

THE RELATIONSHIP BETWEEN MENTORING AND SOCIAL STATUS AT WORK: A  
SOCIAL NETWORK STATUS STUDY

by

LAKEESHA A. FLOWERS  
M.S. University of Central Florida, 2003  
B.A., B.S. University of Florida, 2001

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Major Professor: Kimberly A. Smith Jentsch

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## ABSTRACT

Mentoring is an important means of developing talent. Typically, mentoring involves two individuals – a mentor, who provides career development and psychosocial support to a less experienced counterpart (the protégé). Because mentoring is related to several desired outcomes such as career advancement, and job satisfaction, it is important to understand which individual characteristics are important to obtaining or providing effective mentoring. It is also necessary to examine potential but unconfirmed outcomes of mentoring such as social network status. This study examined the relationships between several individual characteristics, namely social intelligence and emotional intelligence, and mentoring relationships. In addition, this study examined the relationships between mentoring and social network status. In this non-experimental study, there were several unique relationships among these constructs. The results indicate a person's social intelligence is indicative of their status as a mentor (or not a mentor) but is not related to status as a protégé (or not a protégé). In addition, a mentor's perception of the costs and benefits of mentoring were explained by the protégé's social intelligence and emotional intelligence. A mentor's social intelligence also explained the quality of the mentoring given. Finally, a mentor's social network status was related to the protégé's social network status but this relationship was not due to the mentoring received. This study provides one of the first examinations of the relationship between mentoring and social network status and provides areas for future research and practical considerations.

This dissertation would not be possible without my parents, Everald “Guy” Flowers and Gloria Flowers and the rest of my loving family, professors and friends. Thank you all for your tremendous encouragement, support and prayers on my behalf throughout my education.

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## CHAPTER ONE: INTRODUCTION

Mentoring is a mainstay in many modern American business organizations. According to Smith, Howard, and Harrington (2005), over one-third of major American corporations and all of the Department of Defense have formal mentoring programs. It is likely informal mentoring takes place *even more* frequently than formal mentoring relationships as formal mentoring programs are typically created to replicate the success of informal mentoring. When these informal mentoring relationships are considered with formal mentoring relationships, it is likely mentoring occurs at most American organizations. The prevalence and impact of mentoring relationships makes understanding their merits and methods to improve them imperative for American businesses (Betts & Pepe, 2006; Parise & Forret, 2007), particularly if businesses are to take advantage of the benefits mentoring offers.

Despite the prevalence of mentoring and mentoring research, there remain unanswered questions about mentoring and potential antecedents and outcomes. One noteworthy potential outcome of mentoring is improvements in social network status of those receiving mentoring. In this case, social network status refers to a person's social ties and influence within their workgroup. Both empirical and anecdotal evidence cite social networks as a critical form of social capital (e.g., Brass & Burkhardt, 1993; Hunt, et al., 2008, Ibarra, 1995) related to career development, social support, and information. Mentoring could potentially increase social network status by providing the knowledge and social connections necessary to advance in the organization. Mentoring can also provide protégés access to valuable resources which may also improve a person's social standing. It is important to analyze social standing as there are implications for leadership development and career advancement. Surprisingly, however, no known research has focused on social network status as a potential mentoring outcome despite its

theoretical link to mentoring. Therefore, the primary purpose of the present research is to explore the potential relationships between mentoring and social network status.

Although it is likely social network status is predicted by mentoring the specific mechanisms by which mentoring impacts social network status are unknown. Therefore it is imperative to study other variables that may influence both mentoring and social network status to understand the theoretical framework that supports these relationships. For example, it is often assumed having strong “people skills” will improve mentoring as well as social network status but these relationships remain untested. Social intelligence and emotional intelligence are likely related to “people skills” and may be particularly relevant to mentoring and social network status. Although I draw similarities between intelligences and the “people skills” Allen and Poteet described I am not implying intelligences are skills. Instead I am illustrating the similarities between the behaviors of people high in social intelligence and emotional intelligence and those high in the “people skills” Allen and Poteet described. Therefore, a secondary aim of this research is to study how mentoring and social network status are related to social intelligence and emotional intelligence.

Despite the logical implications between mentoring, social intelligence, and emotional intelligence, there is limited empirical research on these constructs. The present study aims to address this void. This research will study how mentoring is related to social network status and how social intelligence and emotional intelligence relate to the mentoring relationship and the relationship between mentoring and social network status. Specifically, this study will focus on the relationship between social intelligence and emotional intelligence and the likelihood an individual becomes a mentor or a protégé as well as how the mentoring relationship is impacted. Also, this study will address the impact of social intelligence and emotional intelligence on the

perceptions of the costs and benefits of mentoring and the actual amount of mentoring received and how the perceived costs and benefits of mentoring impact the mentoring received. By costs and benefits of mentoring, I am referring to a mentor's perceived potential risks and gains from mentoring someone else. These relationships are depicted in Figure 1. The theory and empirical research to support this model and corresponding hypotheses are in the following chapter.

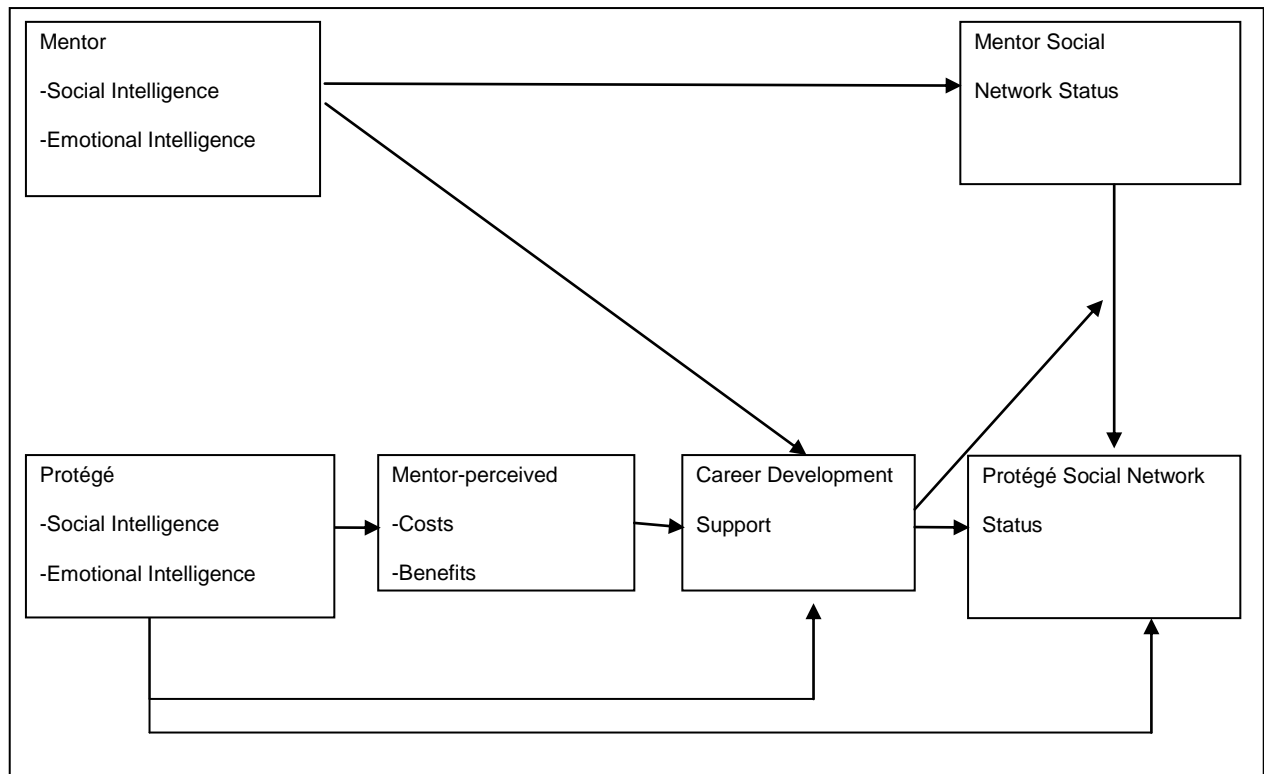


Figure 1: Conceptual Model

## **CHAPTER TWO: LITERATURE REVIEW**

Mentoring is a developmental relationship between two individuals, one of whom takes a concerted interest in the other's professional and personal growth. Mentors provide both career development and psychosocial support to their protégés (Ragins & Cotton, 1999), and these functions are related to several career benefits, such as the advancement of a protégé's career (Dreher & Ash, 1990; Noe, 1988; Ragins & Cotton, 1999). Business professionals and researchers often refer to mentoring as a critical resource for employees (Ragins & Cotton, 1993), which may indicate why many companies encourage mentoring relationships among their employees. In essence, the mentor, who is usually older and more experienced than the protégé, teaches, advises, guides, models and guards protégés (Wilson & Johnson, 2001).

### **Mentoring Functions**

Mentoring researchers often note the mentoring functions derived from Kram (1988). In this research, Kram presented a conceptual framework of mentoring functions based on several studies of developmental relationships and noted the mentoring relationship provides many functions that develop both the protégé and mentor. These functions are typically categorized in one of two areas – career-related functions and psychosocial support. Mentors provide career-related functions (also known as instrumental functions) to support the protégé's professional development and advancement. These functions include providing sponsorship for promotions or other higher status positions, exposure and visibility to leaders, senior management, or other influential organization members, coaching to become more successful, protection from undue scrutiny or possible consequences from errors and challenging assignments that provide development or the opportunity to be successful (Kram, 1988). These functions are intended to improve the protégé's professional competence and career success. The mentor's hierarchical

status relative to the protégé, their increased career experience and tenure within the organization, and professional success offer platforms from which they can provide their protégé this developmental support.

The second class of mentoring functions relate to social support. Psychosocial support functions provide a broader spectrum of help in that they can aid a protégé through both professional and personal development (Kram, 1988). In this regard, mentors expand their focus to personally support their protégés, rather than just building the protégé's professional competence. The psychosocial functions mentors provide are believed to improve the protégé's feelings of competence and professional identity, and psychological functioning (Ragins & Cotton, 1999; Turban, Dougherty, & Lee, 2002). Psychosocial functions include role modeling, acceptance and confirmation, counseling, and friendship. Ultimately, these functions should improve a protégé's self-concept, identity and professional success (Kram, 1988). Psychosocial support in mentoring relationships builds mutual trust and intimacy as well (Kram, 1988), which is likely to improve the quality of the mentoring provided and each member's satisfaction with the relationship.

Mentoring is fundamentally a relationship built on the exchange of career development and psychosocial resources from one party to another. One theory to explain this exchange of resources is social exchange theory which is explained next.

### **Social Exchange Theory**

Social exchange theory is particularly useful in explaining the interactions within both mentoring relationships and relationships within social networks (which I will elaborate on later). A fundamental component of social exchange theory is the exchange of valued resources among members (sometimes referred to as "actors") within the relationship. These exchanges



are typically based on norms of reciprocity or negotiation. Social exchanges based on reciprocity tend to occur in relationships with a history of previous transactions and are less likely to be explicitly bargained than negotiated exchanges, which are typically associated with economical or short-term transactions. For these reasons, reciprocity-based social exchanges are likely to be associated with trusting and committed relationships (Cropanzano & Mitchell, 2005), such as mentoring relationships. Within successful mentoring relationships, protégés are likely to receive psychosocial support from their mentors and mentors are likely to perceive their protégés as a means to a rewarding experience or positive recognition from others. The expectation of reciprocity promotes this continued exchange of support, information, advice, and other resources making the relationship beneficial for both parties. Next I will elaborate on some of these benefits, beginning with protégé benefits.

### **Protégé Benefits of Mentoring Relationships**

When mentors give career development and psychosocial support to their protégés, their protégés can expect to receive many benefits – both objective and subjective. Aside from career related and psychosocial functions, benefits of mentoring for protégés include increased job and career success. Empirical results examining protégé outcomes indicate faster promotion rates, greater compensation (Dreher & Cox, 1996), greater levels of job satisfaction, career satisfaction and career commitment (Allen, Eby, Poteet, Lentz, & Lima, 2004).

Evidence of career-related mentoring benefits is abundant. Baugh and Scandura (1999) found mentoring relationships may increase protégés' organizational commitment, and job satisfaction. Mentoring may also enhance protégés' career expectations and confidence in finding future positions outside of their organization. Additionally, Chao's (1997) longitudinal data indicated career planning and career involvement, organizational socialization, job

satisfaction, and income as some of the outcomes that were better for mentored compared to non-mentored employees over a five year period.

Mentoring may be even more beneficial for women or minorities. Several studies about the mentoring benefits for women have found mentoring relationships *increase* the likelihood women will receive support and cooperation from other employees, which is likely to increase the probability of career success (Ilgen & Youtz, 1986; Noe, 1988). Mentoring may also provide a buffer to job stress by providing a source of psychosocial support to female employees, who often have a limited peer network at work and may feel isolated (Noe, 1988). Several studies have indicated women who had a history of being mentored had higher levels of job success, job satisfaction, publicity of accomplishments, increased self confidence and awareness of skills (Ragins & Cotton, 1996). Other underrepresented employees may find mentoring is an effective method for gaining some of the access that is typically afforded to members of the majority group (Wilson & Johnson, 2001). Because of this, methods for increasing the number of mentoring relationships, better preparing parties involved in the mentoring relationship, and otherwise understanding how these relationships can be more effective may have implications for improving inclusion of women and minorities in organizations, particularly in higher levels within organizations.

### **Mentor Benefits of Mentoring Relationships**

Protégés are not the only potential beneficiaries of mentoring. Mentors may also gain much from participating in mentoring relationships. Ragins and Scandura (1999) found mentors may receive personal satisfaction, experience improvement in their own job performance, receive support from their protégés and positive recognition from their peers as a result of mentoring others. These potential benefits are discussed further below.

## **Organizational Benefits of Mentoring Relationships**

Apart from benefits to individuals in mentoring relationships, organizations also have much to gain from mentoring relationships among their employees. Allen et al. (2004) found intentions to remain in the organization may be higher among mentored individuals compared to employees who had not been mentored. Given the high cost of training, turnover and recruitment, mentoring may be a practical means of retaining a talented and productive workforce. As stated earlier, mentoring provides a means to develop leaders. Therefore, mentoring may be a valuable and cost-effective leadership development strategy for both mentors and protégés. Finally, mentoring may be an effective method of transferring corporate knowledge from senior employees (who are more likely to retire) to more novice employees. It, thus, becomes valuable as a knowledge retention strategy.

Mentoring may also increase the productivity of employees. Within a university setting, doctoral students who were mentored reported being more involved in research activity than non-mentored students (Cronan-Hillix, Gensheimer, Cronan-Hillix, & Davidson, 1986). Organizational socialization, the extent to which an individual has the information necessary to adjust to his or her new roles in the organization, was also higher among mentored employees compared to non-mentored employees (Chao, 1997). Having a close relationship with a more experienced professional who is willing to show someone the ropes and assist in navigating the political and cultural channels, may shorten the adjustment period to the organization (Kram, 1988). This hastening of adjustment should improve a new employee's socialization and productivity, increasing the organization's profitability. In addition, this close bond may improve engagement in the organization and reduce intentions to turnover and organizational commitment.

## **Formal Mentoring Relationships**

Given the potential for such positive outcomes, many companies are promoting mentoring relationships among their employees. One method organizations use to increase mentoring activity is instituting formal mentoring programs. By implementing formal mentoring programs, many organizations are fostering career development and building a competitive advantage among their workforce (Allen & Poteet, 1999). Unlike informal mentoring relationships, which tend to develop spontaneously through the mutual liking and attraction between the mentor and the protégé, formal mentoring relationships are created by matching the protégé and mentor by a third party, for purposes and by criteria determined by that party as a representative of the organization. Formal mentoring programs vary in characteristics such as who is targeted, the structure of the program, how frequently and for what duration the protégé and mentor will meet, the purpose of their relationships, how long the relationship will last, and how mentors and protégés are assigned and matched (Kram, 1988). While there are many differences in their structures, the objectives of formal mentoring programs are typically similar. Formal mentoring programs aim to effectively acculturate new employees (Kram, 1988) and develop junior employees.

The benefits of mentoring are so abundant it is no wonder many organizations have instituted formal mentoring programs. But not all individuals will be able to participate in a formal program and it is necessary to understand what predicts individual participation in informal mentoring, particularly because we know informal mentoring is more successful than formal mentoring (e.g., Ragins & Cotton, 1999). Many studies have analyzed the individual differences which predict the likelihood of someone entering a mentoring relationship and the effectiveness of the mentoring relationship.

As mentoring relationships become increasingly common and organizations are motivated to leverage their potential, it is imperative we understand which factors are related to effective mentors, protégés, and their relationships. Likewise, it is critical to understand why some individuals are more likely to participate in an informal mentoring relationship compared to a formal relationship or no mentoring relationship. Much theory has been written about what types of mentors and protégés are attractive and sought. However, little quantitative data exists to support those claims. Here I will describe some of the existing research to illustrate what we do know about effective mentoring partners and how it relates to the proposals of the present study.

### **Knowledge and ability.**

According to social exchange theory, both protégés and mentors will be motivated to develop relationships with others if they expect to receive favorable outcomes from the relationships. Knowledge and ability are several characteristics perceived as linked to effective mentoring. According to Allen & Poteet (1999), mentors believed understanding their organization, their organization's values, their products and the general industry were important, presumably because the mentor can pass this information to their protégés and give them the coaching that will increase their knowledgebase. The importance of a mentor's knowledge was corroborated by Eddy, D'Abate, Tannenbaum, Givens-Skeaton, and Robinson (2006) where perceptions of mentor's expertise were positively related to developmental relationship effectiveness.

Similar to mentor knowledge, protégé ability is also an attractive trait (Allen, 2004; Allen, Poteet, & Burroughs, 1997; Green & Bauer, 1995). In 2004, Allen reported protégés ability was a significant predictor of a potential mentor's willingness to mentor that protégé. In

terms of social exchange, mentors may be interested in high ability protégés because they are more likely to be successful, which would be a desirable reflection on his or her mentor; high ability protégés may also require less energy and time from the mentor than an average or low ability protégé (Allen, Poteet, & Russell, 2000).

### **Motivation and willingness to learn.**

Research also indicates a potential mentor's motives are predictive of mentoring quality. Motives to mentor explain why a mentor chooses to participate in a mentoring relationship and are significantly correlated with the type of mentoring he or she provides his or her protégé (Allen et al., 2004). Thus, they are expected to predict the quality of mentoring a protégé will receive. Allen (2004) found three motives to mentor: mentor self-enhancement, intrinsic satisfaction from mentoring, and motive to benefits others and the organization. According to Allen's (2004) results, a mentor may be motivated to mentor by a single one of these motives or some combination of all three. A mentor's motives also predict protégé's reports of mentoring functions (Allen, 2004; Lima, 2004) and effectiveness (Eddy, et al., 2006.)

Mentors also reported they were more attracted to potential protégés who had a willingness to learn (Allen, Poteet & Burroughs 1997). Mentors frequently stated it was most important that protégés wanted to learn and were willing to take constructive criticism. It is not surprising that mentors consider these facets when deciding to mentor someone given the opportunity costs for a mentor (Ragins & Scandura, 1999). Coaching and providing support to another individual is time consuming but protégés willing to learn may learn faster (therefore, costing a mentor less time) or make that time more worthwhile to the mentor.

## **Similarity.**

Researchers often find similarity between the mentor and protégé is related to several mentoring outcomes. Similarity in gender, race, and values often predicts the amount of mentoring received, the satisfaction with the mentoring relationship and the degree to which partners in the mentoring relationship liked each other (Ensher & Murphy, 1997). For example, Allen and Eby (2003) found mentors who perceived themselves to be more similar to their protégé also reported their similarity was related to both mentorship quality and learning. In addition, mentors' liking of protégés was positively related to gender similarity and deep-level similarity (personality, interests, work values, and personal values) of the protégé and mentor (Lankau, Riordan, & Thomas, 2005). Mentors' perception of deep level similarity was also related to protégés' reports of the psychosocial functions received from their mentor (Lankau et al., 2005) and the amount of mentoring provided (Burke, McKeen, & McKenna, 1993).

Although perceived similarity may be important to mentoring success it is not always practical for mentoring relationships to develop between individuals who are similar. For example, in formal mentoring relationships, a third party often matches individuals and may not know how similar the potential mentor and protégé are. In addition, formal mentoring programs often target women and minorities as protégés and they may be less likely to be matched with a demographically similar mentor because demographically similar mentors may not be as prevalent in the organization. The smaller representation of women and minorities in senior positions is often the impetus of targeting minorities and women for inclusion in the formal mentoring program. Finally, as organizations promote diversity it is more likely that mentoring relationships between dissimilar individuals will promulgate. Perceived similarity is often cited as important because it improves the relationship. However, since perceived similarity between

mentor and protégé may not be practical it is wise to consider other factors that may predict mentoring success, such as skills that promote interpersonal relationships.

### **Interpersonal skills.**

Although there is surprisingly limited research regarding the interpersonal or relationship-oriented skills that are important for mentors, there is evidence to suggest this domain of skills is necessary. For example, mentors identified having a “people orientation” as a desirable mentor attribute (Allen et al., 1997). Allen et al. (1997) did not elaborate on what was considered “people-orientation” but did offer “people skills” as an example of this characteristic. Examples of people skills may include relating well to others, effective communication and building rapport.

Another ideal relationship-oriented skill mentors report is the ability to understand the mentoring needs of a protégé (Allen & Poteet, 1999), probably because mentors can use this understanding to tailor their mentoring to better address the protégé’s deficiencies. “Read other people’s needs to identify where you can help,” and “understanding that all individuals are going to be different – everyone’s going to work at a different pace,” were sample comments made by participants (Allen & Poteet, 1999, p. 65) to describe what they meant by “understanding others.”

Allen and Poteet’s (1999) research points to various interpersonal skills as ideal for mentors. In fact, if the number of times each of these dimensions was mentioned were combined, collectively it would be the most important mentor characteristic. Allen and Poteet did not discuss combining these dimensions but it appears individuals who had one characteristic would be more likely than not to possess additional interpersonal skills. If these skills were combined into a single dimension, this dimension could more parsimoniously be labeled “social



intelligence” as defined by researchers such as Thorndike and Stein (1937) or “emotional intelligence” (Mayer & Salovey, 1997), two related constructs. Interestingly, communication skills, social intelligence, and people orientation were more frequently cited by participants in Allen and Poteet (1999) than characteristics such as leadership qualities, the ability to teach others, and willingness to share information and provide feedback, skills that may often be considered important for good mentors to possess. This suggests studying social intelligence and emotional intelligence is critical to improving mentoring relationships and outcomes.

From available research we can also conclude mentors are attracted to protégés with strong interpersonal skills. In research by Allen et al. (1997) mentors identified people skills as a desirable protégé attribute. Examples of people skills may include relating well to others, effective communication and building rapport. Protégés with such skills will likely be able to ameliorate potential interpersonal problems with their mentor and foster a more enjoyable relationship. Thus, protégés with high social intelligence and emotional intelligence may be less likely to be associated with dysfunctional mentoring relationships. In addition, their talents may encourage positive holistic perceptions (the halo effect) and effective impression management which would reduce the likelihood of negative perceptions or reflections on their mentors.

Beyond the reduction of these potential liabilities, protégés with high social intelligence and emotional intelligence are likely to provide several benefits to their mentors. Mentors are likely to enjoy the time spent with these protégés, making the relationship more rewarding, and will be more comfortable with and likely to trust or rely on such protégés (increasing their base of support). The above body of evidence provides fodder to further analyze how social intelligence and emotional intelligence contribute to mentoring effectiveness. In the next

sections I will further describe these constructs and their relation to mentoring in the present research.

### **Social Intelligence and Emotional Intelligence**

The constructs of social intelligence and emotional intelligence are related to each other and to effectiveness in personal relationships such as mentoring. Social intelligence, the ability to perceive, understand, and engage in effective and appropriate social behaviors (Walker & Foley, 1973), is likely to relate to mentoring through the shared focus on social relationships. Research about social intelligence and mentoring is limited. However, some researchers (e.g., Allen & Poteet, 1999) have identified links between social intelligence-related personal characteristics and mentoring. For example, Allen and Poteet (1999) identified having a “people orientation” and the ability to understand a protégé’s needs (Allen et al., 1997) as desirable mentor attributes. The second construct, emotional intelligence, is the ability to perceive, generate, understand, and regulate emotions (Mayer & Salovey, 1997). The constructs are similar so presently we will discuss each and compare them.

#### **Social intelligence.**

Social intelligence as a psychological construct has appeared in research literature since the early 20<sup>th</sup> century. Since then, a number of different definitions of the construct have appeared. From early and simplistic definitions when it was described as “the ability to understand and manage people” (Thorndike & Stein, 1937, “275”) to more modern and complex definitions consisting of multiple facets such as perceptiveness of other people’s internal states and moods, knowledge about social rules and situations, and use of social techniques to manipulate others (Kosmitzki & John, 1993), the construct has received much attention in both the empirical and popular literature.

Since social intelligence first appeared in research publications, there have been a number of changes to how the construct is conceptualized and defined. For example, modern definitions of social intelligence include knowledge of the appropriate behaviors in specific social settings (e.g., social etiquette) (Kosmitzki & John, 1993; de Ruyter, Saini, Markopolus, & Van Breemen, 2005), ability to perceive and understand behavior, ability to understand and predict people's motives, intentions, and behavior (e.g., de Ruyter et al., 2005), the ability to get along with others or to effectively and appropriately accomplish social goals. The myriad of definitions of social intelligence tend to converge towards three components - a perceptual, cognitive, and behavioral component. Integrating these facets of social intelligence produces a simple definition comprised of three elements: the ability to perceive, understand, and engage in effective and appropriate social behaviors. Silvera, Martinussen, and Dahl (2001) described and labeled these facets in their model of social intelligence. The *perceptual* element of social intelligence recognizes the ability to perceive personal and other's behavior (i.e. social awareness); the *cognitive* element describes one's ability to understand social behavior (i.e. social information processing); and the *behavioral* element reflects one's observable performance of appropriate behavior in social settings (e.g. social skills) (). Social intelligence provides mentors and protégés the ability to perceive and be aware of each other's behavior (or that of individuals outside of but consequential to the relationship, such as co-workers or other members of social networks), understand the social dynamics of the mentor-protégé relationship or the dynamics of the environment that affect their relationship, and to engage in or solicit appropriate mentoring behaviors. For simplicity, I will generally use the term social intelligence to refer collectively to the three facets unless I am noting specific examples, distinguishing the facets from each other or discussing unique relations to other constructs.

### **Emotional intelligence.**

In 1990, Mayer, DiPaola, & Salovey introduced the umbrella term “emotional intelligence” (EI) to describe a broad collection of individual skills and dispositions that use the management and expression of feelings to foster personal development. More specifically, Mayer & Salovey (1997) defined emotional intelligence as “the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth (p. 5).” Such a set of skills can be very relevant to establishing and maintaining effective close personal relationships such as mentoring relationships.

Various models of EI describe the construct as either a set of abilities related to emotion processing and management or a mixture of abilities and traits. Mixed models of emotional intelligence (those which define emotional intelligence as a mixture of abilities and personality traits) tend to be a broader family of models than ability based models. Examples include Bar-On’s five meta-factor (15 sub-factors) model, which defines emotional intelligence as a combination of interconnected “emotional and social competencies, skills, and facilitators” that impact an individual’s understanding and relations to their self and others as well as their ability to handle life stresses (<http://www.reuvenbaron.org/bar-on-model/essay.php?i=2> accessed on January 21, 2010). Although there is empirical evidence to support mixed models of emotional intelligence predicting constructs such as job performance (e.g., Joseph and Newman, 2010) such models have been criticized for being a catch-all of positive, non-cognitive individual differences and providing little incremental value over personality measures (Joseph & Newman, 2010; Zeidner et al., 2004). Because of these construct validity concerns, the current study employs an ability-based model of emotional intelligence.

Mayer and Salovey's (1997) ability-based model, a commonly used conceptualization, defines EI as consisting of four branches. The branches include emotion regulation (ability to be open to feelings, engage or detach from emotions); understanding and analyzing emotions (ability to recognize emotions, their patterns of relationships, and their meanings); emotional facilitation of thinking (using emotions in intellectual processing and thinking); and perception, appraisal, and expression of emotion (ability to identify feelings and emotions in self or others). Within the context of a mentoring relationship, for example, protégés or mentors with high levels of emotional intelligence may be more comfortable with their or their partner's emotions and more adept at using these emotions to complement or effectively configure experiences to make the mentoring relationship more fruitful.

#### **Distinction between social intelligence and emotional intelligence.**

Clearly the similarities between emotional intelligence and social intelligence extend beyond their relation to mentoring. Part of the similarities between social intelligence and emotional intelligence arise from their shared history. Some consider social intelligence simply the precursor to emotional intelligence (e.g., Landy, 2006). Conclusions such as these, however, ignore the more recent evolution of social intelligence research. Landy reviewed the social intelligence literature up to 1983, not accounting for over 25 years of subsequent modern theory and research. Furthermore, Landy's review is focused on the early 20th century, when a great deal of modern psychology and psychometrics were in their infancy. Many of these criticisms (e.g., social intelligence is not well defined, measures of social intelligence may be measures of general intelligence applied to interpersonal settings, etc.) may not be true of more recent work. Mayer & Salovey (1997) also expressed concerns about social intelligence. In their research, the authors indicate early conceptualizations of social intelligence were so highly correlated with

spatial-performance skills and verbal-propositional abilities that it was a redundant concept. According to Mayer and Salovey, their more modern concept of emotional intelligence considers skills that are distinguishable from spatial-performance and verbal-propositional abilities, indicating emotional reasoning abilities is a distinct type of intelligence.

Apart from this potential distinction, there are several conceptual differences between social and emotional intelligence. Lacking from most descriptions of emotional intelligence is the significance of non-affective dimensions such as cognitions (Mayer & Salovey's model is an exception) and extra-individual, contextual factors (which may influence social settings). These factors are typically included in models of social intelligence. Also, social intelligence does not explicitly address the emotion aspect of behavior that is the cornerstone of emotional intelligence models. An additional point of departure is social intelligence tends to be outwardly focused whereas emotional intelligence is inwardly focused. However, this is not a universal facet among all emotional intelligence models and many emotional intelligence models do incorporate interactions with others (e.g., Shaw & Roberts, 2008). Albrecht (2006) studied the intelligence work of Howard Gardner and Daniel Goleman to arrive at the following conclusion about the complement between emotional intelligence and facets of social intelligence:

“We can look at EI as a dimension of *internal* competence – self-awareness and skillful deployment of one's emotional responses. Then we can clearly delineate our model of social intelligence in terms of *externally oriented* competencies. In other words, we need *both* of these intelligences for interpersonal success. (p. 17, emphasis added)”

In light of the conflicting arguments made by researchers, the distinction between social intelligence and emotional intelligence remains questionable and deserving of more empirical attention. Thus, one contribution of the present study is analyzing both social intelligence and emotional intelligence to determine the empirical support for the distinctness of these constructs.

**Research Question:** Do social intelligence and emotional intelligence contribute uniquely to predicting mentoring and social network status?

### **Social intelligence and emotional intelligence in personal relationships.**

Social intelligence facilitates the development and manipulation of relationships in a variety of ways. Although organizations are not likely to encourage or promote such a relationship, Kaukiainen et al. (1999) found social intelligence is related to indirect aggression but not to direct forms of physical or verbal aggression. Kaukiainen et al. (1999) proposed, to be effective, indirect aggression requires understanding of human behavior and personal relationships and an individual's ability to disguise his or her intentions. Without a high level of social intelligence, the participants in this study were unlikely to be able to engage in such behaviors. Such data are evidence social intelligence is related to successful manipulation of social relationships. Extrapolating further, social intelligence is important to developing and maintaining personal relationships, whether for positive or negative intentions. In the context of a healthy relationship, social intelligence can be very instrumental to achieving effective outcomes, such as developing a strong mentoring relationship.

Even when limited to a single component of social intelligence, the relations between social intelligence and relationships are still apparent. For example, when Jones and Day (1997) focused on social information processing the authors hoped their restricted definition of social intelligence would create a more reliable measure, which would contribute to detecting

correlations with other variables. Their data indicated students' social intelligence and their teachers' ratings of their behavioral and social competencies (such as frustration tolerance, task orientation, and peer social skills) and behavioral problems at school (such as acting out) were related. Similar to earlier studies, Jones and Day's (1997) data are empirical support for the relationship between an individual's social information processing and their functioning in social relationships. Despite the focus on a single element of social intelligence (rather than the three factors other researchers often cite), there was a relationship between social intelligence and interpersonal behavior. It is likely including the other social intelligence factors would explain relationships to other elements of interpersonal behavior.

Taylor (1990) reviewed the research about social intelligence published in the counseling and psychotherapy fields and found social skills development programs (which focuses on the behavioral component of social intelligence) successfully addressed many behavioral issues, such as anger control, improving marital, family, and parenting relationships, and decreasing social anxiety across various populations, including non-clinical. If developing this facet of social intelligence improves close personal relationships such as marriage and family, then it is likely there will be similar results for mentoring relationships.

As discussed above, research supports the relations between social intelligence and social relationship across a variety of settings and outcomes. Since research demonstrates the importance of social intelligence in a variety of social relationships it is likely social intelligence will have similar impacts to workplace relationships. There are several reasons to consider social intelligence in the workplace. Social intelligence may be one of the biggest assets for administrative and executive employees, who tend to be the occupational groups with the largest social intelligence scores. Hunt (1928) found social intelligence was correlated with the amount



of social interaction required in a profession, professional success, and salary. This led Hunt to conclude social intelligence measures would be valuable as a vocational guide to help people determine likelihood of success in positions that require managing and interacting with others.

According to Hunt,

“A superior ability in dealing with people is the chief requirement for success in such vocations, assuming sufficient general ability to manage the details of the job. About 90 per cent of those who are successful in executive and administrative positions make scores on the Social Intelligence Test as good or better than the average score of employees in positions where no occasion arises for direct dealing with others. (p.334)”

Additionally, since mentoring relationships require extensive “dealing with others” (the social interactions between a protégé and a mentor), Hunt’s philosophy supports the importance of social intelligence as a means to improve mentoring effectiveness. Additional social intelligence research also suggests social intelligence should facilitate mentoring. For example, Osipow and Walsh (1973) reported social intelligence predicted counselor effectiveness. Such research is highly relevant because counseling is a function mentors provide their protégés. Although this study provides support for the premise that social intelligence is related to effective mentoring relationships, more research is needed to understand the relationship.

Having established the relationship between social intelligence and emotional intelligence and the links between social intelligence and social relationships, it is imperative to discuss the research that suggests links between *emotional intelligence* and social relationships, mentoring in particular. Several studies have shown the relation between emotional intelligence

and successful social behavior. In 2010, Joseph and Newman reported emotional intelligence predicted job performance ratings even when personality and cognitive ability were considered. Furthermore, for some types of jobs (those with greater emotional labor demands), emotional intelligence had a stronger relationship with performance than other jobs. These authors found support for their causal model of emotional intelligence (based on Salovey and Mayer, 1997), which proposes emotional intelligence leads to job performance. According to Joseph and Newman (2010), emotion perception permits an individual to recognize an emotion; emotion understanding permits an individual to appraise the situation and the emotions exhibited against their knowledge structures of emotion; and emotion appraisal leads to emotion regulation, or the ability to respond effectively given the emotions perceived and understood.

Other studies demonstrate results consistent with the cascading model proposed by Joseph and Newman (2010). A 2003 Center for Creative Leadership study, “*Leadership skills and emotional intelligence*” reports links between several leadership skills and emotional intelligence. Participative management (seeking input and buy-in from employees), putting people at ease, straightforwardness and composure, building and mending relationships, confronting problem employees are among the leadership skills that were higher among people with higher levels of emotional intelligence. Although these skills were presented in the context of leadership, there are logical relationships between these skills and mentoring. For example, participative management would matter in a mentoring relationship as a mentor is more likely to influence his protégé’s behaviors if he first has his “buy-in”. The ability to put people at ease and confronting problems would also help mentors and protégés deal with any challenges within or affecting their relationship. Similar evidence for the link between emotional intelligence and leadership skills resulted from the Johnson and Johnson Consumer Companies study (Cavallo &

Breinza, 2001) where emotional intelligence distinguished high performing managers and high potential employees.

Given the above research, the following hypotheses are proposed:

***Hypothesis 1:*** *Individuals with higher a) social intelligence and b) emotional intelligence will be more likely to have an informal protégé.*

***Hypothesis 2:*** *Individuals with higher a) social intelligence and b) emotional intelligence will be more likely to have an informal mentor.*

### **Costs for Mentors**

The research cited above has mainly focused on the rosy aspects of mentoring, such as potential mentoring benefits and qualities that make mentoring relationships more fruitful. Given the risk mentoring entails (such as the risk of a negative experience) and the opportunity costs (the time a mentor spends mentoring a protégé could be spent doing another activity such as self-development) it is not surprising mentors are more likely to be attracted to protégés with characteristics that mitigate the mentoring risks and costs. Furthermore, because mentoring is a social exchange relationship, mentors are likely to select protégés they believe will make the relationship more successful or satisfying while limiting the mentor's exposure to risk. However, mentoring experiences are not always successful and the costs of participating may outweigh the potential benefits received.

Ragins and Scandura (1999) found five independent factors of costs to mentors: the relative amount of trouble to benefits of mentoring ("trouble"), the time and energy that mentoring entails ("energy drain"), the misperception by others the mentor is giving unfair advantages to his or her protégé ("nepotism"), the possibility the protégé's behavior or

performance will cause the mentor to be portrayed negatively (“reflection”), and the fear the relationship may become unhealthy and the protégé may betray the mentor (“dysfunctional”).

It is deceptively simple to predict social intelligence and emotional intelligence will have the same relationship with all mentoring costs. However, because of the variability within these costs it is necessary to analyze the unique relationship, particularly the direction of that relationship with social intelligence and emotional intelligence. For example, it is likely protégés with higher levels of social intelligence (for example, social information processing) and emotional intelligence are less likely to be a trouble to mentor or energy drain to their mentors (compared to protégés with lower levels of social intelligence and emotional intelligence) for several reasons. These protégés may be more sensitive to the social or emotional cues that their mentor may be too tired or busy and wait until a later time to engage them. In addition, protégés higher in social intelligence (for instance, social skills) and emotional intelligence will be more likely to facilitate the mentoring they need to receive, thereby actually requiring less trouble or energy on the part of their mentors. Social intelligence and emotional intelligence should enable protégés to better understand and implement their mentor’s guidance and request pertinent advice from their mentors. Similarly, mentors are less likely to perceive protégés with higher levels of social intelligence and emotional intelligence (compared to protégés with lower levels of social intelligence and emotional intelligence) as less likely to be a bad reflection on them. Socially intelligent and emotionally intelligent protégés are probably less likely to be viewed negatively by others because they are probably better at behaving appropriately in social situations (particularly those high in social skills) and relating well to others. In addition, both social intelligence and emotional intelligence are positively

related to job performance (e.g., Joseph & Newman, 2010). Therefore, social intelligence and emotional intelligence should decrease a mentor's fear of a protégé being a poor reflection.

It is likely protégés with higher levels of social intelligence and emotional intelligence will be perceived as a greater risk of having a dysfunctional relationship with their mentors and for risk of perceived nepotism by the mentor. Dysfunctional mentoring relationships are characterized by concerns of competition or betrayal between mentor and protégé. As cited earlier, Kaukiainen et al. (1999) found social intelligence is related to indirect aggression, conceivably because social intelligence is necessary to covertly manipulate someone. This normally positive characteristic may allow protégés to engage in negatively perceived behaviors towards their mentors. In addition, the relationship between social intelligence, emotional intelligence and job performance may make some mentors lose confidence in their own job security when their protégés could be seen as successful employees themselves. The link between social intelligence, emotional intelligence and job performance may also impact mentors' concerns of nepotism perceived by others. Social intelligence and emotional intelligence are related to job performance. Because mentoring and performance are both related to career success, mentors with high performing protégés may be at increased risk of others thinking the protégé's success was unfairly obtained.

***Hypothesis 3:** Protégé social intelligence and emotional intelligence will be negatively related to mentor-perceived a) trouble/energy drain and b) bad reflection and positively related to c) dysfunctional relationship and d) nepotism.*

### **Benefits for Mentors**

Earlier, I elaborated on the mentoring benefits for protégés and organizations. However, mentors may benefit from being in a mentoring relationship as well. Ragins and Scandura

(1999) also found independent types of benefits to mentors: the satisfaction of mentoring (“rewarding experience”), the improvement in the mentor’s own job performance due to rejuvenation or other protégé provided inspiration (“improved job performance”), obtaining work-related information and psychological support (“loyal base of support”), and positive recognition for their mentoring contributions (“recognition by others”). For example, the mentor may receive recognition from supervisors and peers for assuming the responsibilities inherent in developing less experienced employees and preparing them to be more successful (Parise & Forret, 2007). As mentoring is an added commitment of time and resources, organizational leadership may appreciate and value the investment of the protégé. In addition, being a mentor provides opportunities to hone one’s coaching and leadership skills as mentors provide guidance to others (Kram, 1988). These skills are often important to succeed in supervisory positions so mentoring provides valuable preparation. This is one reason mentoring is related to leadership development.

Aside from the leadership experience and recognition, mentors stand to build their professional networks through their relationships with their protégés. By taking a special interest in the futures of junior employees, mentors also establish strong links to their protégés and, likely, the protégé’s peers. Engaging these relationships builds the mentor’s support base, providing another benefit for mentors (Parise & Forret, 2007). Since protégés are often younger than their mentors, the mentoring relationship offers the opportunity to connect and learn from multiple age groups and generations. Connecting to multiple generations will become more of an asset as the mixture of generations in the workforce becomes more diverse (Murphy, 2007).

Mentoring may also be a personally fulfilling activity. Individuals with previous mentoring experience report greater satisfaction and sense of fulfillment than those who have not

been mentors (Parise & Forret, 2007; Ragins & Scandura, 1999). Mentoring may also enhance personal development because mentors gain personal satisfaction for his or her role in developing a novice employee.

Aside from the personal fulfillment, mentoring is associated with career benefits for mentors as well. Mentors report greater levels of career success than non-mentors. This relationship was maintained when both subjective indicators of success (e.g., personal evaluations of financial, interpersonal, hierarchical, and job success; e.g., Parise & Forret, 2007) and objective indicators of career success, (e.g., through the number of promotions; Bozionelos, 2004) were analyzed.

In support of these proposed relationships, previous research has reported intentions to mentor were positively related to anticipated benefits and negatively related to anticipated costs (Ragins & Scandura, 1994; Ragins & Scandura, 1999). In addition, Parise and Forret (2007) found voluntary participation as a mentor was positively related to the perception of mentoring as a rewarding and negatively related with the relationship being more trouble than it's worth.

Based on the above research the following hypothesis is proposed:

***Hypothesis 4:*** *Protégé social intelligence and emotional intelligence will be positively related to mentor-perceived a) rewarding experience, b) improved job performance, c) recognition by others and d) loyal base of support.*

Chun et al. (2010) reported mentor emotional intelligence, protégé emotional intelligence and the interaction of the two predicted protégé trust, which predicted the mentoring provided. In addition, mentor's emotional intelligence (but not protégé emotional intelligence) predicted the mentoring provided to the protégé. However, this finding may have been due to same source bias (because both mentor emotional intelligence and mentoring functions data were provided by

mentors). Therefore, more research that uses different sources of this data is needed. Also, Chun et al.'s research focused on formal mentoring relationships but it is imperative to study these relationships to determine if they are still observed within different mentoring contexts. Nonetheless, these findings lend support for the relationship between emotional intelligence and mentoring.

***Hypothesis 5:*** *Mentor a) social intelligence and b) emotional intelligence will predict mentor provided career development support.*

***Hypothesis 6:*** *Protégé a) social intelligence and b) emotional intelligence will predict mentor provided career development support.*

Social exchange theory also explains trust is paramount for relationships to last, particularly when potential gains may not be realized in the near term. Previous data indicate mentors' perceptions of negative experiences predicted their protégés' reports of the mentoring received (Eby, Durly, Evans, & Ragins, 2008) and mentors' perception of overall relationship quality (Eby, Butts, Durley, & Ragins, 2010). This evidence suggests, mentors are likely to consider the costs of initiating and maintain a mentoring relationship and weigh them against the projected benefits. Because of this, the perceived costs and benefits of mentoring may be important mediating steps within the relationship between protégé social intelligence and emotional intelligence and mentoring received.

***Hypothesis 7:*** *Mentor perceived costs will mediate the relationship between protégé SI and mentor provided career development.*

***Hypothesis 8:*** *Mentor provided career development support will be a) negatively related to mentoring costs and b) positively related to mentoring benefits.*



## **Social Networks**

To this point, I have mainly discussed the dyadic relationship between mentor and protégé. However, mentoring does not occur in a vacuum. Mentors and protégés are likely to share many social contacts, which makes it valuable to consider the relationship between mentoring and social networks. Although Venkatarmani, Green, & Schleicher (2010), found leader member exchange, the relationship between an employee and immediate supervisor (as defined by Sparrowe & Liden, 2005), predicts social network status, no known research has focused on the relationship between mentoring received and social network status. The purpose of the present research is to explore the potential relationships between mentoring and social network status. Prior to describing social network status, it is necessary to define social networks and social network analysis.

Social networks are the collectives of interdependent relationships between individuals or other units such as families, teams, and organizations with multiple units, a professional community, or even a union of states or countries or other collectives of people (Wasserman & Faust, 1994). They are comprised of a set of actors and the relations that bind them (Slaughter, Yu, & Koehly, undated). Similar to mentoring being a relationship between individuals, social networks are relationships between multiple people, all connected to each other by some bond or other shared characteristic. For example, social networks can exist within members of an athletic team, classmates within a graduate program, friends on a social network media website (e.g. Facebook or Linked In), alumni from the same university, or co-workers within an organization. Like mentoring, social networks represent a type of relationship between individuals. However, there are several meaningful distinctions between social networks and mentoring relationships. Social networks may be composed of multiple individuals while mentoring relationships are

comprised of two individuals. In addition, social networks can vary by the characteristics that bind members and the purposes of their relationships (i.e., what people obtain from being connected to each other) whereas in mentoring relationships, the purpose of the relationship is fairly clear. As stated earlier, mentors provide protégés with specific functions – psychosocial support and career development. Furthermore, social networks are not necessarily comprised of close personal relationships. People may be near strangers and still share a social network. Individuals may not realize or perceive themselves as being in a social network with certain others because their connections to another actor within their network may be weak. In contrast, mentoring is typically a personal relationship, particularly if it is an informal mentoring relationship. Because mentoring relationships are quite personal, protégés and mentors within the same relationship are likely to have a strong awareness of their relationship with each other. In addition, mentoring relationships are active. Individuals in a mentoring relationship recognize the benefits received from the relationship as well as potential costs and engage each other to obtain or dispense the mentoring functions described above. In contrast, individuals may not be involved in any active interactions with others within their social network.

Despite the theoretical relationships between social network analysis and mentoring, our understanding of how these constructs connect is limited. One area where there is a gap in our understanding of social networks is the interconnection of social networks and mentoring. According to Kram (1988) “it is essential to understand how an organization’s structures and processes influence behavior in order to maintain those features that encourage supportive relationships and modify those that impede them” (p. 16). Kram primarily spoke of organizational hierarchy, opportunity structure, task design, performance management and reward structure. However, social networks within the organization are another important

component. Although mentoring relationships do not occur in a vacuum, few researchers have studied the social context surrounding mentoring relationships and researchers who have often focus on perceived organizational support or management support for mentoring (e.g., Baranik, Roling, & Eby, 2010; Eby, Lockwood, & Butts, 2006).). Often there are many implications for social networks on mentoring relationships and vice-versa. For example, mentor and protégé are often within the same social network, which provides opportunities to share resources within the social network and may have impacts or implications for the mentor, protégé or the network itself. In addition, either the protégé or mentor may have an opportunity to influence the other's standing within the social network if he or she is a member of the same network.

In addition to framing mentoring relationships, social exchange theory is a useful theory to explain the behaviors demonstrated within social networks. According to social exchange theory, decisions to engage in relationships are based on the value of the resources people expect to give and obtain from the other member of the relationship (Molm, Peterson, & Takahashi, 2001). For example, two co-workers who assist each other in their jobs by providing useful information about the industry or potential customers may have a social exchange relationship with each other. Similarly, an employee and his or her employing organization is another type of exchange relationship as an employee provides support services and meaningful productivity to his or her employer who, in exchange, provides meaningful tasking, and a means to obtain income and job security. The social exchange then may consist of tangible (such as income or other compensation) or intangible (such as loyalty, friendship, support, or a recommendation) resources. Social exchanges can occur within a mentoring relationship (mentors provide support and guidance to their protégés) or within a social network (where actors may exchange any

number of resources, such as information). Social exchanges often impact a person's social network status, which I explain next.

### **Social network status.**

Individuals within social networks have many relations with other members and these relations can vary depending on the type of network and resources exchanged. For example, there are social networks based on information exchange, friendship, familial relations, monetary exchanges, wins or losses (as in an athletic or other competitive conference). The relational ties between parties are rarely all equal in that some parties will have more ties or stronger ties (depending on how the network is operationalized) than others. Therefore, members of social networks may vary in their prominence or rank within the network, generally referred to as social network status. Members with higher social network status may have more connections, stronger or more direct connections, or more visible connections (Wasserman & Faust, 1994). For example, in a social network of advice-seeking frequency, each member can be assigned a social network status calculated by the number of times and the number of people who sought advice from him or her. Furthermore, it is likely there will be variety on the social network status of each person (some will have been sought after frequently for advice and some seldom) which is likely related to some characteristic of the actor (e.g., willingness to give advice, technical knowledge, accessibility) or the network itself (e.g., the physical distribution of people within the network). Another example of social network status may relate to obtaining information. Within a social network, members can be ranked based on their social network status of sources of information. In this network, members could describe who they have to give information to in order to effectively perform their position. Those individuals who have to give

information to the most people (either directly or indirectly through intermediaries) may be considered those with the highest levels of social network status.

The previous examples also illustrate another characteristic of social networks, the directionality of the relationships among members of the network. Direction is an important consideration because the relationship between two people may differ according to the perspective of each actor. For example, there may be an unrequited love relationship between two people in which case one actor may love the other but those feelings are not reciprocated. In a social exchange relationship, one partner may communicate more to another partner than he receives. Direction is necessary to understand the nature of the relationship and the actual social network status of the individual.

Empirical and anecdotal evidence cite social networks as a critical form of social capital (e.g., Brass & Burkhardt, 1993; Hunt, et al., 2008; Ibarra, 1995; Thompson, 2005) and analyzing social networks and the status of members is valuable to understanding social and psychological dynamics. For example, Zohar and Tenne-Gazit (2008) reported social networks were an effective means of studying group influence and interaction, providing support for social structures as an important means of understanding various organizational constructs. Because social network status has been used to explain these organizational variables (e.g., Zohar & Tenne-Gazit) there is promise in including it within a framework to study and understand mentoring relationships. For several reasons, the work of Venkataramani, Green, & Schleicher (2010) is highly relevant to the present study. First, these authors found the leader-member exchange (LMX) a member received was related to the member's perceived (by others) organizational status. In addition, the leader's social network status was related to the leader's LMX. This study is relevant because of the complement and, in some cases, overlap between

LMX and mentoring (Scandura & Schriesheim, 1994). Although, the above findings between social network status and LMX are promising for mentoring research, it is still necessary to conduct specific research on mentoring and social network status to understand the relations between these constructs.

Because social network status has the potential for important organizational outcomes (e.g., understanding influence and trust or the flow of information and resources within the network) and personal outcomes (e.g., job performance) it is critical to understand which factors predict social network status. Given the relationship impact, interpersonal skills such as social intelligence and emotional intelligence have on interpersonal relationships (which are the foundation of social network status) I expect both variables to predict social network status. Furthermore, I expect mentoring to impact social network status as mentoring is a valuable means of providing the very resources and social capital that may increase an individual's social network status.

### **Relationship between social intelligence, emotional intelligence, and social network status.**

The connection between social network status, social intelligence and emotional intelligence comes from the utility of social and emotional intelligence. People with higher levels of social intelligence and emotional intelligence are likely to be more successful in social relationships. Thus, they can use their social and emotional prowess to gain stature, develop more connections with other members of the social network, and become more influential within the network. Their social proclivity should give them an advantage in developing greater numbers of relationships with others in their network rather than be isolated (as lower status actors are). In support of this, Hunt (1928) reported that across a variety of positions there is a

positive correlation between social intelligence and social interaction. In addition, individuals high in social intelligence and emotional intelligence are likely to value the benefits of these social relationships and invest more resources in them. It is likely these individuals will perceive social relationships as contributing to or facilitating more and quicker access to information, improving the quality of communication with others, increasing their status and access to influential members in the organization, establishing more allies, etc., all of which would increase social network status.

The ability to understand social relationships, expectations of behavior, achieve social goals and successfully influence the behaviors of others should be positively correlated with individuals' social network status. Similarly, their ability to recognize and manage their own emotions (and those of others) should facilitate success in their interactions with other network members. Their peers are likely to respond to these skills by recognizing or nominating these individuals as influential within their groups. When actors have beneficial social relationships, others are more likely to perceive associations with them as advantageous. They are, therefore, more inclined to pursue relationships with them that allow them to take advantage of the actor's social resources (e.g., their social relationships, access to information or areas limited to others, perception of being influential, etc.) This promotes the growth of the highly socially involved actor's network even more as well as their status in the network.

From the perspective of other actors within the network, people with high levels of social intelligence and emotional intelligence should be more influential and hold more status within the social network. Their counterparts in the network should recognize how powerful they are relative to people with less social prowess (e.g., lower levels of social intelligence). Hence, other

members of their network should consider them as key points within the network and seek them more often than individuals with lower levels of social intelligence or emotional intelligence.

*Hypothesis 9: A) Social intelligence and b) emotional intelligence will be positively related to social network status.*

### **Relationship between mentoring and social network status.**

Similar to social intelligence and emotional intelligence, participation in a mentoring relationship should also increase social network status. The relationship between being a mentor and social network status may not be surprising. People who decide to mentor others have typically been, at minimum, moderately successful in their careers and developed professional relationships with customers and colleagues. In other words, it is likely mentors will be central within their professional networks. People who are known as mentors may be perceived as talented in these areas and sought after more for advice and influence, even from those who are not their protégés. Furthermore, mentoring someone provides ample experience at advising and guiding others. Thus, mentors may actually become more adroit at advising and influencing other members of their social networks. As these talents are recognized by other network members, it is more likely others will consider mentors as having more influence within the network. Because of this, mentors should have higher social network status than non-mentors.

The research on mentoring and social network status in social networks is sparse. However, Bono and Anderson (2005) found supervisors' mentoring behaviors (under the umbrella of transformational leadership) were positively correlated with their and their direct reports' social network status in informal organizational advice and influence networks. These researchers found engaging in mentoring behaviors influences others and increases social capital (by increasing social networks), which contributes to success. Although this research and



reasoning indirectly supports the relationship between mentoring behaviors and social network status, additional empirical research is necessary to understand the specific relationships between mentoring and social network status.

The relationship between mentoring and social network status should be similar for protégés as that proposed for mentors. Given the impact of extensive experience and tenure in a network on the surface it might seem paradoxical that protégé status (compared to non-protégé status) would be related to improved social network status (assuming protégés do not have extensive experience and tenure). One would expect high status members to not need to be a protégé in a mentoring relationship as they already have this marker of success. However, it is reasonable to expect the very people who are likely to be central in a network are protégés (compared to non-protégés) due to their relationships with their mentors. Protégés are likely to benefit from their mentors' visibility in the social network. Explaining conclusions from a 1977 publication by Kanter, Ragins (1997) notes "mentors provide 'reflected power' to their protégés; the mentor's organizational influence augments the protégé's influence and the mentors' power allows them to provide resources for their protégés (pp. 487-488)." Even aside from direct support or mentoring, the mere connection to their mentors can increase a protégé's visibility to others. Through their network status, mentors can increase the network status of their protégés.

***Hypothesis 10:*** *Protégés will have higher levels of social network status than non-protégés after accounting for their own social intelligence and emotional intelligence.*

In addition to the proposed association effects, mentors can increase the status of their protégés by providing mentoring functions (Feeney & Bozeman, 2008). The nature of the

mentoring relationship means mentors will coach and guide their protégés in a variety of ways to facilitate their success within the organization. Mentors will likely promote or provide opportunities for their protégés to work with others or develop relationships with others in the network, introducing them to others and encouraging them to develop relationships, modeling behaviors or advising them of techniques to interact and network, bragging about them to their peers, etc. Mentoring functions such as these should increase protégés' relationships with other individuals. They should increase the protégés' social network status.

As stated earlier, visibility and sponsorship are some of the career development functions protégés receive from their mentors. Often, mentors have more experience and insight in their organizations than non-mentors (Ragins, 1997), providing them more knowledge of organization politics, structures, and dynamics than their non-mentor peers. Consequently their co-workers should consider them as resources to go to when trying to navigate these channels. The better integrated a mentor is in the social networks of the organization or profession, the more opportunities he or she is likely to have to provide visibility and sponsorship to his or her protégés. An individual's status within his social network may influence the professional opportunities available, the relationships formed with others, the amount of people he or she can use for professional networking, how he or she is regarded by others, etc. When people are in mentoring relationships with highly regarded people they themselves are likely to be highly regarded, thus increasing their social network status.

Results from Tonidandel, Avery, and Phillips (2007) provide indirect empirical support for the relationship between a mentor's network status on a protégé's network status. In their study of collegiate basketball coaches, researchers found a mentor's coaching success moderated the relationship between mentoring received and a protégé's coaching success. According to the

authors, not all mentors are equal and mentoring from *more* successful mentors is likely more beneficial than mentoring from *less* successful mentors. In other words, the impact of mentoring on a protégé goes beyond the actual career development or psychosocial support a mentor provides. The actual success of the mentor himself or herself matters. This is not surprising considering knowledge and expertise (predictors of success) predict mentoring effectiveness (Allen & Poteet, 1999; Eddy, D'Abate, Tannenbaum, Givens-Skeaton, and Robinson (2006). Mentoring from an unsuccessful mentor can potentially be negative for a protégé, costing valuable time and possibly bringing negative perceptions from others (Hunt & Michael, 1983). Poor mentors may not have a good understanding of organizational dynamics or the culture, which may lead to ineffective career guidance to their mentees. In addition, negative views of poor mentors may be transferred to their protégés regardless of the protégés' individual ability. However, successful and positively viewed mentors, who are more likely to be more central in the organization, can be more beneficial to their protégés. Considering network status as an operationalization of success, we can extrapolate from the findings of Tonidandel, Avery, and Phillips (2007). A mentor's social network status (a marker of success as it indicates the number of relationships with other network members), in addition to the mentoring received, is likely related to a protégé's social network status. Specifically, a mentor's social network status will moderate the relationship between mentoring received and protégé social network status.

***Hypothesis 11:*** *The relationship between mentor social network status and protégé social network status will be moderated by the level of career development support provided by the mentor. Specifically, mentor social network status will be more positively associated with protégé social network status for those who received greater career support than for those who received less career support.*

In summary, there are many proposed implications for social intelligence and emotional intelligence in a mentoring relationship and numerous reasons to further study these constructs. To date, there is scant research in the mentoring literature that explains what impacts social intelligence and emotional intelligence have on a mentoring relationship. Despite compelling arguments to expect social intelligence and emotional intelligence to influence the potential to be in a mentoring relationship as well as the success of the mentoring relationship, these relationships have not been studied.

To recap, I proposed that individuals with higher levels of social intelligence and emotional intelligence will be more likely to be in a mentoring relationship and their relationships will be perceived as more successful. In addition, it is proposed that individuals with higher levels of social intelligence and emotional intelligence will have higher levels of social network status. Mentors' social network status (which is influenced by their social intelligence and emotional intelligence) is also expected to predict their protégés' social network status and this effect should be strongest when the mentor provides greater career support to the protégé. By examining social intelligence and emotional intelligence within the context of a mentoring relationship and testing the above described relationships the present study contributes to our understanding of mentoring relationships and will provide potential means to improve these relationships for participants and organizations alike.

### **Mentoring Summary**

Given the many benefits of mentoring and the investments companies make in creating formal mentoring programs, it is worthwhile to continue exploring factors that contribute to mentoring and its relationship to employee success. A particularly concerning area of this research is the individual difference variables that are related to effective mentoring. In addition

to studying the relationships between individual differences and effective mentoring, it is also important to understand the relationships between individual differences and the employee and organizational outcomes related to mentoring. Increasing our knowledge of these complex relationships will be fruitful in developing guidance to improve mentoring for mentors, protégés, and the organizations that employ them.

To recap, empirical research indicates mentoring provides numerous benefits for mentors, protégés, and organizations. The career development and psychosocial support mentors give their protégés are related to numerous positive outcomes. When employees receive the personalized coaching and guidance from a more experienced person who is dedicated to their success they are more likely to be more successful than individuals who were not mentored. For example, previous research has found mentoring is positively related to indicators of protégés' career-success (Dreher & Cox, 1996), career planning and career involvement (Chao, 1997), and job satisfaction and career satisfaction (Allen et al., 2004).

From previous research we know that mentors may benefit from being in a mentoring relationship as well. Mentors receive recognition from supervisors and peers for assuming these responsibilities, develop their coaching and leadership skills and establish strong links to their protégés and, likely, the protégé's peers, which strengthens or grows their professional networks. Mentors may also enhance their personal development by gaining personal satisfaction for his or her role in developing a novice employee and report greater levels of career success than non-mentors (Bozionelos, 2004).

In relation to the organization, mentoring may increase the productivity of employees (Cronan-Hillix et al., 1986) and organizational socialization of mentored employees (Chao, 1997). This hastening of adjustment should increase a new employee's productivity, and,

therefore, the organization's profitability. In addition, this close bond may improve engagement in the organization and organizational commitment and reduce intentions to leave.

Numerous studies have reported perceived similarity between the mentor and protégé as a predictor of mentoring success. Research has also reported ability, knowledge, motivation, and interpersonal skills as personal characteristics that predict mentoring quality, effectiveness and outcomes. However, the area of interpersonal behaviors has received little attention. Since mentoring involves substantial communication and time spent developing friendships and a personal relationships, mentors and protégés who are more comfortable with each other are more likely to report satisfaction with the relationship and experience better outcomes. Interpersonal behaviors or "people skills" may be important for mentors and protégés (e.g., Allen & Poteet, 1999). Individual differences such as listening and communication skills, the ability to read and understand others, having a people orientation (e.g., Allen & Poteet, 1999; Allen et al., 1997) are desirable characteristics for mentors. With such limited understanding of the interpersonal skills that predict mentoring outcomes it is critical to examine which interpersonal behaviors promote mentoring functions and mentoring outcomes.

Allen and Poteet's (1999) and Allen et al.'s (1997) studies indicate protégés and mentors who have a "people orientation" and relate and work well with others are among the most desirable protégés and mentors. These studies suggest social intelligence, the ability to effectively manage personal relationships, and emotional intelligence, the ability to effectively manage emotions, are important in mentors and protégés. Social intelligence and emotional intelligence are related to interpersonal functioning and may be a critical means of improving mentoring relationships and outcomes. Both constructs are related to understanding people and social interactions. While social intelligence tends to be outwardly focused, emotional

intelligence tends to be inwardly focused. However, previous research has not examined the relationships of these constructs to mentoring.

## CHAPTER THREE: METHODOLOGY

### Participants

Participants (both mentors and protégés) were employees of either a Government agency or one of several support contractors conducting aerospace operations in the Southeast United States. There were 342 potential participants invited to participate in this study. Participants may have been protégés, mentors, neither or both. Of the 342 potential participants, self report data were obtained from 194 individuals. However, data on network status were obtained for 146 of these participants (52 protégés and 34 mentors). Eight employees were identified as being mentors to multiple employees. Of the 56 who were protégés, 6 (17.6%) were also mentors to others.

### Demographic data.

Respondents ranged in age from 21 years to 64 years ( $M = 45.87$  years,  $SD = 10.83$  years) for Part 1 and 2. The sample of respondents was comprised of 77 (52.7%) males, 65 (44.5%) females, and 4 unstated. Racial demographics were distributed as follows: 103 (70.5%) Caucasian, 18 (12.3%) Black/African-American, 14 (9.6%) Latino/Hispanic, 1 (0.5%) Asian, 1 (0.5%) Native American and 7 (4.8%) individuals who selected “Multi-racial/Other”.

The occupations represented across sample participants were mainly engineers (43.7%) and business (44.4%). The remaining participants represented clerical (1.4%) or other fields (10%). The sample’s distribution of highest education levels achieved ranged from High School (4; 2.7%), Some College (14; 9.6%), Associate’s Degree (10; 6.8%), Bachelors Degree (55; 37.7%), Masters Degree (57; 39%), Doctorate (4; 2.7%) and two (1.4%) respondents did not provide data. Organizational tenure (duration of time in their present organization) ranged from



2 months to 37 years ( $M = 8.17$  years,  $SD = 7.63$  years) and job tenure (duration of time in present position) ranged from 2.4 months to 25 years ( $M = 5.28$  years,  $SD = 5.20$  years).

Mentors had one to five protégés ( $M = 1.28$ ). Mentors ranged in age from 27 years to 64 years ( $M = 50.94$  years,  $SD = 8.47$  years). The sample of mentors was comprised of 24 (70.6%) males and 10 (29.4%) females. The racial demographics of mentors were 26 (76.5%) Caucasian, 2 (5.9%) Black/African-American, 4 (11.8%) Latino/Hispanic, 1 (2.9%) Asian, and 1 (2.9%) Native American/Alaskan Native. The mentors' distribution of highest education levels achieved ranged from some college (4, 11.8%), Associate's Degree (2, 5.9%), Bachelors Degree (9, 26.5%), Masters Degree (15, 44.1%), Doctorate (3, 8.8%) and 1 respondent who did not provide data. Among mentors, 7 (20.6%) were currently team leads (a sub-supervisory role), 6 (17.6%) were technical experts, and 13 (38.2%) were current supervisors. The remaining 8 (23.5%) were non-supervisors or non-leads.

## **Measures**

### **Social intelligence.**

Social intelligence was assessed by the Tromso Social Intelligence Scale (TSIS; Silvera, Martinussen, Dahl, 2001) was used to assess participants' social intelligence. This 21 item self-report scale is composed of three subscales of equal length. These subscales measure social awareness (tendency to know what to expect in social situations), social skills (ability to engage in and adapt to social settings), and social information processing (ability to understand and predict behaviors and feelings). In previous research, the three factor model has emerged across several confirmatory factor analyses using several independent samples (Silvera, Martinussen, Dahl, 2001). The TSIS appears relatively free of social desirability contamination, which is often a concern with self-report scales. Correlations with the Marlowe-Crowne Social

Desirability scale were quite low and the TSIS had little evidence of gender or age bias (Silvera, Martinussen, Dahl, 2001). A sample item from this scale is “I can predict other peoples’ behavior.”

All items on this survey were accompanied by a 7- point Likert-like scale ranging from (1= describes me extremely poorly, 7=describes me extremely well). Previous estimates of internal consistency reliability (Cronbach’s coefficient alpha) were acceptable, ranging from .79 to .86 across the three subscales (Silvera et al., 2001). In the present study, Cronbach’s alpha estimate of the entire scale (21 items) was .85. Estimates of internal consistency for each of the subscales were: social awareness subscale .73, social information processing subscale .80, and the social skills subscale .82.

Social information processing (SIP) scores for all respondents ranged from 1.86 to 5.00 ( $M = 3.72$ ,  $SD = .58$ ); social skills (SS) scores ranged from 2.86 to 6.14 ( $M = 4.99$ ,  $SD = .65$ ); social awareness (SA) ranged from 4.29 to 6.86 ( $M = 5.79$ ,  $SD = .53$ ).

### **Emotional intelligence.**

I used the Schutte Emotional Intelligence Scale to assess emotional intelligence . This 33-item self report measure was answered on a 5-point Likert-like scale (1 = *strongly disagree* and 5 = *strongly agree*). The Schutte is based on Salovey and Mayer’s (1990) ability based emotional intelligence model and is a brief and valid measure of emotional intelligence (Schutte, et al., 1998). This instrument assesses three components of emotional intelligence: appraisal and expression of emotion in the self and others; regulation of emotion in the self and others; and use of emotions in problem solving. Despite its theoretical basis on a three factor model, confirmatory factor analysis suggest the emergence of a single factor of emotional intelligence. The model is also consistent with other ability based models of emotional intelligence, including

Mayer and Salovey's 1997 revision to their earlier model (Schutte, et al., 1998). A sample item from this scale is "I know when to speak about my personal problems to others."

Psychometric data for the Schutte are quite favorable. The estimates of internal consistency reliability (coefficient alpha) ranged from .87 to .90 and two-week test-retest reliability was 0.78 (Schutte, et al., 1998). The scale has predicted theoretically related constructs such as alexithymia, attention to feelings, clarity of feelings, mood repair, and depression in expected directions. In the present study, the internal consistency estimate of the entire scale was .87. Emotional intelligence (EI) scores for all respondents ranged from 2.4 to 4.75 ( $M = 3.86$ ,  $SD = .40$ ). See Table 1.

### **Mentoring functions.**

Noe's (1988) scale was used to measure mentoring functions. This scale measures career development and psychosocial support, however, only career development was analyzed in this study. As explained earlier, career-related functions support the protégé's professional development and advancement and include functions such as providing sponsorship, exposure and visibility to leaders, senior management, or other influential organization members, coaching to become more successful, protection and challenging assignments (Kram, 1988). The items on Noe's scale were derived from qualitative and descriptive mentoring relationship studies. The scale measures the extent to which a mentor provides each mentoring function. Responses were measured on a 5-point Likert-like scale, (1 = *no extent*, 5 = *great extent*). A sample item from this scale is "My mentor shared the history of their career with me."

Previous estimates of coefficient alpha internal consistency reliability ranged from 0.89 - 0.92 (Noe, 1988). In this sample, the estimate of Cronbach alpha for the career development subscale, was .90.

### **Mentoring costs and benefits.**

Mentoring costs and benefits were measured by Ragins and Scandura (1994) 33-item scale (20 benefits items and 13 costs items). Responses on this 5-point Likert-type scale ranged from (1 = *strongly disagree*, 7 = *strongly agree*). In previous research, the cost items of the measure has demonstrated reasonably high internal consistency (estimated coefficient alpha =.76) and even higher on the benefits items (estimated coefficient alpha =.91; Ragins & Scandura, 1994). In previous studies, all costs items have been grouped together and all benefits items were grouped together. However, the proposed relationships in this study required I assessed the individual mentoring costs and the individual mentoring benefits. In this study, the estimates of Cronbach's alpha for the mentoring costs were: trouble/energy drain ( $\alpha = .70$ ), dysfunctional relationship ( $\alpha = .37$ ), nepotism ( $\alpha = .66$ ) and bad reflection ( $\alpha = .40$ ). For the mentoring benefits, the estimates of Cronbach's alpha were: rewarding experience ( $\alpha = .71$ ), improved job performance ( $\alpha = .76$ ), loyal base of support ( $\alpha = .68$ ) and recognition by others ( $\alpha = .71$ ). A sample item from this scale is "Mentoring this protégé will have a positive impact on my job performance."

### **Social network status.**

I used a two item measure to assess social network status. This measure was based on Bono and Anderson (2005). These two items were "This person has a great deal of influence on the decisions that get made in this organization" and "This person's support and buy-in are necessary for my ideas or initiatives to succeed." Similar to Bono and Anderson (2005), responses were collected on a 5-point Likert scale anchored by strongly disagree and strongly agree. The correlation between the two items after averaging across all co-workers was .90.

The social network measure required participants answer questions about all their immediate co-workers. Since accuracy of social network status is contingent on having a considerable representation from the network providing data, individuals only received a social network status score when there were responses from at least 50% of their network. When such was the case, each person received a social network status score based on the average ratings of their co-workers.

### **Demographics.**

I collected several demographic items including sex, race, age, and highest education level. In addition, I asked participants to provide their position title and the type of position. The options were supervisor, team lead (a sub-supervisory role that supports supervisors to facilitate team performance), technical lead (a senior expert but non-supervisory position), other civil servant or contractor. I also collected several tenure variables, asking participants the number of years they have worked in their organization (organization tenure), and in their position (position tenure). I also asked participants how long they have worked as a civil servant and as a contractor. Either or both of these questions may have applied to participants.

### **Procedure**

I targeted three departments for participation in this study. These organizations varied in organizational structure, complexity, composition of positions and size of social networks. From the three organizations, I derived 22 social networks, which ranged from 5 - 21 employees.

I met with the Directors (the highest level supervisor) of each of the three organizations to discuss the study and requirements from their staff and each provided their support and communicated their support for my study and encouraged participation from their subordinate staff via email and/or in person. Subsequently, I met with all of the unit supervisors across the

three organizations to coordinate a time to present and solicit participation in the study to their staff. In these presentations I described the general purpose of the surveys, instructions for participating, and requested participation. I stressed the requirement of only identifying a mentor in their immediate work group and also explained the study and data were independent of my role as their human resources representative.

Following each presentation, I emailed the link to Part 1 of the online survey (completed through the website, Survey Gizmo) to the unit. This link took participants to the informed consent agreement and participants consented by proceeding to the first page of study measures. That page (the one following the informed consent agreement) contained the social intelligence and emotional intelligence measures (see Appendices A and B, respectively).

The following description of a mentor followed the measures of social intelligence and emotional intelligence:

“A mentor can generally be defined as an individual who has more advanced work experience and knowledge than you and who is committed to providing you help in developing your career and giving you social support. A mentor is not necessarily a supervisor or chief but is committed to your success.”

After this description, participants provided their name and indicated whether they had a mentor in their unit. Participants who indicated they had a mentor then provided their mentor's name and email address, the duration of the mentoring relationship, and completed the career development questions (see Appendix C). Participants' names and their mentors' names were necessary to match protégés and mentors as well as to match participants' data from part 1 with data collected during part 2. Participants could identify up to three mentors. After completing the mentoring functions items or if they did not indicate having a mentor, participants completed

the demographics items and saw a paragraph thanking them for their participation and reminding them they would receive an invitation for part 2.

My research assistant and I emailed several reminders to complete Part 1 to the potential participants. After several attempts to obtain data from members of each unit, my research assistant emailed a request to complete part 2 of the survey to all employees. This email included a link to the second set of online surveys. In addition, employees who were identified as a mentor also received the name of the protégé who identified them so they could answer the items measuring the perceived costs and benefits of mentoring that protégé.

Similar to part 1, employees responding to the measures of Part 2 were first shown an informed consent agreement. On the next page, participants gave their name and, if applicable, the name of the participant who identified him or her as a mentor, and the length of the mentoring relationship. Mentors received the names of all the protégés who identified them and completed the Mentoring Costs and Benefits measure for each protégé (see Appendix D). All participants received the Social Network measure (see Appendix E). This scale contained only the names of the participant's immediate co-workers. This was designed so employees were only rating co-workers who shared at least one social network (i.e., the work unit) and to reduce respondent fatigue by limiting the number of people they rated. The demographics measure was the final scale (see Appendix F).

## CHAPTER FOUR: RESULTS

All analyses were conducted on PASW Statistics GradPack 17.0 for Windows. When testing the hypotheses, I included only participants who had complete data (e.g., social intelligence, emotional intelligence, mentoring data, and social network data). I used the same data analysis strategy to test all of the social intelligence and emotional intelligence hypotheses. The goal of this strategy was to preserve statistical power. The social intelligence scale had three subscales. I did not hypothesize differential effects for the three subscales but included them as separate variables to explore whether such differential effects may exist. First, all the social intelligence facets and any pertinent control variables (based on correlations with the dependent variable) were entered in either a multiple regression or logistic regression analysis (depending on the dependent variable). Next, any of the social intelligence subscales that were or approached statistically significant regression weights were retained and tested with emotional intelligence in subsequent analyses. The final models included here had significant F values. This strategy of limiting the number of variables tested at once and removing non-significant predictors preserved statistical power by improving the ratio of sample size to variables.

### **Discriminant Validity of Social Intelligence and Emotional Intelligence**

A secondary purpose of this research was to examine the construct validity of social intelligence and emotional intelligence. As noted earlier, several researchers have stated the two constructs are closely related while others have indicated emotional intelligence is a more contemporary version of social intelligence. The correlations between the social intelligence facets and emotional intelligence were examined to test the discriminant validity of the two constructs and there were several interesting correlations. The correlation between EI and SIP [ $r(145) = .65, p = .00$ ] was larger than the correlation between EI and SS [ $r(145) = .37, p = .00$ ] and that between EI and SA



[ $r(145) = .20, p = .01$ ]. The difference in size of the correlations between the SI facets and EI and the small to moderate size of the correlations (with the exception of the correlation between EI and SIP) provide evidence these are different constructs.

Social intelligence and emotional intelligence also had different correlation patterns with other variables measured in this study, providing evidence these constructs are distinct but related. These relations are described throughout the results section. In Table 1, the means, standard deviations, and intercorrelations among study variables are displayed.

Table 1 Means, Standard Deviations and Zero Order Correlations among Study Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Age	45.87	10.83	-																	
2. Organization	8.17	7.63	.38**a	-																
Tenure																				
3. Position Level			.34**a	.21*a	-															
4 SIP	3.72	.58	-.03a	.03b	.01a	-														
5.SS	4.99	.65	-.06a	.09b	.10a	.35**a	-													
6.SA	5.79	.53	-.15~a	.01b	-.01a	.23**a	.27**a	-												
7. EI.	3.86	.40	.05a	.12b	.05a	.65**a	.37**a	.20*a	-											
8.Improved Job	3.78	.69	-.32*c	-.05c	.07c	-.02c	.07c	.38**c	.03c	-										
Performance																				
9.Rewarding	4.04	.57	-.21c	.05c	.09c	-.13c	-.01c	.21~c	-.13c	.76**c	-									
Experience																				
10.Recognition	2.71	.91	.00c	-.21c	-.10c	.16c	-.02c	.17c	.26*c	.28*c	.32**c	-								
11. Support	3.97	.87	-.06c	-.04c	-.03c	.13c	.14c	.19~c	.07c	.54**c	.48**c	.29*c	-							
12. Trouble/Energy	1.65	.60	.05c	-.12c	-.08c	.24~c	-.07c	-.07c	.27*c	-.21~c	-.45**c	-.01c	-.18c	-						
Drain																				
13. Nepotism	1.70	.76	-.18c	.12c	-.07c	.21~c	.14c	.23*c	.09c	.01c	-.03c	-.10c	.10c	.26~c	-					
14. Bad Reflection	1.63	.55	-.12c	-.23c	.12c	.02c	-.26*c	-.05c	.16c	-.08c	-.27*c	.31*c	-.06c	.41**c	.15c	-				

15. Dysfunctional Relationship	1.90	.71	.00c	.07c	.15c	-.20c	-.23~c	.34**c	-.07c	.41**c	.33*c	.17c	.06c	-.35**c	-.03c	.07c	-			
16. Career Development	3.97	.81	-.13c	-.09c	-.14c	.31*c	.28*c	.19~c	.31*c	.29*c	.10c	.25*c	.36**c	.07c	.26*c	.07c	-.21c	-		
17. SNS	4.97	1.18	.18*a	.13a	.52**a	.09a	-.05a	.16*a	.00a	-.01c	-.01c	.01c	.02c	-.03c	.24*c	.12c	.32**c	.00c	-	
18. Protégé			-.13a	-.23**a	-.14a	-.08b	-.06a	-.09a	.02a									.00a	-	
19. Mentor			.27**b	.15~b	.42**b	.06b	.20*b	.13~b	.13~b	-.13c	-.05c	-.05c	-.16c	-.04c	.04c	-.05c	.08c	-	.36**	-.25**b
																		.23c	b	

*Note.* one tail tests; ~ $p < .10$ , \* $p < .05$ ,  $p^{**} < .01$ .  $N_s$  are shown by letters a-c.  $N_a = 142-146$ .  $N_b = 130-132$ .  $N_c = 49-52$ .

### **Identification as a Mentor and/or Protégé**

Slightly more than a third (36%) of the 146 participants reported being in a mentoring relationship with someone in their social network group at the time of the study. Those who reported having such a mentor tended to have less organizational tenure [ $r(144) = -0.23, p = .01$ ]. This likely means employees who were in the organization longer were less likely to need or pursue receiving mentoring.

### **Social intelligence and emotional intelligence correlations with identification as a mentor.**

The bivariate correlations between being a mentor and social intelligence and emotional intelligence were mostly non-significant. Neither the correlation between mentor status and SIP ( $r(131) = .06, p = .25$ ) nor mentor status and SA ( $r(131) = .13, p = .07$ ) were statistically significant. The correlation between mentor status and EI was also not significant ( $r(131) = .13, p = .07$ ). However, the correlation between mentor status and SS was significant ( $r(131) = .20, p = .01$ ).

### **Social intelligence and emotional intelligence as predictors of identification as a mentor.**

Hypothesis 1 stated individuals with higher a) social intelligence and b) emotional intelligence will be more likely to have a protégé (be a mentor). I first used logistic regression to evaluate the relationship between the three facets of social intelligence and mentor status. Logistic regression is the appropriate analysis for predicting a categorical dependent variable (e.g., as a mentor/non-mentor or protégé/non-protégé) when the independent variables are continuous or categorical (Tabachnick & Fidell, 2001). Organizational tenure was included as a covariate in these analyses because of the correlation between organizational tenure and mentor status.

### ***Social intelligence.***

Mentor status was regressed on the three facets of social intelligence and organizational tenure. In this analysis, the SS subscale emerged as a statistically significant predictor of mentor status [ $B = -.73$ ,  $SE = .38$ ,  $p = .03$ , one-tailed ( $M_{mentors} = 5.20$ ,  $M_{non-mentors} = 4.91$ )]. Neither the SA [ $B = -.45$ ,  $SE = .43$ ,  $p = .15$ , one-tailed], or the SIP subscale [ $B = .15$ ,  $SE = .40$ ,  $p = .35$ , one-tailed], nor organizational tenure [ $B = -.04$ ,  $SE = .03$ ,  $p = .06$ , one-tailed] accounted for additional unique variance.

### ***Emotional intelligence.***

Next, the emotional intelligence scale was included as a predictor with the SS subscale and organizational tenure to explain status as a mentor. In this model, EI was not a significant unique predictor [ $B = -.24$ ,  $SE = .57$ ,  $p = .33$ , one-tailed] but SS [ $B = -.72$ ,  $SE = .37$ ,  $p = .03$ , one-tailed] remained a significant predictor. Thus, Hypothesis 1 was partially supported. Specifically, those scoring higher on the SS subscale of social intelligence were more likely to report currently being a mentor to someone in the workgroup. See Table 2.

Table 2 Logistic Regression Results of SI/EI Predicting Mentor Status

Variable	Mentor Status			
	<i>B</i>	<i>SE</i>	95% CI	Significance
Model 1				
Org Tenure	-.04	.03	.92 1.01	.06
SIP	.15	.40	.53 2.56	.35
SA	-.45	.43	.28 1.48	.15
<b>SS</b>	<b>-.73</b>	<b>.38</b>	<b>.23 1.02</b>	<b>.03*</b>
Overall Model				<b>.03</b>
Model 2				
Org Tenure	-.04	.03	.92 1.01	.07
<b>SS</b>	<b>-.72</b>	<b>.37</b>	<b>.23 1.01</b>	<b>.03*</b>
EI	-.24	.57	.26 2.38	.67
Overall Model				<b>.02*</b>

### **Social intelligence and emotional intelligence correlations with protégé status.**

None of the bivariate correlations between protégé status and social intelligence and emotional intelligence were statistically significant. The correlation between protégé status and SIP ( $r(52) = -.08, p = .18$ ), protégé status and SA ( $r(52) = -.09, p = .14$ ), and protégé status and SS ( $r(52) = -.06, p = .24$ ) were all not statistically significant. The correlation between protégé status and EI was also not significant ( $r(52) = .02, p = .40$ ).

### **Social intelligence and emotional intelligence as predictors of protégé status.**

Hypothesis 2 stated individuals with higher a) social intelligence and b) emotional intelligence will be more likely to have a mentor (be a protégé). Since participants with greater organizational tenure were less likely to have a mentor I included organizational tenure as a covariate with social intelligence and emotional intelligence in the calculations to explain protégé status.

#### ***Social intelligence.***

Initially, the three facets of social intelligence and organizational tenure were entered as independent variables with protégé status as the dependent variable. In this calculation, organizational tenure [ $B = .08, SE = .03, p = .00$ , one-tailed] was a significant predictor of protégé status but none of the individual facets of social intelligence was a significant predictor (SIP: [ $B = .24, SE = .34, p = .23$ , one-tailed], SA [ $B = .27, SE = .36, p = .23$ , one-tailed], SS [ $B = -.02, SE = .30, p = .48$ , one-tailed]).

#### ***Emotional intelligence.***

In the second model, emotional intelligence and organizational tenure were entered as independent variables to explain protégé status. In this analysis, organizational

tenure remained a statistically significant predictor [ $B = .08, SE = .03, p = .00$ , one-tailed] but emotional intelligence did not emerge as a significant predictor of protégé status [ $B = -.19, SE = .46, p = .35$ , one-tailed]. Thus, Hypothesis 2 was not supported. Those higher in social and emotional intelligence were not more likely to report currently having a mentor from their workgroup. See Table 3.

Table 3 Logistic Regression Results SI/EI Predicting Protégé Status

Variable	<i>B</i>	<i>SE</i>	95% CI	<i>p</i>
Model 1				
Org Tenure	.08	.03	1.02 1.14	.00**
SIP	.24	.34	.66 2.47	.23
SA	.27	.36	.65 2.64	.23
SS	-.02	.30	.55 1.78	.48
Overall Model	p= .02			
Model 2				
Org Tenure	.08	.03	1.02 1.14	.00**
EI	-.19	.46	.34 2.04	.35
Overall Model	p= .02			

## Mentor Reported Costs

### **Protégé social intelligence and emotional intelligence and mentoring costs correlations.**

The correlations between protégé social intelligence and emotional intelligence and mentoring costs varied. Several statistically significant correlations emerged. Those scoring higher on the SIP subscale were viewed by their mentors as more trouble/energy drain ( $r(52) =$

.24,  $p = .04$ , one-tail). Those scoring higher on the SS subscale were seen as less of a potential bad reflection on the mentor ( $r(52) = -.26$ ,  $p = .03$ , one-tail). Although not statistically significant, mentors of protégés scoring higher on the SS subscale were less likely to perceive their protégé as potentially backstabbing them (dysfunctional relationship;  $r(52) = -.23$ ,  $p = .05$ , one-tail). However, mentors of protégés scoring higher on the SA subscale were more likely to perceive the relationship as dysfunctional ( $r(52) = .34$ ,  $p = .01$ , two-tail). Although not statistically significant, mentors perceived a greater risk of perceived nepotism when their protégés scored higher on the SA subscale ( $r(52) = .23$ ,  $p = .05$ , one-tail). Protégés scoring higher on the EI measure were viewed as more trouble/energy drain ( $r(52) = .27$ ,  $p = .03$ , one-tail) by their mentors.

### **Protégé social intelligence and emotional intelligence as predictors of mentoring costs.**

Hypothesis 3 stated protégé social intelligence and emotional intelligence would predict mentor perceived mentoring costs. As described earlier, there are several mentoring costs and the direction of the predicted relationships between each type of mentoring costs and social intelligence and emotional intelligence varied. I calculated four separate sets of multiple regression analyses, with each mentoring cost regressed onto the social intelligence facets and emotional intelligence.

#### ***Trouble/Energy drain.***

In the first equation, trouble/energy drain was regressed onto SIP, SS and SA. In this analysis, only SIP emerged as a significant predictor [ $B = .30$ ,  $SE = .24$ ,  $t = 2.08$ , 95% CI [.01 .59]  $p = .04$ , two-tailed] and the overall model was not significant [ $F = 1.57$ ,  $p = .21$ , two-tailed].



In the second model, trouble/energy drain was regressed onto SIP and EI. Following the previously described strategy, SS and SA were removed as they were not significant predictors in the earlier model. In this model, neither SIP [ $B = .09, SE = .20, t = .43, 95\% \text{ CI } [-.31 .48], p = .33, \text{ one-tailed}$ ] nor EI [ $B = .39, SE = .37, t = 1.03, 95\% \text{ CI } [-.36 1.13], p = .15, \text{ one-tailed}$ ] were significant predictors. The overall model was, again, not significant [ $F = 2.09, p = .07, \text{ one-tailed}$ ]. Finally, a third model was tested with only SIP as the predictor of trouble/energy drain. In this model, SIP approached significance as a predictor of mentor perceived trouble/energy drain [ $B = .24, SE = .13, t = 1.77, 95\% \text{ CI } [-.03 .50], p = .08, \text{ two-tailed}$ ], overall model  $F = 3.11, p = .08, \text{ two-tailed}$ . In each of these models, SIP had a positive relation to trouble/energy drain which was counter to the direction hypothesized. Therefore, I included the two-tailed significance test results.

### *Nepotism.*

In the next set of analyses, I first regressed nepotism onto SIP, SS, and SA. In this analysis, none of the predictors had a significant relationship with mentor perceived nepotism nor was the overall model significant [ $F = 1.50, p = .12$ ]. In the next model, I regressed nepotism onto SA and EI. SA was retained given its significant bivariate correlation with nepotism. In this analysis, neither SA [ $B = .30, SE = .19, t = 1.59, 95\% \text{ CI } [-.08 .68], p = .06, \text{ one-tailed}$ ] nor EI [ $B = .11, SE = .33, t = .33, 95\% \text{ CI } [-.55 .77], p = .37, \text{ one-tailed}$ ] were significant predictors, nor was the overall model significant [ $F = 1.47, p = .12, \text{ one-tailed}$ ]. In the third model, nepotism was regressed onto SA alone. SA [ $B = .31, SE = .18, t = 1.70, 95\% \text{ CI } [-.06 .68], p = .05, \text{ one-tailed}$ ] emerged as a significant predictor of mentor perceived nepotism [ $F = 2.88, p = .05, \text{ one-tailed}$ ]. The relationship between SA and nepotism was positive as hypothesized.

### ***Bad reflection.***

The third mentor perceived mentoring cost I tested was bad reflection. First, I regressed bad reflection onto SIP, SS, and SA. In this model, only SS was a significant predictor [ $B = -.24$ ,  $SE = .12$ ,  $t = -2.00$ , 95% [-.48 .00],  $p = .03$ , one-tailed] but the overall model was not significant [ $F = 1.40$ ,  $p = .13$ , one-tailed].

In the next model, bad reflection was regressed onto SS and EI. Both SS [ $B = -.28$ ,  $SE = .11$ ,  $t = -2.56$ , 95% CI [.01 .98],  $p = .01$ , one-tailed] and EI [ $B = .50$ ,  $SE .24$ ,  $t = 2.07$ , 95% CI [.01 .98],  $p = .04$ , two-tailed] were significant predictors and the overall model was also significant [ $F = 3.99$ ,  $p = .03$ , two-tailed]. As hypothesized, SS was negatively related to bad reflection. Contrary to my hypothesis, EI was *positively* related to bad reflection.

### ***Dysfunctional relationship.***

The last mentor perceived mentoring cost I tested was dysfunctional relationship. Dysfunctional relationship was regressed onto SIP, SS, and SA. In this analysis, only SA [ $B = .60$ ,  $SE = .16$ ,  $t = 3.66$ , 95% CI [.27 .92],  $p = .00$ , two-tailed] and SS [ $B = -.34$ ,  $SE = .14$ ,  $t = -2.53$ , 95% CI [-.62 -.07],  $p = .02$ , two-tailed] were significant predictors of dysfunctional relationship and the overall model was also significant [ $F = 5.96$ ,  $p = .00$ , two-tailed].

Next, I regressed dysfunctional relationship onto SA, SS, and EI. The overall model was statistically significant [ $F = 5.46$ ,  $p = .00$ , two-tailed]. In this analysis, only SA [ $B = .59$ ,  $SE = .17$ ,  $t = 3.61$ , 95% CI [-.26 .93],  $p = .00$ , two-tailed] and SS [ $B = -.38$ ,  $SE = .14$ ,  $t = -2.78$ , 95% CI [-.66 -.11],  $p = .01$ , two-tailed] were significant predictors. EI [ $B = -.04$ ,  $SE = .29$ ,  $t = -.14$ , 95% CI [-.62 .54],  $p = .89$ , two-tailed] was not a

significant predictor of dysfunctional relationship. As hypothesized, SA was positively related to dysfunctional relationship but contrary to the hypothesis, the SS subscale was negatively related to dysfunctional relationship.

**Summary of mentoring costs relations.**

To summarize the relationships between protégé social intelligence and emotional intelligence and mentor perceived mentoring costs: the social information processing subscale was a positive predictor of trouble/energy drain; the social skills subscale was a negative predictor of both bad reflection and dysfunctional relationship; the social awareness subscale was a positive predictor of both nepotism and dysfunctional relationship; and the emotional intelligence measure was a positive predictor of bad reflection. Thus, Hypothesis 3 was partially supported. These results are summarized in Table 4.

Table 4 Multiple Regression Results of Protégé SI/EI Predicting Mentoring Costs

Variable	Costs															
	Trouble/Energy Drain				Nepotism				Bad Reflection				Dysfunctional Relationship			
	B	t	95% CI	p	B	t	95% CI	p	B	t	95% CI	p	B	t	95% CI	p
<b>Model 1</b>																
SIP	.30	2.08	.01 .59	.04*	.22	1.22	-.14 .59	.23	.11	.84	-.15 .38	.40	-.16	-1.06	-.46 .14	.29
SA	-.06	-.36	-.37 .26	.72	.28	1.42	-.12 .68	.16	.04	.29	-.25 .33	.77	.60	3.66	.27 .92	.00*
SS	-.13	-1.03	-.39 .13	.31	.00	.00	-.33 .33	.99	-.24	-2.00	-.48 .00	.03~	-.34	-2.53	-.62 -.07	.02*
Overall Model	$F = 1.57, p = .21$				$F = 1.50, p = .23$				$F = 1.40, p = .25$				$F = 5.96, p = .00*$			
<b>Model 2</b>																
SIP	.09	.43	-.31 .48	.33~												
SA					.30	1.59	-.08 .68	.06~					.59	3.61	-.26 .93	.00*
SS									-.28	-2.56	.01 .98	.01~	-.38	-2.78	-.66 -.11	.01*
EI	.39	1.03	-.36 1.13	.15~	.11	.33	-.55 .77	.37~	.50	2.07	.01 .98	.04*	-.04	-.14	-.62 .54	.89*
Overall Model	$F = 2.09, p = .07~$				$F = 1.47, p = .12~$				$F = 3.99, p = .03*$				$F = 5.46, p = .00*$			
<b>Model 3</b>																
SIP	.24	1.77	-.03 .50	.08*												
SA					.31	1.70	-.06 .68	.05~					.59	3.65	.27 .92	.00
SS													-.39	-3.03	-.65 -.13	.00
EI																
Overall Model	$F = 3.11, p = .08*$				$F = 2.88, p = .05~$				$F = 8.35, p = .00*$							

## **Mentor Reported Benefits**

### **Protégé social intelligence and emotional intelligence and mentoring benefits correlations.**

The correlations between protégé SI and EI to mentoring benefits varied. Several statistically significant correlations emerged. Protégés scoring higher on the SA subscale were viewed by their mentors as more beneficial to improving the mentor's job performance ( $r(52) = .38, p = .00$ ) and those scoring higher in EI were viewed as being more beneficial with respect to bringing the mentor recognition ( $r(52) = .26, p = .03$ ).

### **Protégé social intelligence and emotional intelligence as predictors of mentoring benefits.**

Hypothesis 4 stated protégé social intelligence and emotional intelligence would predict mentor perceived mentoring benefits. As described earlier, there are several mentoring benefits and I expected each was positively related to social intelligence and emotional intelligence. I calculated four separate sets of multiple regression analyses, with each mentoring benefit regressed onto the SI facets and EI.

#### ***Recognition.***

First, recognition was regressed onto the three facets of SI. Neither SIP [ $B = .28, SE = .22, t = .57, 95\% CI = [.16 .72], p = .10, \text{one-tailed,}$ ], SS [ $B = -.20, SE = .20, t = -1.01, 95\% CI [ -.60 .20] p = .16, \text{one-tailed}$ ] nor SA [ $B = .32, SE = .24, t = 1.36, 95\% CI [ -.15 .80], p = .09, \text{one-tailed}$ ] were significant predictors and the overall model was not significant [ $F = 1.18, p = .17, \text{one-tailed}$ ]. In the next model, recognition was regressed onto SA and EI. SA was retained due to its marginally significant beta in the previous analysis. In this model, only EI was a significant predictor [ $B = .66, SE = .39, t = 1.70,$

95% CI [-.12 1.44],  $p = .05$ , one-tailed] and the overall model approached statistical significance [ $F = 2.23$ ,  $p = .06$ , one-tailed]. As predicted, the direction of the relationship between EI and recognition was positive.

***Rewarding experience.***

Next, rewarding experience was regressed onto SIP, SS, and SA. None of these subscales were significant predictors of rewarding experience nor was the overall model statistically significant [ $F = 1.20$ ,  $p = .16$ , one-tailed]. Next, I regressed rewarding experience onto SA and EI. I retained SA due to its marginally significant regression weight in the previous analysis. In this analysis, SA [ $B = .24$ ,  $SE = .14$ ,  $t = 1.70$ , 95% CI [-.04 .52],  $p = .05$ , one-tailed] emerged as a statistically significant predictor but EI did not [ $B = -.30$ ,  $SE = .25$ ,  $t = 1.22$ , 95% CI [-.79 .19],  $p = .23$ , two-tailed] nor was the overall model statistically significant [ $F = 1.86$ ,  $p = .17$ , two-tailed]. Thus, the data suggest there is no relationship between rewarding experience and protégé SI or EI.

***Improved job performance.***

Next, I regressed improved job performance onto SIP, SS, and SA. In this analysis, SA [ $B = .48$ ,  $SE = .17$ ,  $t = 2.90$ , 95% CI [.14 .83],  $p = .01$ , two-tailed] emerged as a statistically significant predictor but neither SIP [ $B = -.06$ ,  $SE = .16$ ,  $t = -.59$ , 95% CI [-.37 .26],  $p = .56$ , two-tailed] or SS [ $B = -.05$ ,  $SE = .14$ ,  $t = -.52$ , 95% CI [-.34 .23],  $p = .56$ , two-tailed] were statistically significant. Additionally, the overall model was significant [ $F = 2.94$ ,  $p = .04$ , two-tailed].

Next, improved job performance was regressed onto SA and EI. In this model, SA [ $B = .46$ ,  $SE = .16$ ,  $t = 2.86$ , 95% CI [.14 .79],  $p = .01$ , two-tailed] remained a statistically significant predictor but EI did not emerge as statistically significant [ $B = -$

.10,  $SE = .28$ ,  $t = -.92$ , 95% CI [ -.67 .46],  $p = .36$ ]. The overall model was statistically significant [ $F = 4.44$ ,  $p = .02$ , two-tailed]. The data suggest mentors view protégés scoring higher in SA as being more beneficial to improving the mentor's own job performance as predicted.

### ***Loyal base of support.***

The last mentor perceived benefit tested was loyal base of support (support). Support was regressed onto SIP [ $B = .12$ ,  $SE = 1.38$ ,  $t = .58$ , 95% CI [-.30 .55],  $p = .28$ , one-tailed], SS [ $B = .05$ ,  $SE = .19$ ,  $t = .28$ , 95% CI [-.33 .44],  $p = .39$ , one-tailed], and SA [ $B = .25$ ,  $SE = .23$ ,  $t = 1.10$ , 95% CI [-.21 .71],  $p = .14$ , one-tailed]. None were a significant predictor of support and the overall model was not significant [ $F = .83$ ,  $p = .24$ , one-tailed]. Next, support was regressed onto SA and EI. I retained SA because of its marginally significant regression weight in the prior analysis. Again, neither SA [ $B = .29$ ,  $SE = .22$ ,  $t = 1.32$ , 95% CI [-.15 .72],  $p = .10$ ] nor EI [ $B = .08$ ,  $SE = .38$ ,  $t = .21$ , 95% CI [.68 .84],  $p = .42$ , one-tailed] were statistically significant [ $F = .98$ ,  $p = .19$ ]. Thus, contrary to the hypothesis, neither SI nor EI were significant predictors of support.

### **Benefits summary.**

To summarize the relationships between protégé SI and EI and mentor perceived benefits: protégés scoring higher in EI were viewed as more beneficial to mentor recognition; and protégés scoring higher in SA were viewed as more beneficial to improving their mentor's job performance. However, the other benefits were not related to protégé SI or EI. Thus, Hypothesis 4 was partially supported. These findings are in Table 5.

Table 5 Multiple Regression Results of Protégé SI/EI Predicting Mentoring Benefits

Variable	Benefits															
	Recognition				Rewarding Experience				Improved Job Performance				Loyal Base of Support			
	B	T	95% CI	p	B	t	95% CI	P	B	t	95% CI	p	B	t	95% CI	p
Model 1																
SIP	.28	.57	.16 .72	.10~	-.14	-1.03	-.42 .13	.16~	-.06	-.59	-.37 .26	.56*	.12	.58	-.30 .55	.28
SA	.32	1.36	-.15 .80	.09~	.24	1.61	-.06 .54	.06~	.48	2.90	.14 .83	.01*	.25	1.10	-.21 .71	.14
SS	-.20	-1.01	-.60 .20	.16~	-.03	-.24	-.28 .22	.42					.05	.28	-.33 .44	.39
Overall	$F = 1.18, p = .17~$				$F = 1.18, p = .16~$				$F = 2.94, p = .04^*$				$F = .83, p = .24$			
Model 2																
SIP																
SA					.24	1.70	-.04 .52	.05	.46	2.86	.14 .79	.01*	.29	1.32	-.15 .72	.10
SS																
EI	.66	1.70	-.12 1.44	.05~	-.30	1.22	-.79 .19	.23*	-.10	-.92	-.67 .46	.36	.08	.21	.68 .84	.42



Overall  $F = 2.23, p = .06\sim$

$F = 1.86, p = .17^*$

$F = 4.44, p = .02^*$

$F = .98, p = .19$

Model

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## **Mentor Provided Career Development**

### **Mentor social intelligence and emotional intelligence and correlations to career development.**

Some of the correlations between mentor social intelligence and emotional intelligence and mentor provided career development were statistically significant. Mentor SS ( $r = -.45, p = .01$ ) and SA ( $r = .42, p = .01$ ) were both statistically correlated to career development but SIP ( $r = .23, p = .19$ ) and EI ( $r = .20, p = .24$ ) were not related to career development. It is worth noting there was a negative correlation between mentor SS and career development support.

### **Mentor social intelligence and emotional intelligence as predictors of career development.**

Career development was regressed onto mentor SIP, mentor SS, and mentor SA. In this analysis, neither mentor SIP [ $B = .14, SE = .28, t = .51, 95\% \text{ CI } [-.42 .71], p = .62$ , two-tailed] nor mentor SA [ $B = .62, SE = .24, t = 2.56, 95\% \text{ CI } [.13 1.12], p = .15$ , two-tailed] were significant predictors of career development but mentor SS [ $B = -.70, SE = .19, t = -3.67, 95\% \text{ CI } [-1.08 -.31], p = .00$ , two-tailed] was and the overall model was statistically significant [ $F = 6.99, p = .00$ ]. Next, I regressed career development onto mentor SS and mentor EI. In this analysis, mentor SS [ $B = -.97, SE = .21, t = -4.72, 95\% \text{ CI } [-1.39 -.56], p = .00$ , two-tailed] and mentor EI [ $B = 1.01, SE = .28, t = 3.57, 95\% \text{ CI } [.44 1.58], p = .00$ , two-tailed] were significant predictors of career development and the overall model was statistically significant [ $F = 12.23, p = .00$ ]. The data are presented in Table 6.

Table 6 Multiple Regression Results of Mentor SI/EI Predicting Career Development

Career Development				
Variable	<i>B</i>	<i>T</i>	95% CI	<i>P</i>
Model 1				
Mentor SIP	.14	.51	-.42 .71	.62
Mentor SA	.62	2.56	.13 1.12	.15
Mentor SS	-.70	-3.67	-1.08 -.31	.00
Overall Model	$F = 6.99, p = .00$			
Model 2				
Mentor SS	-.97	-4.72	-1.39 -.56	.00
Mentor EI	1.01	3.57	.44 1.58	.00
Overall Model	$F = 12.23 p = .00$			

**Protégé social intelligence and emotional intelligence and correlations to career development.**

The correlations between protégé SI and EI to career development were mostly significant. SIP ( $r(52) = .31, p = .01$ ), SS ( $r(52) = .28, p = .02$ ), and EI ( $r(52) = .31, p = .01$ ) were all significantly and positively correlated to career development. SA was the only SI facet not significantly correlated to career development ( $r(52) = .19, p = .09$ ).

**Protégé social intelligence and emotional intelligence as predictors of career development.**

Hypothesis 6 stated protégé a) social intelligence and b) emotional intelligence would predict mentor provided career development support. Hypothesis 7 stated

mentor perceived mentoring costs would mediate the relationship between protégé SI and mentor provided career development. Multiple regression analysis was conducted to test these hypotheses.

To test Hypothesis 6, protégé reported career development support was regressed onto the three facets of protégé social intelligence. The overall model was not significant [ $F = 2.52, p = .07$ , two-tailed]. Additionally, none of the individual facets of social intelligence (SIP [ $B = .30, SE = .18, t = 1.64, 95\% \text{ CI } [-.07 .67], p = .11$ , two-tailed], SS [ $B = .19, SE = .17, t = 1.17, 95\% \text{ CI } [-.15 .52], p = .26$ , two-tailed], and SA [ $B = .14, SE = .20, t = .69, 95\% \text{ CI } [-.26 .54], p = .48$ , two-tailed]) were significant unique predictors of career development. I then added EI to SIP. The overall model was, again, not significant [ $F = 2.98, p = .06$ , two-tailed]. SIP [ $B = .22, SE = .26, t = .84, 95\% \text{ CI } [-.30 .74], p = .41$ , two-tailed] and EI [ $B = .43, SE = .46, t = .93, 95\% \text{ CI } [-.50 1.35], p = .36$ , two-tailed] were each non-significant predictors of career development. Thus, Hypothesis 6 was not supported. These results are provided in Table 7.

Although the regression results do not provide support for Hypothesis 6, the statistically significant correlations between career development received and protégé social intelligence and emotional intelligence do provide evidence of a relationship between career development and protégé social and emotional intelligence.

Table 7 Multiple Regression Results of Protégé SI/EI Predicting Career Development

Career Development				
Variable	<i>B</i>	<i>t</i>	95% CI	P
Model 1				
Protégé SIP	.39	1.64	-.07 .67	.11~
Protégé SA	.14	.69	-.26 .54	.48
Protégé SS	.19	1.17	-.15 .52	.26
Overall Model	<i>F</i> = 2.55, <i>p</i> = .07			
Model 2				
Protégé SIP	.22	.84	-.30 .74	.41
Protégé EI	.43	.93	-.50 1.35	.36
Overall Model	<i>F</i> = 2.98 <i>p</i> = .06			

**Mentoring costs as mediator between protégé social intelligence and emotional intelligence and career development.**

Because there was no significant relationship between protégé social intelligence and mentor provided career development (Hypothesis 6) there could be no support for the mediation relationship proposed in Hypothesis 7. Thus Hypothesis 7, which stated mentor perceived mentoring costs would mediate the relationship between protégé social intelligence and emotional intelligence and career development, was not supported.

### **Mentoring costs and benefits as predictors of career development.**

Hypothesis 8 stated perceived mentoring a) costs and b) benefits will be related to mentor provided career development support. I used multiple regression to test this hypothesis. Career development support was regressed onto all mentoring costs and benefits simultaneously. This model was significant overall [ $F = 3.15, p = .01$ , two-tailed]. Two costs (nepotism [ $B = .34, SE = .15, t = 2.28, 95\% \text{ CI } [.04 .65], p = .03$ , two-tailed], dysfunctional relationship [ $B = -.43, SE = .18, t = -2.43, 95\% \text{ CI } [-.78 - .07], p = .02$ , two-tailed]) and one benefit (improved job performance [ $B = .70, SE = .26, t = 2.56, 95\% \text{ CI } [.18 1.22], p = .01$ , two-tailed]) emerged as unique predictors in the directions predicted.

To determine if a more parsimonious model explained the data, I regressed career development on only improved job performance, nepotism, and dysfunctional relationship as they were the only statistically significant predictors in the previous model. Improved job performance [ $B = .53, SE = .17, t = 3.19, 95\% \text{ CI } [.20 .87], p = .00$ , two-tailed], nepotism [ $B = .30, SE = .15, t = 2.64, 95\% \text{ CI } [.01 .60], p = .04$ , two-tailed], and dysfunctional relationship [ $B = -.42, SE = .16, t = -2.66, 95\% \text{ CI } [-.74 - .10], p = .01$ , two-tailed] were each statistically significant predictors of career development and the overall model was significant as well [ $F = 5.60, p = .00$ , two-tailed]. Thus, Hypothesis 8a and 8b were partially supported. See Table 8.

Finally, I combined the single statistically significant mentoring benefit and two statistically significant mentoring costs with all facets of mentor social intelligence and mentor emotional intelligence to predict career development. In this analysis, mentor social awareness [ $B = .54, SE = .23, t = 2.33, 95\% \text{ CI } [.07 1.02], p =$

.03, two-tailed], mentor social skills [ $B = -.74$ ,  $SE = .23$ ,  $t = -3.25$ , 95% CI [-1.20 -.27],  $p = .00$ , two-tailed], and mentor emotional intelligence [ $B = .72$ ,  $SE = .36$ ,  $t = 2.02$ , 95% CI [-.01 1.46],  $p = .05$ , two-tailed] all emerged as statistically significant predictors of career development. Of the included mentoring costs and benefits, improved job performance [ $B = .46$ ,  $SE = .19$ ,  $t = 2.39$ , 95% CI [.07 .85],  $p = .02$ , two-tailed] also remained statistically significant. The overall model was significant as well [ $F = 5.87$ ,  $p = .00$ , two-tailed].

Table 8 Multiple Regression Results of Mentor Perceived Mentoring Costs and Benefits and Mentor SI/EI Predicting Career Development

Variable	Career Development			
	<i>B</i>	<i>T</i>	95% CI	P
<b>Model 1</b>				
Improved Job Performance	<b>.70</b>	<b>2.56</b>	<b>.18 1.22</b>	<b>.01*</b>
Rewarding Experience	-.63	-1.98	-1.28 .01	.06
Recognition	.23	1.72	-.04 .49	.09
Support	.15	1.02	-.15 .45	.32
Trouble/Energy Drain	-.20	-.82	-.67 .28	.42
Nepotism	<b>.34</b>	<b>2.28</b>	<b>.04 .65</b>	<b>.03*</b>
Bad Reflection	-.08	-.35	-.56 .40	.78
Dysfunctional Relationship	<b>-.43</b>	<b>-2.43</b>	<b>-.78 -.07</b>	<b>.02*</b>
Overall Model				<b>F = 3.15 p = .01*</b>
<b>Model 2</b>				
Improved Job Performance	.53	3.19	.20 .87	.00*
Nepotism	.30	2.64	.01 .60	.04*

Dysfunctional Relationship	-.42	-2.66	-.74 -.10	.01*
Overall Model				<b>F = 5.60, p = .00*</b>
<hr/>				
Model 3				
Mentor SIP	-.05	-.16	-.69.59	.87
Mentor SA	<b>.54</b>	<b>2.33</b>	<b>.07 1.02</b>	<b>.03</b>
Mentor SS	<b>-.74</b>	<b>-3.25</b>	<b>-1.20 -.27</b>	<b>.00</b>
Mentor EI	<b>.72</b>	<b>2.02</b>	<b>-.01 1.46</b>	<b>.05</b>
Improved Job Performance	<b>.46</b>	<b>2.39</b>	<b>.07 .85</b>	<b>.02</b>
Nepotism	.27	1.29	-.16 .71	.21
Dysfunctional Relationship	-.29	-1.67	-.66 .07	.11
Overall Model				<b>F = 5.87, p= .00</b>

### **Social Network Status**

Hypothesis 9 related social intelligence and emotional intelligence to social network status. Prior to testing these hypotheses, I calculated inter-rater agreement of social network status.

In analyzing Hypothesis 9, I included position level as a covariate. Position level describes the level of responsibility and authority of the participant's position. Positions were coded as "1" if they were supervisory, managerial, team leader or technical expert and "0" for all others. Positions coded as "1" entail more responsibility and authority than positions coded as "0". This variable was included because social network status is likely linked to the authority and responsibility of someone's position.



**Mentor social intelligence and emotional intelligence and correlations to mentor social network status.**

I calculated correlations between mentor social intelligence, mentor emotional intelligence and mentor SNS. None of the correlations between individual facets of SI or EI and SNS were statistically significant. See Table 9.

Table 9 Means, Standard Deviations and Zero Order Correlations among Study Variables for Mentors

Variable	M	SD	1	2	3	4	5	6	7
1. Age	50.94	8.47	--						
2. Organization Tenure	10.10	9.20	.41**	--					
3. Position Level			.46**	.16	--				
4 SIP	3.79	.54	-.03	-.07	.15	--			
5.SS	5.21	.58	.18	.13	.28	.21	--		
6.SA	5.91	.51	-.09	.09	.04	.43**	.20	--	
7. EI	3.95	.37	.12	.07	.19	.54**	.44**	.28~	--
8. SNS	5.71	1.07	-.21	.04	.15	.15	-.10	.26~	-.18

*Note.* one tail tests; ~ $p < .10$ , \* $p < .05$ ,  $p^{**} < .01$ .

**Social intelligence and emotional intelligence as predictors of social network status.**

Hypothesis 9 stated social intelligence and emotional intelligence would predict social network status. I tested the relationship between social intelligence, emotional intelligence, and social network status by including all participants (protégés, mentors, and employees not in a mentoring relationship). This increased the sample size and improved statistical power more than a sample of only mentors and protégés. Social network status was regressed onto

position level, the three facets of SI, EI, status as a mentor (i.e. participant was identified as a mentor), and status as a protégé (i.e. participant stated he or she had a mentor). The overall regression model was significant [ $F = 10.13, p = .00$ , one-tailed] as was position level [ $B = 1.15, SE = .19, t = 5.98, 95\% \text{ CI } [.77 \ 1.54], p = .00$ , one-tailed], SIP [ $B = .46, SE = .21, t = 2.17, 95\% \text{ CI } [.04 \ .87], p = .02$ , one-tailed], SA [ $B = .37, SE = .17, t = 2.17, 95\% \text{ CI } [.03 \ .70], p = .02$ , one-tailed], and status as a mentor [ $B = .44, SE = .23, t = 1.96, 95\% \text{ CI } [-.01 \ .89], p = .03$ , one-tailed]. SS was also a statistically significant predictor but in the opposite direction than hypothesized [ $B = -.30, SE = .15, t = -2.05, 95\% \text{ CI } [-.59 \ -.01], p = .04$ , two-tailed]. Neither EI [ $B = -.46, SE = .30, t = -1.56, 95\% \text{ CI } [-1.05 \ .12], p = .12$ , two-tailed] nor status as a protégé [ $B = -.11, SE = .18, t = -.58, 95\% \text{ CI } [-.47 \ .26], p = .57$ , two-tailed] were statistically significant predictors of social network status. The significant relationships between SNS and two facets of social intelligence (i.e., SIP and SA) provide partial support for Hypothesis 9.

Hypothesis 10 stated protégés would have greater levels of social network status than non-protégés even after controlling for protégé social intelligence and emotional intelligence. Since protégé status was not a statistically significant predictor of social network status hypothesis 10 was not supported. See Table 10.

Table 10 Social Intelligence, Emotional Intelligence, Position Level, Status as Mentor/Protégé as Predictors of SNS

SNS				
Variable	B	t	95% CI	P
<b>Model</b>				
Position Level	1.15	5.98	.77 1.54	.00~
SIP	.46	2.17	.04 .87	.02~
SS	-.30	-2.05	-.59 -.01	.04*
SA	.37	2.17	.03 .70	.02~
EI	-.46	-1.56	-1.05 .12	.12*
Mentor Status	.44	1.96	-.01 .89	.03~
Protégé Status	-.11	-.58	-.47 .26	.57
Overall Model	<b>F= 10.13, p= .00</b>			

**Mentor social network status and protégé network status correlations.**

The correlation between protégé’s position level and protégé’s SNS was statistically significant ( $r(52) = .54, p = .00$ ). Because position level was correlated to protégé SNS, I included it as a control in the regression models to predict protégé SNS.

**Mentor social network status and career development as predictors of protégé network status.**

Hypothesis 11 stated career development would moderate the relationship between mentor social network status and protégé social network status. First, protégé social network status was regressed onto mentor social network status and protégé position level. Overall, this model was significant [ $F = 10.92, p = .00$ , one-tailed] and both mentor social network status [ $B = .36, SE = .14, t = 2.53, 95\% \text{ CI } [.07 .65], p = .01$ , one-tailed] and protégé position level [ $B = .83, SE = .32, t = 2.71, 95\% \text{ CI } [.19 1.48], p = .00$ , one-tailed] were statistically significant predictors. After controlling for the protégés' position level, those with higher status mentors had higher status themselves.

Next, protégé social network status was regressed onto mentor social network status, protégé position level and mentor provided career development support. Although the overall model was significant [ $F = 6.92, p = .00$ , one-tailed] only protégé position level [ $B = .85, SE = .33, t = 2.57, 95\% \text{ CI } .18 1.51, p = .01$ , one-tailed] and mentor SNS [ $B = .35, SE = .15, t = 2.38, 95\% \text{ CI } .05 .65, p = .01$ , one-tailed] were statistically significant predictors. Mentor provided career development was not a significant predictor of protégé SNS [ $B = .03, SE = .18, t = .18, 95\% \text{ CI } -.32 .39, p = .43$ , one-tailed].

Next, I regressed protégé social network status onto mentor social network status, protégé position level, career development and the interaction of mentor social network status and career development. In this analysis, only protégé position level [ $B = 1.26, SE = .31, t = 4.05, 95\% \text{ CI } [.62 1.89], p = .00$ , one-tailed] was a statistically significant predictor [ $F = .98, p = .00$ , one-tailed] of protégé SNS. Mentor SNS [ $B = -.10, SE = .59, t = -.17, 95\% \text{ CI } [-1.31 1.11], p = .43$ , one-tailed], career development [ $B = -.49, SE = .89, t = -.56, 95\% \text{ CI } [-2.29$

1.31],  $p = .29$ , one-tailed], and the interaction of mentor social network status and career development [ $B = .01$ ,  $SE = .02$ ,  $t = .62$ , 95% CI [-.03 .05],  $p = .27$ , one-tailed] were non-significant predictors of protégé SNS. These results suggest mentor social network status is related to protégé social network status and that career development support does not moderate this relationship. Thus there was no support for Hypothesis 11. See Table 11 for these results.

Table 11 Multiple Regression Results of Mentor Social Network Status, SI/EI, and Career Development Predicting Protégé Social Network Status

Protégé SNS				
Variable	B	t	95% CI	p
<b>Model 1</b>				
Protégé Position Level	.83	2.71	.19 1.48	.00
Mentor SNS	.36	2.53	.07 .65	.01*
Overall Model	<b>F= 10.92, p= .00*</b>			
<b>Model 2</b>				
Protégé Position Level	.85	2.57	.18 1.51	.01~
Mentor SNS	.35	2.38	.05 .65	.01~
Career Development	.03	.18	-.32 .39	.43
Overall Model	<b>F= 6.92, p= .00</b>			
<b>Model 3</b>				

Protégé Position Level	1.26	4.05	.62	1.89	.00
Mentor SNS	-.10	-.17	-1.31	1.11	.43
Career Development	-.49	-.56	-2.29	1.31	.29
Mentor SNS x Career	.01	.62	-.03	.05	.27
Development					
Overall Model	<b>F= .98, p= .00</b>				

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## CHAPTER 5: DISCUSSION

### Summary of Results

The purpose of this study was to examine the relationships between social intelligence, emotional intelligence, the costs and benefits of mentoring relationships and social network status. As illustrated in the conceptual model (Figure 1), I expected individuals with higher levels of social intelligence and emotional intelligence would be more likely to be a protégé and a mentor than individuals with lower levels of social intelligence and emotional intelligence. In addition, I predicted social intelligence and emotional intelligence would explain both mentor perceived mentoring benefits and costs and protégé reported mentoring received. Finally, several hypotheses related to work group social network status as an outcome of mentoring. Specifically, I expected people higher in social intelligence and emotional intelligence would also have higher social network status; mentors' social network status would explain their protégé's social network status and the relationship between a mentor's social network status and his or her protégé's social network status would depend on the mentoring the protégé received.

Overall, there was support for many of the relationships predicted (see Figure 2 for a summary of findings). Participants higher in social intelligence (in particular, social skills) were more likely to be a mentor than participants lower in social intelligence but, contrary to my hypothesis, neither social intelligence nor emotional intelligence distinguished protégés from non-protégés.

Protégé social intelligence and emotional intelligence were also related to mentor perceived costs, albeit in variable and, at times, unexpected directions. This may be in part to the variety of mentoring costs and potential drivers of those costs. The variable pattern of

results between the various facets of social intelligence, emotional intelligence, and mentoring costs also demonstrated the multidimensionality of this construct.

For example, contrary to my hypothesized relationship, a protégé's social information processing was positively related to their mentor's perceptions of the trouble and energy drain of mentoring and emotional intelligence was related positively to the risk of a protégé being a bad reflection on the mentor. This particular pattern of findings indicates positive characteristics may not always lead to positive outcomes.

Additionally, this study found several mentoring costs and benefits were related to the quality of the career development protégés received from their mentor. Although there were no relationships between protégé social intelligence and the mentoring they received (and, therefore, no mediation by mentor perceived costs and benefits) mentor social intelligence and emotional intelligence both explained the career development mentors provide their protégés, even after considering the mentors' perceptions of the costs and benefits of mentoring their protégés.

Lastly, the study examined the relationships between mentoring, social intelligence and emotional intelligence and social network status and found individuals with higher levels of social intelligence or who are mentors have higher levels of social network status than employees with lower levels of social intelligence or those who are not mentors. These results were observed even when controlling for an individual's authority and position. Mentors' social network status was positively associated with their protégés' social network status but did not interact with the career development functions they provided.



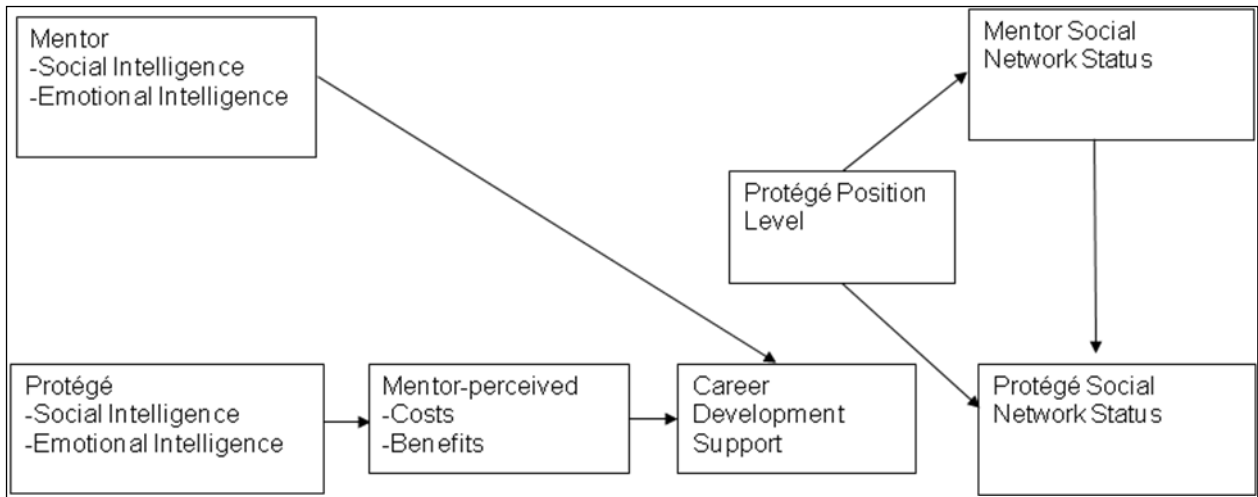


Figure 2: Summary of Results

### Theoretical Implications

#### **Different relationships among facets of social intelligence.**

There were several differences in the relationships between the three facets of social intelligence and the other constructs studied, particularly the various mentoring costs and benefits. This may indicate the three facets of social intelligence are unique as are the mechanisms that relate these facets to other constructs. For example, a mentor’s report of trouble/energy drain was predicted by the protégé’s social information processing but not the other two social intelligence facets. Perhaps protégés with a penchant for analyzing social experiences (social information processing) exhaust their mentors by engaging them in this analysis. Assuming this mechanism, a similar relationship between social awareness and trouble/energy drain or social skills and trouble/energy drain would not be expected because social skills and social awareness do not include the same information processing activity.

In addition, mentors' reports of the cost "bad reflection" were predicted by the protégé's social skills but not protégé social information processing or social awareness. Unlike social information processing or social awareness, social skills may have been related to "bad reflection" because protégé social skills reflects protégé behavior, which may be the basis of why a protégé may be perceived as a bad reflection on his or her protégé.

This varied pattern of results indicates although all three facets of social intelligence are important they relate to different outcomes in the mentoring relationship. Additionally, the different relationships between the three facets and other constructs provide support for the three factor model of social intelligence proposed by Silvera, Martinussen and Dahl (2001). Future research should focus on the specific mechanisms that relate the various facets of social intelligence to mentoring costs and benefits and other constructs.

**Social intelligence and emotional intelligence as predictors of mentor/protégé status.**

Participants higher in social intelligence (in particular, social skills) were more likely to be a mentor than those lower in social intelligence. These results provide support for the often assumed belief that mentors are likely to have better interpersonal skills than non-mentors (e.g., Allen et al,1997) and contributes to the literature by identifying the specific facet of social intelligence (social skills compared to other facets of social intelligence or emotional intelligence) that matters.

Neither social intelligence nor emotional intelligence explained how likely someone was to be a protégé. Perhaps, mentors consider other protégé characteristics such as protégés willingness to learn (e.g., Allen, Poteet & Burroughs 1997) when selecting protégés. Additionally, it is possible individuals in this organization recognize the importance of

mentoring and seek it regardless of their levels of social intelligence or emotional intelligence. As this study did not examine the difficulty of finding a mentor (only if someone had a mentor), future research should analyze whether higher social intelligence or emotional intelligence facilitates a protégé obtaining a mentor or choice of mentor. Additionally, although social intelligence and emotional intelligence were not related to likelihood of being a protégé, they were related to their mentors' perceptions of the costs or benefits of mentoring them. The data suggest social intelligence and emotional intelligence explain attributes of the mentoring relationship beyond whether someone will be a protégé or not.

**Protégé social intelligence and emotional intelligence predicting mentoring costs and benefits.**

The findings regarding a protégé's social intelligence and emotional intelligence predicting their mentor's perceived mentoring costs and benefits proved to be complex. I proposed protégés higher in social intelligence and emotional intelligence would be perceived as less trouble or energy drain and less likely to be perceived as a bad reflection by their mentors. Furthermore, I predicted protégés with higher social intelligence and emotional intelligence would be more likely to be perceived as having a dysfunctional relationship or benefitting from nepotism by their mentors because these costs are related to high ability and performance (which social intelligence would explain). The data, however, suggest mixed results. For instance, protégés with higher levels of social intelligence (social information processing) were more likely to be considered more trouble or energy drain than protégés with lower levels of social intelligence. Although this result was opposite of what was predicted, it is feasible protégés who often analyze social experiences and review them with their mentors for assistance may be perceived as energy draining or wasting their mentors'

time, particularly if their mentors do not share the same proclivity towards social information processing. However, mentors high in social information processing who have protégés also high in social information processing may not perceive such activity as energy draining. Future research should examine whether the similarity between protégé and mentor social intelligence moderates this relationship.

As hypothesized, protégés with lower levels of social intelligence (social skills) were more likely to be perceived as a bad reflection by their mentors than protégés with higher social intelligence but contrary to the hypothesis, protégés with higher emotional intelligence were more likely to be perceived as a bad reflection on their mentors than protégés with lower levels of emotional intelligence. Often, characteristics such as emotional intelligence are considered desirable across a variety of contexts. However, contextual variables (such as organizational culture) may impact the effectiveness of certain individual differences. For example, in this organization, mentors of protégés higher in emotional intelligence were perceived as being a bad reflection on their mentors. It may be the case that mentors perceive these protégés as being “too emotional” which may not be desirable or conducive to professional success in a highly technical and engineering-based organization. Studying the potential contextual/organizational moderators of variables such as social intelligence and emotional intelligence is an area for future research.

As predicted, social intelligence (social awareness) was positively related to concerns of perceived nepotism and dysfunctional relationships. Mentors expect others will perceive them as being nepotistic to their protégés when their protégés have higher levels of social awareness. Also, mentors perceive themselves as being at greater risk for being backstabbed or displaced (dysfunctional relationship) by their protégés when their protégés have higher

levels of social awareness. This finding is similar to that of Kaukiainen et al. (1999), who found social intelligence is related to indirect aggression and proposed people with high social intelligence understand human behavior and personal relationships are able to disguise their intentions. Protégés with higher levels of social intelligence may demonstrate behaviors that threaten their mentors' feelings of job security, feelings of self-competence, or other characteristics. These results demonstrate employees may experience detrimental results due to some of their otherwise positive traits.

As expected, mentors perceived greater benefits from mentoring protégés higher in social intelligence or emotional intelligence. Mentors perceived greater recognition by others when their protégés were higher in emotional intelligence. This may seem conflicting with the earlier finding that mentors perceive greater risk of being perceived negatively when their protégés are higher (instead of lower) in emotional intelligence. Recognition may come when someone takes the time to help someone who would otherwise experience professional distress absent of extra guidance and development. It is plausible recognition in these cases may be for mentors' altruistic behavior (for taking on a protégé who may be a risk to their own reputations, judgment and competence). It may be mentors perceive their co-workers commending them for taking on a protégé despite the risks these protégés pose to their professional reputation, particularly if the environment does not perceive emotional intelligence as conducive to professional success. Additionally, mentors with protégés higher in social awareness perceived gaining improvements to their own job performance compared to mentors with protégés lower in social awareness. It may be that protégés' social awareness facilitates the identification and sharing of information pertinent to their mentors' performance.

A mentor's perception of how rewarding the mentoring experience is was not related to their protégé's social intelligence or emotional intelligence. Because this is a personal experience, it is likely the personal fulfillment of mentoring may be more a product of mentor characteristics, such as values, previous experiences, or motives rather than the protégé himself or herself. Previous research has found mentors' intentions to mentor were related to their previous experience either as a protégé or mentor (Allen, 2003). Perhaps, mentors who had previous mentoring experience found it rewarding and are motivated to continue.

### **Mentoring costs and benefits predicting mentoring.**

Not surprisingly, mentors give more career development to their protégés when they perceive their job performance improving as a result of mentoring their protégé. Social exchange theory explains this type of finding. However, the relationships between perceived mentoring risks and mentoring provided were, again, complex. According to this data, not all mentoring risks impact behavior. For instance, when mentors perceive having a more dysfunctional relationships with their protégés they are less likely to give their protégés career development. This finding may be related to mentor trust in protégés. Chun et al., (2010) reported a positive relationship between a protégé's trust in their mentor and mentoring received such that protégés receive less mentoring when they have lower levels of trust in their mentor. However, mentors' trust in their protégés was not studied. It may be that mentors provide less mentoring when they do not trust their protégés (just as mentors provide less mentoring when their protégés do not trust them). In the present study I did not measure mentor trust but mentors' reports of dysfunctional relationships appear related to trust because items measured fear of being backstabbed or being displaced by the protégé. Future research

should expand on the present results and those of Chun et al., (2010) by examining both protégé and mentor trust, the perceived relationship dysfunction and the mentoring received.

**Mentor social intelligence and emotional intelligence predicting career development.**

Although protégé social intelligence and emotional intelligence were not related to the mentoring they received, their mentor's social intelligence and emotional intelligence was. This study provides quantitative evidence to support the qualitative findings of Allen et al, (1997) and clarifies the type of "people skills" necessary to be an effective mentor. Evidently, social intelligence not only explained the likelihood an individual was a mentor but also how much mentoring he or she provided. Unexpectedly, mentor social skills were negatively related to the career development they provide their protégés, which is an interesting area for future research.

**Social network status.**

The finding that individuals with higher levels of social intelligence are more likely to have higher levels of social network status even after controlling for the level of their position implies social intelligence may be a useful individual difference for assessment of potential leadership or other positions which require the ability to influence others. It appears social intelligence predicts this marker of success but emotional intelligence does not. Again, this finding supports the position social intelligence and emotional intelligence are distinct constructs.

Furthermore, this study found protégés have higher social network status when their mentors have higher social network status, even after accounting for protégés' position level. However, the career development protégés received was not related to their social network

status either directly or as a moderator of mentor social network status. This is an intriguing finding because it appears some mentoring benefits protégés receive may be due to their mere association with their mentors or role modeling of their mentor but not by the actual mentoring itself. However, because this was a cross-sectional study, causal inferences cannot be inferred. Even though protégé position level was controlled for there may be another unmeasured characteristic explains the association between mentor and protégé status.

### **Practical Implications**

Results from the present study suggest several practical implications for employees actively engaged or pursuing a mentoring relationship and for organizations intending to capitalize from the benefits of formal mentoring programs. Foremost, investing in training curriculums to develop social intelligence among employees may be valuable because socially intelligent employees are more likely to engage in mentoring relationships than employees lower in social intelligence. Developing employees' social intelligence may also help employees give better mentoring, perhaps because they better understand their protégés' needs or use more effective means to counsel and help their protégés.

Another avenue for developing mentors to be more effective is providing awareness training of individual differences which may impact mentoring relationships. Because this research found mentors perceive socially intelligent protégés as more costly to mentor it is important to make potential mentors aware they may have negative perceptions of these protégés even though these characteristics can be related to positive outcomes for protégés, their mentors, and their organizations. Such training may also be helpful to protégés as it sensitizes them to the need to manage the impressions they may make to others.



In addition to developing social intelligence to improve mentoring, organizations may want to use social intelligence assessments to select potential mentors. However, organizations should exercise caution when placing would be mentors by their levels of social intelligence as there are no known measures of social intelligence designed and validated for such decisions.

Aside from actions relevant to mentors, the data suggest several important considerations for protégés or potential protégés. One recommendation is for protégés to build relationships with a variety of mentors because mentors with different skill sets will likely convey different benefits to their protégés. For example, protégés social network status may be improved if they have mentors with higher levels of social network status regardless of the mentoring they receive from that mentor. But without effective mentoring, protégés may have more influence amongst their peers than the competence to use that influence effectively. Therefore, protégés should develop a cadre of mentors and other sources of professional development to be effective

There were several promising findings about social intelligence and emotional intelligence in this study. However, organizations where emotional intelligence is viewed as a negative characteristic may not benefit from programs designed to develop these competencies. It is prudent for organizations to assess their climate towards these skills and their relation to success in their organization prior to investing in programs to select or develop emotional intelligence.

Given the finding that social intelligence is related to social network status, organizations may be tempted to assess social intelligence for selection to positions requiring skill in influencing people (e.g., sales, facilitation, leadership, management, etc.). However,

as stated earlier in discussing using social intelligence to place mentors, organizations should be cautious in using social intelligence measures that have not been designed and validated for selection.

### **Limitations**

There are several areas worth noting as limitations of this study. Foremost, this was a non-experimental test of a directional model. Therefore, I can only suggest the data support the directions of the hypotheses proposed but I cannot definitively rule out alternative explanations. Where possible, I controlled for alternative explanations by examining covariates. For example, I suggest mentor social network status influences protégé social network status because I controlled for protégé position level and still found mentor social network status explained protégé social network status. This allowed me to rule out the competing hypothesis that mentors seek protégés who have higher levels of social network status because I took protégé position level into consideration and still found a relationship between mentor social network status and protégé social network status. However, there may be alternative explanations for some other findings that cannot be ruled out in a non-experimental design such as this one.

A second limitation in this study is the relatively low incidence of mentoring relationships may have reduced the statistical power for some potential relationships to emerge. The data analysis strategy described earlier likely conserved some statistical power (by improving the ratio of sample size to number of variables included). Despite the small number of mentoring relationships studied (52), several significant relationships emerged. This indicates many of the relationships that emerged as statistically significant are robust. A

larger sample of mentoring relationships may have facilitated more statistically significant findings among the studied variables.

A third issue relates to the external validity or generalizability of these findings to other settings. The sample studied was composed mainly of Federally-employed, scientific/engineering/technical positions and business positions supporting such work. This organization's culture may value different types of skills than valued in other industries, possibly limiting the generalizability of these findings. In this organization, mentors of protégés with higher levels of emotional intelligence were more concerned their protégés would reflect poorly on them than mentors of other protégés were. It may be the case this organization (and other Federal organizations or those conducting scientific or technical work) place less value on emotional intelligence than other organizations. Future research should address the generalizability of these findings across organizational settings. There are several limitations related to the potential for respondents to respond in a self-serving fashion. The collected data were not anonymous. Names were necessary to match participants with their mentor or protégé (when applicable) and social network data. Participants may have been motivated to respond favorably about themselves or a person they rated (i.e. mentor, protégé, or social network member) particularly to create a positive impression to anyone with access to the data or to avoid speaking negatively about anyone rated (such as a mentor, protégé or social network member).

Additionally it is important to note my professional relationship to the participants and organization. During this study I was the Human Resources Specialist supporting the organizations targeted. This presented several concerns because I was in a position to influence (or at least give the perception of influence) personnel decisions impacting potential

participants. Many participants may have been motivated to participate in this study to help me or ingratiate me. Participants may also have been motivated to respond in a manner that would confirm or refute my hypotheses instead of responding truthfully. This later threat was minimized because I gave very little information about the purpose of my study or my proposed hypotheses. In addition, data were collected from multiple sources making it difficult for any participant to control their own and others' responses about them.

Finally, applicants may have been motivated to respond in a self-serving manner to create a more favorable view of themselves if they thought the data would be used for any personnel decisions (given my human resources role) or provided to management. I took several measures to mitigate and communicate my limited exposure to the identifying information, the role of a research assistant in removing all identifying information prior to analysis, the procedures for securing data, and that management would not receive any personally identifiable data. Nonetheless, having to identify themselves may have biased some participants' to produce self-serving responses. However, it is likely such a bias would result in range restriction in various measures, reducing statistical power to detect the findings I reported rather than produce the findings reported here.

## **Conclusion**

This study makes several contributions to existing literature. Foremost, this study examines the relationships between mentoring and social network status, an infrequently studied but potentially valuable outcome of mentoring. An important contribution of this study was discovering mentoring may impact social network status of protégés but not through the actual mentoring functions protégés receive from their mentors but rather through other, currently unknown, means. This is an important step

in understanding the relation between mentoring and social network status and opens the door to future research in this area.

Beyond studying mentoring and social network status, this study examined the relationships between mentoring and social intelligence and emotional intelligence. While much previous qualitative research and anecdotal statements have stated “people skills” are related to effective mentoring, this study provides quantitative research about the type of behavioral drivers (social intelligence and emotional intelligence) which are related to mentoring.

Finally, this study thoroughly examined the relationships between several mentor perceived mentoring costs and benefits and how they are related to protégé characteristics and the amount of mentoring support provided. This is an important contribution to the literature because previous research combines various mentoring benefits (and likewise costs) into a single dimension but the present research imparts the value of analyzing various benefits and costs separately. Thus, this research may serve as a precedent for future research to follow suit and examine benefits (and costs) individually. Understanding the unique relationships between individual characteristics, mentoring benefits and costs and mentoring outcomes helps individuals to better understand how to prepare protégés and mentors for mentoring relationships. An improved understanding of the dynamics of mentoring relationships should make the experience more beneficial for the parties involved and their organizations.

## **APPENDIX A: TROMSO SOCIAL INTELLIGENCE SCALE**

Please report the extent to which the following items describe you.

All items were presented with a 7-point Likert scale (Describes me extremely poorly = 1 - Describes me extremely well = 7)

1. I can predict other peoples' behavior.
2. I often feel that it is difficult to understand others' choices.
3. I know how my actions will make others feel.
4. I often feel uncertain around new people who I don't know.
5. People often surprise me with the things they do.
6. I understand other people's feelings.
7. I fit in easily in social situations.
8. Other people become angry with me without me being able to explain why.
9. I understand others' wishes.
10. I am good at entering new situations and meeting people for the first time.
11. It seems as though people are often angry or irritated with me when I say what I think.
12. I have a hard time getting along with other people.
13. I find people unpredictable.
14. I can often understand what others are trying to accomplish without the need for them to say anything.
15. It takes a long time for me to get to know others well.
16. I have often hurt others without realizing it.
17. I can predict how others will react to my behavior.
18. I am good at getting on good terms with new people.

19. I can often understand what others really mean through their expression, body language, etc.
20. I frequently have problems finding good conversation topics.
21. I am often surprised by others reactions to what I do.



## **APPENDIX B: SCHUTTE EMOTIONAL INTELLIGENCE SCALE**

Please report the extent to which the following items describe you.

All items were presented with a 5-point Likert scale (Strongly Disagree = 1; Strongly Agree = 5)

1. I know when to speak about my personal problems to others.
2. When I am faced with obstacles, I remember times I faced similar obstacles and overcame them.
3. I expect that I will do well on most things I try.
4. Other people find it easy to confide in me.
5. I find it hard to understand the non-verbal messages of other people.\*
6. Some of the major events of my life have led me to re-evaluate what is important and not important.
7. When my mood changes, I see new possibilities.
8. Emotions are one of the things that make my life worth living.
9. I am aware of my emotions as I experience them.
10. I expect good things to happen.
11. I like to share my emotions with others.
12. When I experience a positive emotion, I know how to make it last.
13. I arrange events others enjoy.
14. I seek out activities that make me happy.
15. I am aware of the non-verbal messages I send to others.
16. I present myself in a way that makes a good impression on others.
17. When I am in a positive mood, solving problems is easy for me.
18. By looking at their facial expressions, I recognize the emotions people are experiencing.

19. I know why my emotions change.
20. When I am in a positive mood, I am able to come up with new ideas.
21. I have control over my emotions.
22. I easily recognize my emotions as I experience them.
23. I motivate myself by imagining a good outcome to tasks I take on.
24. I compliment others when they have done something well.
25. I am aware of the non-verbal messages other people send.
26. When another person tells me about an important event in his or her life, I almost feel as though I have experienced this event myself.
- 27).When I feel a change in emotions, I tend to come up with new ideas.
- 28).When I am faced with a challenge, I give up because I believe I will fail.\*
- 29). I know what other people are feeling just by looking at them.
30. I help other people feel better when they are down.
31. I use good moods to help myself keep trying in the face of obstacles.
32. I can tell how people are feeling by listening to the tone of their voice.
33. It is difficult for me to understand why people feel the way they do.\*

\*Item is reverse-coded

## **APPENDIX C: MENTORING FUNCTIONS**

Please report the extent to which the following took place during your mentoring relationship. All items were presented with a 5-point Likert scale (No Extent = 1; Great Extent = 5)

1. My mentor shared the history of their career with me. (CD)
2. My mentor has encouraged me to prepare for advancement. (CD)
3. My mentor has encouraged me to try new ways of behaving on the job. (PS)
4. I agree with my mentor's attitudes and values regarding work. (PS)
5. I respect and admire my mentor. (PS)
6. I will try and be like my mentor when I reach a similar position in my career. (PS)
7. My mentor has demonstrated good listening skills in our conversations. (PS)
8. My mentor has discussed my questions or concerns regarding feelings of competence, commitment to advancement, relationships with peers and supervisors and work/family conflicts. (PS)
9. My mentor has shared personal experiences as an alternative perspective to my problems. (PS)
10. My mentor has encouraged me to talk openly about anxiety and fears that detract from my work. (PS)
11. My mentor has conveyed empathy for the concerns and feelings I have discussed with him/her. (PS)
12. My mentor has kept feeling and doubts I shared with him/her in strict confidence. (PS)
13. My mentor has conveyed feelings of respect for me as an individual. (PS)
14. My mentor reduced unnecessary risks that could threaten the possibility of me remaining in the organization or getting a promotion. (CD)

15. My mentor helped me finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete. (CD)

16. My mentor helped me meet new colleagues. (CD)

17. My mentor gave me assignments that increased my visibility within the organization.  
(CD)

18. My mentor assigned responsibilities that increased my contact with those who may judge my potential for future advancement. (CD)

19. My mentor gave me assignments or tasks that prepared me for a higher job. (CD)

20. My mentor gave me assignments that presented opportunities to learn new skills. (CD)

(CD = career development item; PS = psychosocial support item)

**APPENDIX D: MENTORING COSTS AND BENEFITS SCALE**

Please report the extent to which the following items describe you.

All items were presented with a 5-point Likert scale (Strongly Disagree = 1; Strongly Agree = 5)

1. Mentoring this protégé will have a positive impact on my job performance. (B- IJP)
2. I gain a sense of satisfaction by passing my insight on to this protégé. (B-RE)
3. Mentoring this protégé will be a catalyst for innovation. (B-IJP)
4. My job is rejuvenated by my relationship with this protégé. (B-IJP)
5. Mentoring this protégé takes too much time away from my own job. (C-Trouble)
6. Mentoring this protégé is an energy drain. (C-ED)
7. I run the risk of being viewed as developing a political cadre with this protégé. (C-Nep)
8. The advantages of being a mentor to this protégé will likely far outweigh the drawbacks. (B-RE)
9. Choosing to mentor this protégé will be a negative reflection on my judgment. C-Bad Refl)
10. Members of the organization will view me as playing favorites with this protégé. (C-Nep)
11. I am likely viewed by others as giving unfair advantages to this protégé. (C-Nep)
12. It is likely my job performance improved when I became a mentor to this protégé. (B-IJP)
13. I can gain status amongst my peers for my mentoring activities with this protégé. (B-Rec)



14. Mentoring this protégé takes more time than it's worth. (C-Trouble)
15. I obtained positive recognition in my organization for assuming a mentoring role over this protégé. (B-Rec)
16. Mentoring this protégé has a positive impact on my job. (B-IJP)
17. This protégé can be a negative reflection on my competency. (C-Bad Refl)
18. This protégé can be a positive reflection on my competency. (B-IJP)
19. I get a sense of fulfillment by passing my wisdom on to this protégé. (B-RE)
20. This protégé can end up taking my job. (C-Dysf Rel)
21. I run the risk of being displaced by this protégé. (C-Dysf Rel)
22. This protégé is a trusted ally for me. (B-Support)
23. Choosing this protégé is a positive reflection on my judgment. (B-None)
24. This protégé is an important source of support for me. (B)
25. This protégé can enhance my reputation. (B-None)
26. My creativity increases when mentoring this protégé. (B-RE)
27. A poor protégé can ruin my reputation. (C-Bad Refl)
28. I achieve recognition from my superiors for developing the talent of this protégé. (B-Recog)
29. I may be backstabbed by this protégés. (C-Dysf Rel)
30. The rewards that come from being a mentor to this protégé more than compensate for the costs. (B-RE)
31. The major drawback of being a mentor to this protégé is the time commitment. (C-ED)
32. Serving as a mentor to this protégé can be one of the most positive experiences of my career. (B-RE)

33. Mentoring this protégé makes me feel better about myself. (B-RE)

## **APPENDIX E: SOCIAL NETWORKING MEASURE**

All items were presented with a 7-point Likert scale (Strongly Disagree = 1; Strongly Agree = 7)

These questions are about your relationships with your co-workers. Please read the question, think about your co-workers and select the appropriate names. Do not choose yourself for any of the questions.

1. This person has a great deal of influence on the decisions that get made in this organization.
2. This person's support and buy-in are necessary for my ideas or initiatives to succeed.

## **APPENDIX F: DEMOGRAPHICS MEASURE**

Please indicate the response that best describes you.

1. Sex: Male Female

2. Race: a. White/Caucasian

b. Black/African American

c. Asian

d. Middle Eastern

e. Native American

f. Hispanic/Latino

g. Other

3. Age: a. Less than 18 years

b. 18-24 years

c. 25-34 years

d. 35-44 years

e. 45-54 years

f. Greater than 55 years

4. What is your highest level of education obtained?

a. High school diploma/GED

b. Some College

c. Associate's degree (A.A.)/2-year degree

- d. Bachelor's degree/4-year degree
- e. Master's degree/MBA
- f. Doctorate
- g. Other

5. How long have you worked for your current organization?

- a. Less than 6 months
- b. 6-12 months
- c. 1-3 years
- d. 3-5 years
- e. Greater than 5 years

6. How long have you worked for NASA?

- a. Less than 6 months
- b. 6-12 months
- c. 1-3 years
- d. 3-5 years
- e. Greater than 5 years

7. How long have you been in your current position?

- a. Less than 6 months
- b. 6-12 months
- c. 1-3 years

- d. 3-5 years
- e. Greater than 5 years

8. Which of the following best describes your position?

- a. Supervisor
- b. Team Lead
- c. Technical Lead
- d. Non supervisor/Non Lead

9. What is your position series, title, and grade?



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