interval (Janssen, Vuuren, & Jong, 2015). For example, informal mentoring is less

visible than formal mentroing. Further, formal mentoring is usually conducted with definite time

constraints while informal mentoring is not conducted with time limitations. Also, informal

mentoring and formal metoring are essentially regarded differently (Baugh & Fagenson, 2007).

Since time restraints affect the formal mentoring process, it tends to be more visible since

ceratin goals must be achieved during a prededetermined period. Inversely, informal mentoring

usually thrives for a longer period usually, therefore, oftentimes is less visible. As a result,

informal mentoring lends itself to a different level of intensity (Ragins & Cotton, 2007) and

different initiation procedures (Blake-Beard, O'Neil, & McGowan, 2007). For example, the

informal mentoring attraction of alike people tends to be a motivating factor for mentor and

protégé to connect and decide to work together (Baker, 2015; Vance & Nickitas, 2014). For

formal mentoring it is not unusual for protégés and mentors to complete paperwork to facilitate a

match between mentor and protégé, however, such activites should be minimal (Rowley, 1999).

Since informal mentoring is less visible it tends to last longer. This visibility factor

possibly plays a factor in these types of relationships extending through to personal growth

(Ragins & Cotton, 1999). Although the relationship may begin with the goal of professional

development, the relationship could possibly continue for a sustained period of time (Rose,

Rukstalis, & Schuckit, 2005). Further, the fact that a time limitation is not enforced upon informal mentoring may essentially play a factor in its effectiveness.

Some of the direct quotes from survey participants shed light on mentoring from the viewpoint of the mentor. For example, Levinson's 1978 model assumes that human development continues throughout a lifetime and does not end in adolescence. Likewise, mentoring relationships can also continue throughout a lifetime. One of the mentor participants reflected this idea as follows when responding to an open-ended question,

> *The fact that I will always be there for him.*

The sample for this research study consisted of college professor mentors and graduate student protégés. The AIS Association and the PhD Project were chosen based on their diverse professor and student populations. In addition to a central North American membership, there was also a strong international membership presence. Rose (2005) reported that there were group distinctions among international graduate students' concepts with regard to an ideal mentor. A study was conducted involving Ph.D. students using citizenship, academic discipline, stage of persistence, age, gender, and preferences for three styles of mentoring. Conclusions indicated that graduate students' assessments of the ideal mentor were informed somewhat by major socio-cultural factors, but also indicated that individual differences may play a greater role. And according to Andrae (2006), international graduation rates are comparable to those of the total student population in the United States.

Bowen and Rudenstein (1992) reported that 40-60% of doctoral students who matriculated into graduate school did not finish. Also, according to Cassuto (2013), doctoral attrition rates remain at a disturbing 50%. These statistics are tied to the mentoring relationship between the doctoral student protégé and faculty mentor (Zhao, Golde, McCormick, 2007).

Within the STEM areas, the graduation rates are also lower than expected. Anderson and Kim (2006) reported that despite the fact that sizable percentages of Latino and Latina (22.7%) and African-American (18.6%) STEM began college in 1995, only 7% of the bachelor's degrees were earned by each of these two groups (Anderson & Kim, 2006). As a result, it appears it may be a lack of mentoring at the undergraduate level for underrepresented students may carry over to graduate students. Further implications to remedy this challenge might be to combine formal and informal mentoring for students to enhance opportunities to complete and graduate both at the undergraduate and graduate levels (Holt, Markova, Dhaenens, Marler, & Heilmann 2016).

For Research Question One, "What are the mentoring mindset characteristics of protégés, as identified by mentors?", the results indicated that mentors believed that protégés possessed a mentoring mindset. Mentors especially desired protégés that possessed a strong learning orientation. Protégés who were critical thinkers open to constructive criticism who considered others point of view were highly valued. These characteristics of the mentoring mindset were reinforced in Carter's (2012) study.

Mentors also valued protégés who were personable, able to blend in with not only mentors but also institution faculty. Mentors wanted protégés who were able to present well at conferences and important professional gatherings. These skills that mentors saw in protégés were collaborative work habits that prepared protégés for future academic pursuits. These characteristics of the mentoring mindset were also supported by Carter (2012).

Mentors were interested in protégés that take the initiative. According to Kim et al. (2015), socialization into academia is one of the keys to success and cannot be overlooked. Given the importance of initiative, protégés should reach out to mentors on some occasions first and not only in times of crisis. It is also imperative that protégés reach out to those outside their

university settings in pursuit of research projects. Therefore, it is essential that protégés demonstrate initiative at conferences and other professional gatherings and functions.

Other participants articulated Zachary's sentiment (2011) that effective learning relationships can develop into traveling together and far,

> *Realization by the mentee that he/she does not know anything, neither does the mentor, but the mentor has more experience than the mentee.*
>
> *The mentee must keep an open mind. EVERYTHING can be discussed and NOTHING is closed to discussion.*
>
> *The ability to interpret and learn from the experiences of the mentor and rightly apply their instruction and embody their experiences in their own life.*
>
> *Frankness and trust.*

For Research Question Two, "What are the mentoring mindset characteristics of protégés, as identified by protégés?", the results indicated that protégés believed they possessed a mentoring mindset. Protégés especially consider their relationship with their mentor as expressly important for developmental purposes. Protégés see their mentoring relationship as the typical one described by Kerry (2014) as distinctive support offered by more experienced individuals to novices. Results from this study found that protégés considered themselves exceptionally relational, especially since protégés saw their success as hinged on how much they could integrate into the academic sphere with the help of their mentors.

Protégés identified their learning orientation as a key ingredient for success. They understood that mentors wanted relationships with protégés that possessed relevant skill sets. This finding was also supported by Carter (2012). Given this, it is incumbent upon protégés to

work on projects with mentors that protégés can provide input on and ensure that the projects are completed timely or that are moved along at an acceptable pace.

Protégés have identified that reflection is crucial in the mentoring relationship with their mentor. Protégés spend time reviewing written comments from mentors as well as reflecting on anything spoken or implied. Protégés understand that input from multiple mentors works to their advantage rather than against (Kram, 2007; Nyquist & Woodford, 2000). Protégés stored import in the idea that they should meet regularly with mentors (Nyquist & Woodford, 2000).

For Research Question Three, "What are the differences, if any, between mentor and protégé mentoring mindset characteristics?", the results indicated that there were significant differences between mentor and protégé viewpoints. Most notably protégés ranked all of the five mentoring mindset characteristics higher in the survey ratings than did mentors. Mentors ranked the factors as follows: learning orientation, relational, initiative, reflective, and skillful and organized. Protégés ranked the factors as follows: relational, learning orientation, reflective, initiative, and skillful and organized.

Both mentors and protégés ranked skillful and organized last in importance. This was surprising given the technology infused world that we live in and the importance placed on skill sets emphasized throughout school for students. Perhaps, it could be that upon acceptance into Ph.D. graduate school, proteges are assumed to possess the requisite skillsets necessary to function properly. Ultimately, skill sets may be situation dependent and linked to the degree pursued. In the final analysis, mentors and protégés alike wish for better processes to maximize their respective potentials. With this in mind the results of this study indicate acceptance of the factors as a guide to improving mentoring relationships.

Kram (2007) described how protégés benefited from diverse developmental networks and participant's comments from this study reinforced this concept as follows,

Ready to absorb all knowledge.

Relationship orientation and willingness to learn.

The urge to pass my experience so that the mentee avoids making mistakes I learned from.

Some of the direct quotes from the participants shed light on mentoring from the viewpoint of the mentor when it came to an absence of a mentoring mindset. Mentor participants reflected this idea as follows when responding to open-ended question two, "What kinds of indicators do mentees/protégés display if they do not possess a mentoring mindset?"

-Stubborn, self-important, looking for the easiest solution, egotistical, fast thinking rather than reflective thinking, preference for expressing their own ideas over listening and creating dialogue, stock with preconceived notions and pre-established expertise that prevent double-loop learning.

-Don't listen or follow advice, can't take a concept I give them and then apply it.

-No follow through on required actions. Designs own path and refuses to veer from it.

- Do things their own way. Refuse to listen. Rely too heavily on the mentor for emotional strength in addition to academic direction.

- Lack of focus during meetings and repeat of past behaviors that don't lead to success.

- Lack of drive and motivation.

- A mentee without a mentoring mindset is always a little too busy to interact in a

deliberate way. They seek advice from everyone and do not attempt to build an

informal as well as formal relationship. They lack the ability to share their ups

and downs with their mentor.

- Defensiveness to critique or new ideas.

- Disappears for a large portion of the semester and non-responsive (or even

hostile) when we do meet are indicators that a mentee does not possess a

mentoring mindset.

- A narrow focus on immediate tasks.

These comments supported Carter's (2012) findings related to what mentors would like to see in protégés; and they were: 1) Mentors desired protégés who possessed prerequisite knowledge and skills, (2) Mentors wanted protégés who demonstrated critical thinking and were open to constructive criticism and who could see viewpoints from different perspectives, 3) Mentors sought to interact with personable doctoral candidates, 4) Mentors preferred protégés with drive, determination, motivation, and a willingness to attempt new things were important to mentors, and 5) Mentors were interested in protégés who used advice to meet goals. Even most important was the ability to develop a learning relationship and transform from a doctoral student into a doctoral candidate to eventually graduate. Included in this capability from the mentor perspective was the self-motivated capability to succeed. Mentor study participants articulated these protégé dimensions in various ways as follows,

Open attitude and willingness to learn.

A desire to learn and ambition.

Drive, ambition, curiosity, excitement about learning, excitement about

doing research, ability to express and share and discuss ideas.

Inquisitive self-starters who operate independently until blocked or need resources.

Good listeners, pick up on approaches to research and then apply to their research.

Having a clear picture of their goals, how I can help them achieve those goals and what I can't / won't do (i.e. the work for them), and what they need to do along the process of achieving their goals.

Strong desire to learn, being inquisitive and open and positive minded toward mentor's feedback.

Motivation to succeed coupled with a willingness to listen and take advice to heart.

Willingness to learn. Humility. Sharing the feeling that we can always help each other.

Recommendations for Further Research

The researcher recommends that this research study be replicated using other organizational databases. Many people in the academy belong to organizations with large populations that are available for research and inquiry. Future research studies should include both undergraduate and graduate populations since mentoring is important at both these levels. Such research could better assist colleges and universities in identifying the subtleties that exist in moving into a more premier class of service to both faculty and students.

This research study was focused on business students at the doctoral level. Future studies could benefit other disciplines as well. A future study that expands on mentor and protégé

experiences via interviews would add depth to the conversation about the mentoring mindset. Additionally, it would be of interest to replicate this research study outside of this country in Asian, European, and Middle Eastern settings where Americans do not dominate. It would be of interest to compare the differing results, if any. The differences in cultures are important in discerning where to place more or less emphasis on each mentoring mindset indicator; however, it is just as important for the mentor to calculate which attitudes, behaviors, and competencies should be developed to assist in enhancing the protégé and then making sure the protégé is on the somewhere on the same page as the mentor. Finally, ultimately, the mentor should impress upon the protégé the importance of viewing the mentoring relationship from the eyes of the mentor. By forming this habit in the protégé a better relationship will possibly develop.

Doctoral level education programs not only will benefit from this study but also education policy makers. Policy makers, in turn, through better mentoring programs based on the conceptual mentoring mindset framework could improve graduation rates in higher education (Johnson, 2015; Olin, 2016).

Practitioners in industry may find the results of this research helpful because mentoring has long been a staple in the business world. This study presents an opportunity to advance mentoring to yet another level for practitioners. Mentors will find this study applicable in that they are able to communicate to not only protégés their preferences in the relationship but also their preferences to the organization to which the mentor and protégé belong. As a result, there is integral and corresponding benefit from this research project for the organization, mentor, and protégé.

Based upon conversations throughout some mentoring association conferences, there was a realization that differences between mentoring mindsets may be due to the influences of and where they were in their careers. According to Levinson (1978), human development continues

throughout life. Therefore, mentoring to accommodate development should continue throughout

adulthood. This should especially be the case when pursuing a doctoral degree given the high

attrition rates. Effective methodologies used during adolescence should be applied throughout

life (Butler, Evans, Brooks, Williams, & Bailey, 2013). Supplemental collaborative support

systems such as quality time spent together and special efforts in assisting the protégé in

negotiating life's obstacles must be practiced for mentoring to be effective (Keating, Tomishima,

Foster, & Alessandri, 2002). Research indicated mentoring is more successful when combined

with other tools such as advocating and protecting (Butler et al., 2002; Sambunjak, Straus, &

Marusic 2010).

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Appendix A – Institutional Information Letter

INFORMATION LETTER
For a Research Study entitled:
"Examination of Mentoring Mindsets of Faculty (Mentors) and Graduate Students (Protégé/Mentee): An Exploratory Study of a Mentoring Framework"

You are invited to participate in a research study to learn more about the mentoring mindset of protégé/mentees that can benefit most as a result of mentoring. The study is being conducted by Keely Britton, a graduate student, under the direction of Dr. Maria Witte, Professor in the Auburn University Department of Educational Foundations, Leadership and Technology. You are invited to participate because you are or have been involved in a mentoring relationship and are age 18 or older.

What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete a survey. Your total time commitment will be approximately ten minutes.

Are there any risks or discomforts? The risks that will be associated with participation in this study are breach of confidentiality if you provide your name and email address in the sign-up form in the last question of the survey. To minimize these risks, your personal information will be deleted after the survey closes and all responses will be anonymous.

Are there any benefits to yourself or others? If you participate in this study, you can expect to provide meaningful data and information to educators and administrators of higher education mentoring programs. We cannot promise you that you will receive any or all of the benefits described.

Will you receive compensation for participating? To thank you for your time you will be offered the opportunity to receive the study results once completed. Contact Keely Britton by phone at (334) 246-2685 or by e-mail at kkb0012@auburn.edu.

Are there any costs? If you decide to participate, you will incur no monetary expenditure.

If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it identifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the Department of Educational Foundations, Leadership and Technology or any other organization.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by ensuring that the web server does not collect e-mail or IP addresses. Qualtrics uses SSL for secure collection and transmission of data and responses are transmitted over a secure, encrypted connection. Information collected through your participation may be used to fulfill an educational requirement, published in scholarly journals, or presented at professional meetings.

If you have questions about this study, please contact Keely Britton by phone at (334) 246-2685, by e-mail at kkb0012@auburn.edu, or by regular mail – Dr. Maria Witte, Department of Educational Foundations, Leadership and Technology, 4036 Haley Center, Auburn University, AL 36849.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334) 844-5966 or e-mail at IRBadmin@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW TO CONTINUE. YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

Keely Britton _____ July 16, 2015
Investigator   Date

The Auburn University Institutional Review Board has approved this document for use from August 29, 2015 to August 28, 2016. Protocol #15-323 EP 1508.

Are you 18 years or older?

○ YES

○ NO

Save & Continue

Amanda Bureau

Reply|
Mon 6/29/2015, 9:55 AM
You
0 AMCIS

Keely,
Hello! Congratulations on passing your comps.

You can utilize the AIS Faculty Directory to search for people. Since you are a current member, you can export the search results to see more information, including member type (academic vs. doctoral student) and email addresses. The export also includes membership expiration date so you can see who the current members are (non-members can have a basic free listing in the directory). You can learn more about the faculty directory here: http://aisnet.org/?FacultyDirectory

Good luck with your research.

Thank you,
Amanda

It is our pleasure to serve you. Click here to tell us how we did.

AMANDA S. BUREAU, CAE, CVA
Membership Director
35 Broad Street, Suite 917
Atlanta, GA. 30303, USA
amanda@aisnet.org
Skype: Amanda_Bureau
+1 317.328.4636
http://start.aisnet.org

Join us at AMCIS 2015 in Puerto Rico and ICIS 2015 in Ft. Worth!

Appendix C – PhD Project Approval of Research Project

Myrna Varner
6/24/ 15 8:41 AM

Hi Keely,

We have over 1274 faculty members 1n our database If you have a link, we will be more than happy to distribute to the members. You can draft an email explaining the survey along with the link and we will share.

Myrna

Myrna Varner
Senior Associate
Member Relations and Communications
The PhD Project
3 Chestnut Ridge Road, Montvale, NJ 07645
phone. (201) 307-76281 fax: (201) 643-3198
myrnavarner@kpmg.com

AMCIS
Subject: PhD Mentoring Mindset Framework Data Collection

Good Evening Everyone,

This message is from Keely Britton, an AIS doctoral student conducting research. This data collection is for dissertation purposes and is being collected to test the mentoring mindset framework.

Are you a Mentor or Mentee 19 years of age or older?
Do you want to contribute and learn more about the mentoring mindset that it takes to earn a PhD?

If you answered YES to these questions, please participate in a mentoring mindset research study. Click on the link below to get started. Or paste the URL into your Internet browser.

Additionally, there is also a qualitative part of the study so I would like for you to sign up for the short interview that expands on the survey questions. Do this by completing the sign-up form at the end of the survey. All that is needed is your name and email address. The contact information is collected in separate databases. Therefore, your survey responses remain anonymous. I will contact you for a time convenient to you. The interview will be conducted by phone.

Follow this link to the Survey:
Take the Survey

Or copy and paste the URL below into your internet browser:
khttps://auburn.qualtrics.com/SE??Q_DOLL=eKdViH1CBVLB9H_40lKv5jU4EJXULH_MLRP_5hmesiIvvq
dVz&Q_CHL=email

Thanks So Much in Advance, Keely

RE: Survey for Mentoring Mindset in PhD Students

Keely Britton

Reply|

Sun 11/8/2015, 12:58 PM

You;

brittonkeely@hotmail.com

Sent Items

Hi Myrna, Here is the email to forward to the membership:

Everyone, (survey link - https://auburn.qualtrics.com/SE/??SID=SV_6hDldnW8kNYGuDH)

Are you a Mentor or Mentee 19 years of age or older?

Do you want to contribute and learn more about the mentoring mindset that it takes to earn a PhD?

If you answered YES to these questions, please participate in a mentoring mindset research study.

The purpose of this research study is to examine the attitudes, behaviors, and competencies existent in protégé/mentees that enable the protégé/mentees to embrace the mentoring process and maximize the benefits of the mentoring relationship. The result of this study will provide meaningful data and information to educators and administrators of higher education mentoring programs in order to understand how mentor and protégé/mentee attitudes and behaviors align so that adjustments can be accomplished.

Additionally, this is also a qualitative part of the study so I would like for you to sign up for the short interview that expands on the survey questions. Do this by completing the sign-up form at the end of the survey. All I need is your name and email address. The contact information is collected in separate databases. Therefore, your survey responses remain anonymous. I will contact you for a time convenient to you. The interview will be conducted by phone.

Thanks So Much, Keely Britton

https://auburn.qualtrics.com/SE/??SID=SV_6hDldnW8kNYGuDH

Appendix F – AIS Email Reminder

Good Evening Everyone,

I apologize if you have gotten this email before. Please ignore it if you have already taken the survey and interviewed.

Please bear with me as the holidays approach! I have almost met my quota. I need only a few more survey responses and interviews.

This message is from Keely Britton, an AIS doctoral student conducting research. This data collection is for dissertation purposes and is being collected to test the mentoring mindset framework.

This is a reminder email. If you have not already taken the survey please do so as soon as possible. If you have already started you may pick up where you left off!

Are you a Mentor or Mentee 19 years of age or older?
Do you want to contribute and learn more about the mentoring mindset that it takes to earn a PhD?

If you answered YES to these questions, please participate in a mentoring mindset research study.
Click on the link below to get started. Or paste the URL into your Internet browser.

Additionally, there is also a qualitative part of the study so I would like for you to sign up for the short interview that expands on the survey questions. Do this by completing the sign-up form at the end of the survey. All that is needed is your name and email address. The contact information is collected in separate databases. Therefore, your survey responses remain anonymous. I will contact you for a time convenient to you. The interview will be conducted by phone.

Follow this link to the Survey:
${l://SurveyLink?d=Take the Survey}

Or copy and paste the URL below into your internet browser:
${l://SurveyURL}

Thanks So Much in Advance, Keely

PhD Mentoring Mindset Framework Dissertation Data Collection

Keely Britton

Reply|

Tue 12/15/2015, 7:35 AM

Myrna Varner (myrnavarner@kpmg.com);

alexandrabush@kpmg.com

Hi Myrna and Alexandra, Here is the explanation and the link to share for the 6th and 12th study day. Please distribute as soon as you can. Thanks, Keely

Good Evening Everyone,

This message is from Keely Britton, a PhD Project doctoral student conducting research. This data collection is for dissertation purposes and is being collected to test the mentoring mindset framework

Are you a Mentor or Mentee 19 years of age or older?
Do you want to contribute and learn more about the mentoring mindset that it takes to earn a PhD?

If you answered YES to these questions, please participate in a mentoring mindset research study.
Click on the link below to get started. Or paste the URL into your Internet browser.

Additionally, there is also a qualitative part of the study so I would like for you to sign up for the short interview that expands on the survey questions. Do this by completing the sign-up form at the end of the survey. All that is needed is your name and email address. The contact information is collected in separate databases. Therefore, your survey responses remain anonymous. I will contact you for a time convenient to you. The interview will be conducted by phone.

If there are any questions or comments please email Keely at KeelyBrittonResearchP@hotmail.com**and** kkb0012@auburn.edu

http://auburn.qualtrics.com/SE/??SID=SV_6hDldnW8kNYGuDH
Thanks So Much In Advance, Keely

Appendix H – Electronic Survey – Mentor Branch

Are you 18 years or older?

○ YES

○ NO

AUBURN UNIVERSITY

Mentors and Protégé/Mentees: The definition of a mentoring mindset constitutes attitudes, behaviors, and competencies that enable the protégé to embrace the mentoring process and maximize the benefits of the mentoring relationship.

Are you a mentor or mentee at your respective institution?

Mentor ○

Mentee ○

BACK | Save & Continue

Survey Completion
0% 100%

Survey Powered By Qualtrics

AUBURN UNIVERSITY

As a mentor at your institution have you met with and counseled the same protégé/mentees on at least two occasions?

○ Yes

○ No

BACK | Save & Continue

Survey Completion
0% 100%

Survey Powered By Qualtrics

APPENDIX H (continued)

Electronic Survey - Mentor Branch

Electronic Survey - Mentor Branch

APPENDIX H (continued)

Electronic Survey - Mentor Branch

AUBURN UNIVERSITY

Reflective Factors: To what degree do you agree or disagree?

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
27 My mentee can self-assess	○	○	○	○	○
28 My mentee learns from mistakes	○	○	○	○	○
29 My mentee articulates reflection out loud	○	○	○	○	○
30 My mentee is ambiguous; uncommunicative	○	○	○	○	○

Importance of Reflective Factors

	Extremely Important	Important	Neither Important or Unimportant	Mostly Unimportant	Extremely Unimportant
31 How important are these factors in contributing to my effectiveness with the mentoring relationship?	○	○	○	○	○

BACK | Save & Continue

Survey Completion
0% ▮▮▮▮ 100%

Survey Powered By Qualtrics

Electronic Survey - Mentor Branch

AUBURN
UNIVERSITY

Please keep in mind the definition a mentoring mindset for the purposes of this study when answering the questions below. The mentoring mindset of a protégé is a construct arising from the protégé attitudes, behaviors, and competencies that enable the protégé to embrace the mentoring process and maximize the benefits of the mentoring relationship.

(a) What constitutes a mentoring mindset in mentees/protégés poised to gain the most benefit from a mentoring relationship with you?

(b) What kinds of indicators do mentees/protégés display if they DO NOT possess a mentoring mindset?

Continue to Demographic Questions

○ Demographic Questions

BACK | Save & Continue

Survey Completion
0% [========   ] 100%

Survey Powered By Qualtrics

Electronic Survey – Mentor Branch

AUBURN UNIVERSITY

What is your gender?

Female   Male
   ○   ○

Race/Ethnicity:

○ White/Caucasian

○ Black/African American

○ Hispanic

○ Asian

○ Other (Please specify by typing in a response)

Please identify your country of origin:

[▼]

Please identify the location of your institution by region:

○ Midwest (IA, IL, IN, KS, MI, MD, MN, ND, NE, OH, SD, WI)

○ Northeast (CT, MA, ME, NH, NJ, NY, PA, RI, VT)

○ South (AL, AR, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV)

○ West (AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, VT, WA, WY)

○ Outside of United States

Separate Sign-up form for follow-up interviews
As a participant in this survey, you are also invited to take part in a follow-up interview. If you are interested in doing so, please provide your name and email address. Next, you will be automatically directed to a separate sign-up form that facilitates the collection of contact information in a separate data set.

The interview should take 30 minutes to complete and it will be audio-recorded but the recorded audio files will be deleted after the completion of the transcription process. Your name will be removed from your responses once I finish interviewing all participants. Therefore, please be assured that your responses will be confidential.

○ Yes, I am willing to participate in an interview regarding the educational experiences described in the survey.

○ No, I would not like to participate in the follow-up interview process.

Thank you for your time to take this survey. Click the SAVE and CONTINUE button to finish.

BACK | Save & Continue

Survey Completion
0% [████████] 100%

Survey Powered By Qualtrics

135

We thank you for your time spent taking this survey.
Your response has been recorded.

Survey Completion

0% 100%

Survey Powered By Qualtrics

Appendix I – Electronic Survey – Protégé Branch

Are you 18 years or older?

○ YES

○ NO

AUBURN UNIVERSITY

Mentors and Protégé/Mentees: The definition of a mentoring mindset constitutes attitudes, behaviors, and competencies that enable the protégé to embrace the mentoring process and maximize the benefits of the mentoring relationship.

Are you a mentor or mentee at your respective institution?

Mentor ○   Mentee ○

BACK | Save & Continue

Survey Completion
0% █ 100%

Survey Powered By Qualtrics

AUBURN UNIVERSITY

As a mentor at your institution have you met with and counseled the same protégé/mentees on at least two occasions?

○ Yes

○ No

BACK | Save & Continue

Survey Completion
0% █ 100%

Survey Powered By Qualtrics

Electronic Survey – Protégé Branch

AUBURN UNIVERSITY

Takes Initiative Factors: To what degree do you agree or disagree?

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
01 As a mentee my mentor would say that he/she initiates contact	○	○	○	○	○
02 As a mentee my mentor would say that I am not a self-starter	○	○	○	○	○
03 As a mentee my mentor would say that I do not take mentoring seriously	○	○	○	○	○
04 As a mentee my mentor would say that I am intentional and action-oriented	○	○	○	○	○

Importance of Takes Initiatives Factors:

	Extremely Important	Important	Neither Important or Unimportant	Mostly Unimportant	Extremely Unimportant
05 How important are these factors in contributing to my effectiveness with the mentoring relationship?	○	○	○	○	○

BACK | Save & Continue

Survey Completion
0% � 100%

Survey Powered By Qualtrics

AUBURN UNIVERSITY

Learning Orientation Factors: To what degree do you agree or disagree?

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
06 As a mentee my mentor would say that I exhibit curiosity	○	○	○	○	○
07 As a mentee my mentor would say that I ask good questions	○	○	○	○	○
08 As a mentee my mentor would say that I am knowledgeable about concepts, content of the field	○	○	○	○	○
09 As a mentee my mentor would say that I admit to knowing everything	○	○	○	○	○
10 As a mentee my mentor would say that I seek & accept feedback from mentor; accept advice graciously	○	○	○	○	○

Importance of Learning Orientation Factors

	Extremely Important	Important	Neither Important or Unimportant	Mostly Unimportant	Extremely Unimportant
11 How important are these factors in contributing to my effectiveness with the mentoring relationship?	○	○	○	○	○

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Survey Completion
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APPENDIX I (continued)

Electronic Survey – Protégé Branch

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Understands Goal Orientation Factors: To what degree do you agree or disagree?

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
12 As a mentee my mentor would say that I am capable in setting goals; have a vision	○	○	○	○	○
13 As a mentee my mentor would say that I am capable in organizational matters	○	○	○	○	○
14 As a mentee my mentor would say that I am capable in time management; prioritizing	○	○	○	○	○
15 As a mentee my mentor would say that I am capable in seeing mainly the small picture	○	○	○	○	○

Importance of Understands Goal Orientation Factors

	Extremely Important	Important	Neither Important or Unimportant	Mostly Unimportant	Extremely Unimportant
16 How important are these factors in contributing to my effectiveness with the mentoring relationship?	○	○	○	○	○

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Relational Factors: To what degree do you agree or disagree?

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
17 As a mentee my mentor would say that I am capable of building relationships	○	○	○	○	○
18 As a mentee my mentor would say that I know how to network	○	○	○	○	○
19 As a mentee my mentor would say that I pick up on social clues	○	○	○	○	○
20 As a mentee my mentor would say that I am approachable; positive	○	○	○	○	○
21 As a mentee my mentor would say that I keep lines of communication open with mentor	○	○	○	○	○
22 As a mentee my mentor would say that I am an active listener	○	○	○	○	○
23 As a mentee my mentor would say that I can keep confidences	○	○	○	○	○
24 As a mentee my mentor would say that I trust and can be trusted	○	○	○	○	○
25 As a mentee my mentor would say that I am honest	○	○	○	○	○

Importance of Relational Factors

	Extremely Important	Important	Neither Important or Unimportant	Mostly Unimportant	Extremely Unimportant
26 How important are these factors in contributing to my effectiveness with the mentoring relationship?	○	○	○	○	○

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Electronic Survey – Protégé Branch

Electronic Survey – Protégé Branch

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Please keep in mind the definition a mentoring mindset for the purposes of this study when answering the questions below. The **mentoring mindset of a protégé is a construct arising from the protégé attitudes, behaviors, and competencies that enable the protégé to embrace the mentoring process and maximize the benefits of the mentoring relationship.**

(a) What constitutes a mentoring mindset in a mentee/**protégé** who is poised to gain the most benefit from a mentoring relationship with a mentor?

(b) What kinds of indicators would a mentee/protégés display if they DID NOT possess a mentoring mindset?

Continue to Demographic Questions

○ Demographic questions

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Electronic Survey – Protégé Branch

APPENDIX I (continued)

Electronic Survey – Protégé Branch

Appendix J – Mentoring Mindset Graphic

Indicators of the Presence of a Mentoring Mindset	The mentoring mindset of a protégé is…..	Indicators of the Absence of a Mentoring Mindset
Takes Initiative • Initiates contact with mentor • Self-starter; confident • Takes mentoring seriously • Intentional; action-oriented	a construct arising from	**Lacks Initiative** • Only responds when mentor initiates or when in crisis • Lacks drive and motivation • Just goes through the motions of mentoring • Wants mentor to tell what to do
Learning Orientation • Exhibits curiosity • Asks good questions • Adequately knowledgeable about concepts, content of one's field • Admits to not knowing everything • Seeks & accepts feedback from mentor; • Accepts advice graciously	those protégé attitudes, behaviors, and competencies	**Lacks a Learning Orientation** • No real curiosity • Wants "quick fix answers" • "Know it all" • Does not take advantage of opportunities for further learning • Rejects feedback or takes it personally • Cannot admit weaknesses; stubborn
Skillful & Organized • In setting goals; has a vision • In organizational matters • In time management; prioritizing • In seeing the big picture	that enable the protégé to embrace the mentoring process	**Lacks Skill & Organization** • In goal setting; lacks vision • In organizational matters • In time management • In seeing big picture
Relational • Can build relationships • Knows how to network • Picks up on social cues • Approachable; positive • Keeps lines of communication open with mentor • Active Listener • Can keep confidences • Trusts and can be trusted • Honest	and	**Lacks Relational Skills** • No attention to building relationships • Avoids opportunities to network • Does not pick up on social cues • Withdrawn • Satisfied with one way communication from the mentor • Talks too much, does not listen well
Reflective • Can self-assess • Learns from mistakes • Articulates reflection out loud • Transparent; forthcoming	maximize the benefits of the mentoring relationship	**Unreflective** • Lack of self-knowledge • Inability to learn from mistakes • Cannot articulate reflection • Withholds sharing

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