WHAT ABOUT THE WIZARD?: STRESS EFFECTS OF BEING A MENTOR

by

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ABSTRACT

The purpose of the current study was to examine the influence of negative mentoring, trust and protégé learning on mentor job stress. Surveys were submitted to protégés who identified mentors, who then received mentor-specific surveys. Matched data from mentor- protégé surveys were analyzed using structural equation modeling (SEM). Results support previous research regarding the importance of trust in mentoring relationships and suggest the significance of protégé-perceived personal learning on mentor stress. Further, results suggest that mentor and protégé experiences could be assessed with a single dyadic measure. Additionally, a new measurement instrument to assess mentoring stressors was developed through qualitative research to develop the construct of mentoring stress. To further expand the exploration of the mentor stress construct, mentors were tested through response to the developed measure. Results present psychometric support for the measure as a potential tool to examine mentor stress. Implications for future research and for practitioners managing formal mentoring programs are also presented.

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CHAPTER 1: INTRODUCTION

Mentor-protégé relationships are virtually as old as time, dating back to the ancient Greeks and continuing forward into today, appearing in classic and popular literature, as well as comprising a significant part of business and personal relationships (Campbell, 2008). In the business context, mentoring relationships have been an important aspect of work life with a major focus on career-development for the protégé (Kram, 1985). In popular and classic literature, the hero in many stories is the protégé, whereas the mentor simply exists as a supporting character primarily in the background while the hero takes the credit (Feldman, 1999). For example, in Arthurian legend Merlin mentors Arthur through his many trials and tribulations, while very little is explored about Merlin, who remains in the background of the story. This common theme in literature has continued to emerge in academic and business research literature on mentoring and the mentor-protégé relationship. In general, the protégé has been the focus of previous mentoring research (Allen, Eby, O'Brien, & Lentz, 2008; Scandura & Pellegrini, 2007). To date, numerous studies have explored how being in a mentor-protégé relationship affects a protégé (Allen, Eby, Poteet, Lentz, & Lima, 2004; Allen, Poteet, & Russell, 2000; Ragins, Cotton, & Miller, 2000; Scandura, 1992; Scandura & Pellegrini, 2007). Until recently, however, very few studies have questioned what the effects of these relationships are on the background characters, the mentors (Eby, Durley, Evans, & Ragins, 2008; Eby & McManus, 2004; Parise & Forret, 2008; Weinberg & Lankau, 2011; Young & Perrewe, 2000). Additionally, recent reviews of the mentoring literature have made calls for mentor-centric research (Eby, 2009; Haggard, Dougherty, Turban, & Wilbanks, 2011; Scandura & Pellegrini, 2007). As such, the focus of the current study is the exploration of the effects of mentoring on the mentor, specifically the mentor's stress. Further, this study will also explore how protégé perceptions of

negative mentoring, mentor trustworthiness, mentoring functions received, and protégé learning may affect mentor stress.

Mentoring is defined as "a relationship between an older, more experienced mentor and a younger, less experienced protégé for the purpose of helping and developing the protégé's career" (Ragins & Kram, 2008, p. 5). The mentor provides two kinds of support—referred to as mentoring functions—in the form of career support and psychosocial support (Kram, 1985). Career support involves the mentor providing advice about career, network connections, political protection, challenging assignments, and other assistance that help a protégé develop and rise in an organization (Allen et al., 2004; Kram, 1985). A mentor is most capable of providing this sort of support because of his or her advanced position and connections. Psychosocial support is the mentor serving as an emotional and social sounding board; a role which has more interpersonal aspects to it than career-related advice (Allen et al., 2004; Kram, 1985). Psychosocial support is not a function of the power differential in the relationship, but it grows as the relationship between mentor and protégé deepens and becomes more trusting. The original conception of mentor functions included role-modeling as a function of psychosocial support. However, Scandura and colleagues later found it to be a separate factor of mentor functions (Scandura, 1992). Role-modeling involves the protégé seeing the mentor as a model for how to behave in the organization and subsequently attempts to emulate that behavior to become more like the mentor (Pellegrini & Scandura, 2005; Scandura, 1992). The current research will define mentoring to include these three distinct functions of career support, psychosocial support, and role-modeling.

CHAPTER 2: THEORETICAL FRAMEWORK

Negative Mentoring

Previous research has identified several benefits of mentoring relationships specifically related to mentors, such as development of a loyal support network, acquisition of new knowledge, job-related assistance, a work-related information network, and a feeling of immortality as mentors pass on their knowledge to protégés (Ragins & Scandura, 1999; Allen, Poteet, Russell, & Dobbins, 1997; Kram, 1983; Erikson, 1964). However, research is still scant on how mentoring relationships may impact mentors' attitudes (Allen & Eby, 2003; Weinberg & Lankau, 2011). Additionally, very few studies have examined how a mentoring relationship may impact the mentor negatively (Eby et al., 2008; Eby & McManus, 2004), and recently there have been calls for more research that examines mentor satisfaction and experiences related to the mentoring relationship (Weinberg & Lankau, 2011).

The current lack of focus on the experiences of the mentor may cause them to feel as though they are not treated as an equally valuable part of the organization. Essentially, protégés may feel that they are owed a mentoring relationship to further their career. They may feel that mentoring is something owed to them by the organization as their fair share of being a part of the organization. However, if a mentoring relationship is considered a perquisite of membership in the organization, the person behind that relationship—the mentor—may be degraded to a simple organizational commodity (Feldman, 1999). Thus, organizational perspectives regarding mentoring programs may have a profound negative effect on mentors, by reinforcing a stigma of the mentor as a commodity or negotiating chip (Whittaker & Cartwright, 2000).

Feldman (1999) characterizes this as the "Paradox of Equal Inequalities."

In other words, every protégé should have a mentor who takes a special interest in

> advancing his/her career—and yet every employee should be treated similarly by the organization as a whole. The only way such a system can come into equilibrium is if all junior employees have mentors and all mentors are equally effective—a situation highly unlikely to ever occur (p 253).

Thus, this paradox has great potential to negatively affect the attitudes and performance of mentors. Feldman's (1999) assertions about dysfunctional mentoring relationships and the effects on mentors address theoretical perceptions and provide a rationale for research into the topic, but empirical research into the topic continues to be scant (Eby et al., 2008; Eby & McManus, 2004; Parise & Forret, 2008; Weinberg & Lankau, 2011; Young & Perrewe, 2000).

Further, there is no agreed upon definition of negative mentoring. This lack of definition may lead to assumptions that negative mentoring is equivalent to "bad" mentoring. While negative mentoring may include some elements of mal intent on the part of the mentor or protégé, this is not always the case (Feldman, 1999; Kram, 1985). Sometimes negative mentoring may involve situations such as a simple mismatch of mentor-protégé personalities or needs (Eby et al., 2008). Thus, a definition of negative mentoring must encompass the complexity of mentor-protégé intentions. Considering previous research on this construct, a suggested definition of negative mentoring might be the following: a pattern of dysfunctional relational behavior on the part of either the mentor or the protégé that is defined by psychosocial problems with either mal or good intent, a mismatch in the dyad, or lack of performance that results in a negative relationship (Kram, 1985, Eby & McManus, 2004, Williams, Scandura, & Hamilton, 2001, Eby, Butts, Lockwood, & Simon, 2004, Feldman, 1999).

Scale development on negative mentoring by Eby and colleagues (2008) provided a strong foundation for empirical exploration into how negative mentoring relationships may affect

mentors. Their research yielded a three-dimensional factor structure. *Protégé performance problems* is exemplified by negative protégé behavior that is focused on the self and includes poor job performance, unwillingness to learn, and potentially self-destructive behaviors outside of work. *Interpersonal problems* is defined by mentor-protégé interpersonal conflicts, protégé impression management, protégé gamesmanship (i.e. playing political games, rather than learning necessary skills), protégé submissiveness, and ultimately relationship deterioration. *Destructive relational patterns* is defined as negative protégé behavior that is focused on the mentor, such as breach of mentor trust, protégé exploitive behavior, protégé sabotage, jealousy, competitiveness, and protégé harassment.

All three dimensions of negative mentoring were found to be significantly related to several important outcomes, including mentor and protégé intentions to leave the relationship, decreased mentor job satisfaction, mentor perceptions of poor relationship quality, and protégé reports of poor mentoring functions received (Eby et al., 2008). More recent research found that the mentor functions of psychosocial support and role-modeling were significantly related to reports of mentor satisfaction (Weinberg & Lankau, 2011). However, psychosocial support was found to have a negative relationship with mentor program satisfaction (β = -0.38, p < .01), leading to post hoc explorations of a possible curvilinear relationship. No curvilinear relationship was found and the researchers suggested the possibility of a negative suppression variable and urged future research to explain this unexpected finding. Exploring the relationship of psychosocial support and role-modeling with mentor program satisfaction through the lens of negative mentoring may provide an opportunity to answer this call. That is, if negative mentoring is present in a mentoring relationship, then one would expect that fewer mentoring functions would also be exhibited (see Figure 1).

*Hypothesis 1a**:** Negative mentoring will be negatively related to mentoring functions provided, as rated by mentors.*

Similar to the effect described previously for mentors, if a protégé perceives a negative mentoring relationship, that protégé may also report a lack of mentoring functions. In fact, research into protégés' perceptions of mentoring has found that perceived negative mentoring has a negative relationship with protégé-reported mentoring functions and satisfaction with the mentoring program (Eby, Butts, Lockwood, & Simon, 2004; Ragins et al., 2000). Specifically, all three dimensions of negative mentoring – protégé performance problems, interpersonal problems, and destructive relational patterns – have been found to be significantly negatively related to protégé reports of career-related and psychosocial support from mentors (Eby et al., 2008).

Further, negative mentoring may drive negative job attitudes such that those in dissatisfying mentoring relationships report similar attitudes to non-mentored individuals, or in some cases, non-mentored individuals report higher job attitudes than those in negative mentoring situations (Ragins et al., 2000). That is, being in a negative mentoring relationship may result in higher negative attitudes than when no mentoring relationship exists. Additionally, negative mentoring has been shown to be negatively related to career-related support and psychosocial support received by protégés (Eby et al., 2004).

*Hypothesis 1b**:** Negative mentoring will be negatively related to mentoring functions received, as rated by protégés.*

Trustworthiness

Several researchers have proposed that variables other than negative mentoring may contribute to the evolution and maintenance of the mentoring relationship. One such variable of

interest is trust (Eby, 2009; Scandura & Pellegrini, 2007). The concept of trust has roots in many different disciplines, such as social psychology, evolutionary psychology, and economics (Sheppard & Sherman, 1998). Furthermore, trust can be an outcome, antecedent, or mediating variable in all types of human relationships (Dirks & Ferrin, 2002; Mayer, Davis, & Schoorman, 1995; Schoorman, Mayer, & Davis, 2007). Thus, when discussing interpersonal relationships, such as mentoring, trust is an integral component that must be considered. In general, trust can be defined as the "willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer et al., 1995, p. 712). This definition is the foundation of the model presented by Mayer and colleagues (1995) and has found support since its presentation in the literature (Dirks, 1999; Dirks & Ferrin, 2002; Grant & Sumanth, 2009; Kim, Ferrin, Cooper, & Dirks, 2004; Levin, Whitener, & Cross, 2006; Mayer & Davis, 1999; Merriman, Maslyn, & Farmer, 2011; Schoorman et al., 2007).

This dyadic trust model has three key components that affect the presentation of trust and outcomes of trust (Mayer et al., 1995). The antecedents of trust involve the perception of trustworthiness of the trustee in a relationship. These antecedents are a trustee's ability, benevolence, and integrity. *Ability* is the perception of the proficiency the trustee has in the domain in question. It has also been proposed that ability is primarily a cognitive – rather than affective – belief (Yakovleva, Reilly, & Werko, 2010). *Benevolence* deals with how much the trustor believes that the trustee intends to do him or her good, irrespective of any sort of motive to gain from the relationship. Interestingly, the example used by Mayer et al. (1995) to explain benevolence is the mentor-protégé relationship. *Integrity* involves how well the trustor believes that the trustee adheres to a set of principles the trustor finds acceptable. Both benevolence and

integrity are primarily affective beliefs (Yakovleva et al., 2010). That is, while ability involves an intellectual calculation about the trustee's skill, benevolence and integrity involve an emotional reaction to the trustee's intentions and belief in his or her sense of ethics.

A limitation of the original conception of the Mayer et al. (1995) model is that it did not account for the reciprocal – or lack thereof – nature of trust in dyadic relationships such as mentoring. For example, a protégé may trust the mentor, but the mentor may fail to trust the protégé, thus over time the protégé trust of the mentor wanes. This research gap in dyadic relationships has been highlighted and a call to research it has been issued (Schoorman et al., 2007). To date, only two studies have investigated reciprocal trust in dyadic relationships. Specifically, reciprocal trust was found to be an integral antecedent of subsequent exhibitions of trust (i.e., delegation and disclosure of information) in leader-subordinate relationships (Wasti, Tan, & Erdil, 2010). The second study found reciprocal trust to be a key factor in the development of trust in buyer-supplier relationships (Gullett et al., 2009).

Given the interactional nature of the mentor-protégé relationships, the existence of trust in a mentoring relationship may influence mentoring functions from both the mentor's and the protégé's perspectives. As trust researchers have defined, trust is a willingness to be vulnerable, and the act of trusting involves taking actions that exhibit that vulnerability (Mayer et al., 1995; Schoorman et al., 2007). For example, within the framework of mentoring functions provided by the mentor, the simple act of providing career-related support to a protégé is an act of vulnerability. When a mentor provides career-related support, he or she is saying to individuals in his or her network that the protégé is a valuable contact to know. This inherent vulnerability can be seen in research findings that show when organizational support of mentoring is lacking, mentors may worry about how a protégé's shortcomings may reflect upon him or her (Parise &

Forret, 2008). Thus, the current study expects that when mentors trust their protégés, they will be more likely to provide higher levels of mentoring functions.

*Hypothesis 2a**:** Protégé's trustworthiness will be positively related to mentoring functions provided, as rated by mentors.*

Similarly, for the protégé, there are certain mentoring functions that may represent significant shows of vulnerability. Given that a mentoring relationship involves psychosocial support for the protégé, the power-differentiated dyadic relationship involved in mentoring is dissimilar from the relationship between leader and employee since the mentoring functions by definition involve psychosocial support. That is, the difference between a protégé and a subordinate is his or her opportunity to be psychosocially vulnerable to the mentor. Because of this vulnerability, trust for the mentor must exist in order for the protégé to allow him or herself to exhibit the vulnerability necessary to encourage psychosocial support. Additionally, a protégé gives a mentor a degree of control over his or her career decisions through the mentor's career support and guidance. In contrast to the emotional vulnerability displayed through the acceptance of psychosocial support, career support represents a more tangible risk vulnerability from mentoring due to career related outcomes. That is, ineffective career advice could spell career-related struggles for a protégé that last well beyond the span of a mentoring relationship. Thus, the current study expects that when protégés trust their mentors, they will report higher levels of mentoring functions.

*Hypothesis 2b**:** Mentor's trustworthiness will be positively related to mentoring functions received, as rated by protégés.*

Mentor Outcomes of Job stress and Turnover Intent

Job stress. In a non-work relationship, if breaches of trust occur resulting in a negative

relationship both parties may choose to leave the relationship. In a work relationship – such as a leader or mentor relationship – where both parties may be unwilling or unable to leave the relationship, there may be negative outcomes to one or both members of the dyad (Ghosh, Dierkes, & Falletta, 2011). Feldman (1999) proposes that one of the negative outcomes of being a mentor is increased job stress. A general definition of stress is "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Stanton, Balzer, Smith, Parra, & Ironson, 2001, p. 867). Job stress is this definition applied to the workplace.

Previous research suggests a significant positive relationship between stress and burnout (Lee & Ashforth, 1996). In a meta-analysis conducted by Lee and Ashforth (1996), role ambiguity, role conflict, and role stress were all positively related to depersonalization. Additionally, role stress was positively related to emotional exhaustion. Finally, they also found that role clarity was negatively related to depersonalization and emotional exhaustion. Thus, because burnout and stress are related, these findings may have significant implications for the study of stress in mentoring.

Mentor job stress can be illuminated through a discussion of social exchange theory; a theory that describes the inner workings of relationships wherein the major considerations involve the benefits versus the costs involved in the relationship (Emerson, 1976; Blau, 1964). Stress from a relationship can arise when the costs of the relationship outweigh the benefits, but the relationship must (or is chosen to) be maintained. Using the lens of social exchange theory, Feldman (1999) outlines the benefits (e.g., political support, generativity) and costs (e.g., betrayal, decreased social position due to a failed protégé, energy drain) that a mentor considers when determining if a mentoring relationship will be beneficial to him or her. In support of

Feldman's suggestions, Eby and colleagues (2008) found negative mentoring experiences were significantly related to mentor burnout, as well as mentor intentions to leave the mentoring relationship. Drawing also from meta-analytic research on stress and burnout (Lee & Ashforth, 1996), role ambiguity and stress were positively related to depersonalization, and role stress was positively related to emotional exhaustion.

As suggested by social exchange theory, people enter into relationships weighing the benefits they may receive against the costs of being a part of the relationship (Emerson, 1976). Unlike transactional relationships, such as economic exchanges – where the costs and benefits are generally quite clear – the costs and benefits in social exchange relations may be ambiguous, leading to confusion about what is owed and what is expected (Cropanzano & Mitchell, 2005). This ambiguity in value may be explained by the social exchange dimensions of particularism and concreteness (Cropanzano & Mitchell, 2005). Particularism refers to how much a resource is valued in relation to the source it comes from. For example, money is very low on particularism, because regardless of who is giving it away, a twenty-dollar bill has the same value. In contrast, an introduction to a business contact has high particularism, because such an introduction is more valued depending upon who provides it and who the contact is. Concreteness refers to how tangible a resource is. For example, money is high on concreteness, because possession is very easy to define; if you can reach into your pocket and pull out the twenty-dollar bill you own it. However, regarding the business introduction, while you may value the introduction, its tangibility is difficult to define, and therefore, it is low on concreteness. The costs and benefits of a mentoring relationship are high in particularism – related to the particular mentor or protégé they're associated with – and low in concreteness – costs and benefits can be subjective based on

how the mentor or protégé perceives them. This ambiguity about the value of the relationship may lead to negative emotions that may manifest as stress or burnout.

Utilizing the framework of social exchange theory, research has found that individuals in social relationships where the cost-benefit ratio is perceived to be ambiguous or unbalanced exhibit more symptoms of burnout (Bakker, Schaufeli, Sixma, Bosveld, & Van Dierendonck, 2000; Halbesleben & Bowler, 2007; Schaufeli, 2006; Schaufeli, van Dierendonck, & van Gorp, 1996). Given the significant investment of time and energy into career support, psychosocial support, and role-modeling for the protégé, dysfunctional mentoring may negatively impact several positive outcomes for mentors, such as mentor job satisfaction and satisfaction with the mentoring relationship (Cropanzano & Mitchell, 2005). Therefore, as a mentor sees the benefit-cost ratio in the relationship begin to weaken, he or she may disengage from the relationship, just as he or she will conversely engage with the relationship while the benefit-cost ratio is high. For example, research has found that mentors who report high-quality relationships experience higher objective and subjective career success (Bozionelos, 2004). Therefore, mentors who provide higher levels of mentoring functions to the protégé are expected to report lower job stress.

*Hypothesis 3a**:** Mentoring functions provided will be negatively related to job stress, as rated by mentors.*

Turnover intent. An additional outcome for mentors that may be influenced by presence of negative mentoring is intent to leave the organization. When subjected to negative mentoring experiences, a mentor – like any employee facing strife at work – may have thoughts about moving to another organization rather than remaining in an organization with the current negative relationship (Luchak & Gellatly, 2007). While it may seem reasonable for a mentor to

end a relationship rather than exit an organization, the risks involved in staying (e.g., damaged reputation) may play a significant role in his or her decision (Allen, Renn, Moffitt, & Vardaman, 2007; Parise & Forret, 2008). Thus, if mentors feel they face more risk to their reputation and career from a failing protégé, thoughts about seeking a new position may seem less risky than staying in their current organization. Furthermore, previous research suggests that the provision of more mentoring functions is positively related to objective and subjective mentor career success (Bozionelos, 2004; Parise & Forret, 2008). Therefore, even if the provision of mentoring functions is neutral—as opposed to negative—mentors may not experience as much positive career success as their colleagues with positive mentor-protégé relationships.

Recognizing that mentoring functions is only one variable among many (e.g., pay differences, job performance, lack of organizational fit) that influences turnover cognitions, the current study will focus on turnover intentions that are related directly to the mentoring relationship (Griffeth, Hom, & Gaertner, 2000). In other words, mentors who report providing high-levels of mentoring to their protégés are expected to have lower turnover intentions as compared to their colleagues with low-level mentoring.

Hypothesis 3b: Mentoring functions provided will be negatively related to mentoring-related turnover intentions, as rated by mentors.

Perceived Organizational Support for Mentoring

While the experience of mentoring may reduce job stress and turnover intent for a mentor, an organization's policies may mitigate such effects. Specifically, the perception of organizational support for a mentoring program (POSM) may influence numerous mentor outcomes including job satisfaction, affective commitment, job performance, and withdrawal behaviors (Rhoades & Eisenberger, 2002). There have also been assertions that POS is important

to mentoring programs, however there has been little research on the topic and much of this research has been conducted with a protégé-centric focus (Finkelstein & Poteet, 2010).

Eby and colleagues (2006) differentiated POSM from the more generic construct of perceived organizational support (POS). They claimed that while POS and POSM are similar constructs there are distinctions between the two, including the following: POS is a broad construct while POSM is only focused on support for mentoring, POS represents an affective reaction to the organization while POSM represents a cognitive evaluation, and POS emphasizes a social exchange between the employee and the organization while POSM is a single-direction employee evaluation of the organization. The current study defines POSM as "beliefs that agents of the organization recognize the importance of mentoring, that managerial role models for appropriate mentoring behavior are available, and that mentors are rewarded for their mentoring efforts (Eby, Lockwood, & Butts, 2006)."

Even though research on the topic of POSM is scant, there are previous findings that provide direction to the current study. A meta-analysis conducted by Rhoades and Eisenberger (2002) found that POS has a significant relationship with role stressors and strain. Stress in one's job or role may have a negative effect on how one perceives organizational support, and reduced POS may also produce more job stress. Organizations report that support is integral to the success of a mentoring program. Examples of this organizational support include executive involvement as mentors (Tyler, 1998), communication to the organization about program success (Forret, 1996), and the use of reward systems by linking mentor performance and organizational success (Keele, Buckner, & Bushnell, 1987; Wilson & Elman, 1990). However, research on the effects of the support for mentoring has focused only on protégés, not mentors (Finkelstein & Poteet, 2010). For instance, when organizational support for mentoring programs exists, protégés

report more career and psychosocial support (Eby, Lockwood, & Butts, 2006), as well as increased positive work attitudes such as affective organizational commitment and job satisfaction (Rhoades & Eisenberger, 2002).

Eby, Lockwood, and Butts (2006) performed two studies examining POSM by protégés and mentors. The studies presented evidence that although organizational support for mentoring programs resulted in protégés receiving higher levels of career and psychosocial support (Hu, Wang, Yang, & Wu, 2014; Baranik, Roling, & Eby, 2010), mentor accountability was shown to be negatively related to mentor willingness to enter into future mentoring relationships (Eby et al., 2006). Additionally, when protégés perceived that mentors were held accountable by organizations, mentors exhibited lower distancing and manipulative behavior (Eby et al., 2006).

Another protégé and mentor-centric line of research explored how different antecedent variables were longitudinally related to outcome variables by taking measures at three different time points (i.e., program launch, midway, program close; Wanberg, Kammeyer-Mueller, & Marchese, 2006). One antecedent variable of interest was POSM, which was found to have no significant relationship with mentor outcomes, including the mentors' feelings that mentoring was a "rewarding experience" (c.f. Ragins & Scandura, 1999).

Eby and colleagues (2006) urged future researchers to explore POSM and its relationships with mentor outcomes in more depth. POS has been found to have negative relationships with stress variables (Rhoades & Eisenberger, 2002), but the effect of POSM – in the form of mentor accountability – may reduce a mentor's willingness to enter future mentoring relationships (Eby et al., 2006), or lack any effect at all (Wanberg et al., 2006). In other words, POSM may provide additional oversight or visibility into the mentoring relationship that may increase – rather than decrease – stress variables. Mentors who believe that the mentoring

program lacks management support are more likely to believe that protégé failure reflects poorly on them (Parise & Forret, 2008). Therefore, while it may seem that organizational support should enhance the experience of being a mentor, this pattern of results points to the influence of other variables, and recent compilations of research literature urge for more research on the topic (Finkelstein & Poteet, 2010).

Research from the field of leader-member exchange (LMX) research, using the theoretical basis of social exchange theory, may provide futher clarity on POSM (Erdogan & Enders, 2007). Specifically, this research found POS to moderate the positive relationships between supervisor-rated LMX and subordinate job performance and job satisfaction such that the outcomes were stronger when supervisors had high POS. Similar to the current study, the researchers theorized that when organizational support was present, supervisors would have more resources available for the exchange relationship with their subordinates. Given the similarity of this model with the current study, and the theoretical connections between LMX and mentoring, POSM may provide a mentor with more resources and assurance that a protégé's performance will not reflect poorly on the mentor.

*Hypothesis 4a**:** Mentor's POSM will moderate the relationship between mentoring functions provided and mentor's job stress, such that mentoring functions provided and mentor's job stress will be more negatively related when mentor's POSM is high as opposed to when it is low.*

Burris and colleagues (2008) found that when employees feel like they have a good relationship with leaders and the organization, they are less likely to have turnover cognitions and are less likely to consider leaving. Furthermore, research has also found that when an employee perceives that he or she is supported by an organization, particularly in the face of

challenges and strife, turnover intentions are significantly reduced (Rhoades & Eisenberger, 2002). That is, their psychological attachment to the organization may ameliorate a desire to leave, because they feel supported by the organization. Thus, in the context of the current study, a mentor who feels supported by the organization may be less likely to consider exiting the organization, even in the face of a poor mentoring relationship.

Hypothesis 4b: Mentor's POSM will moderate the relationship between mentoring functions provided and mentor's turnover intentions, such that mentoring functions provided and mentor's turnover intentions will be more negatively related when mentor's POSM is high as opposed to when it is low.

Influence of Mentoring Functions and Protégé Learning on Mentor Job Stress

Mentoring is a dyadic relationship; and, the effects of protégé perceptions on mentor outcomes must be considered. Social exchange theory suggests that individuals in relationships will evaluate the return-on-investment of the relationship as they enter into those relationships (Cropanzano & Mitchell, 2005; Emerson, 1976). That is, when an individual recognizes he or she is in a relationship perceived as inequitable, the result may be a psychological—if not physical—withdrawal from the relationship. Additionally, previous research has found that "bad mentoring experiences" influence protégé psychological withdrawal at work as well as decreased work performance (Eby, Butts, Durley, & Ragins, 2010). Experiences of negative mentoring reported by protégés may result in overall depressed mood, work behaviors, and psychological disengagement. Additionally, support has been found for an "incivility spiral" in mentoring relationships (Ghosh et al., 2011). That is, as a mentoring relationship goes downhill, and a protégé becomes more dissatisfied, he or she may begin to exhibit more and more negative attitudes toward the mentor. Further, research has found that mentors may worry that poor

protégé behavior may detrimentally affect the mentor's own career (Parise & Forret, 2008). Accordingly, this concern may likely exhibit an increase in mentor's stress about the mentoring relationship.

Hypothesis 5a: Mentoring functions received, as rated by protégés, will be negatively related to mentors' job stress.

As discussed previously, protégés can benefit greatly from a mentoring relationship. These benefits include outcomes such as job performance, career advancement, and better ability to adapt to change (Allen et al., 2004). A common defining element of many of the benefits to protégés is personal learning, which is defined as "knowledge acquisition, skills, or competencies contributing to individual development, including the interpersonal competencies of self-reflection, self-disclosure, active listening, empathy, and feedback" (Kram, 1996, p. 140; Lankau & Scandura, 2002). The involvement of a mentor and his or her advanced experience and skill provides the protégé with an opportunity to learn different skills and abilities. With these new abilities, the protégé may perform better, advance faster, and adapt to change better than other employees. Research has found that role-modeling provided by a mentor is related to personal skill development in protégés (Lankau & Scandura, 2002).

Hypothesis 5b: Mentoring functions received, as rated by protégés, will be positively related to protégés' personal learning, as rated by mentors.

Hypothesis 5c: Mentoring functions received, as rated by protégés, will be positively related to protégés' personal learning, as rated by protégés.

Hypothesis 5d: Mentoring functions provided, as rated by mentors, will be positively related to protégés' personal learning, as rated by protégés.

Hypothesis 5e: Mentoring functions provided, as rated by mentors, will be positively

related to protégés' personal learning, as rated by mentors.

Mentors' and protégés' experiences are inter-related; therefore the outcomes on a mentor may be affected by the protégé. For instance, a protégé who reports receiving psychosocial support may be less likely to experience stress in terms of role ambiguity and role conflict (Lankau et al., 2006). Another promising perspective on mentor-protégé relationships may come from research on LMX. LMX theory focuses on the dyadic relationship that occurs between a leader and follower and involves elements of both transactional and transformational leadership (Graen & Uhl-Bien, 1995). That is, high-quality LMX relationships can involve some measure of emotional support and career support (Dienesch & Liden, 1986). Thus, there are some similarities between the support from leader to member and the relationship between mentor and protégé (i.e. career support). However, even though similarities between LMX and mentoring exist, the two are conceptually distinct—yet related—constructs (Scandura & Pellegrini, 2007).

Relational cultural theory proposes that traits are not independent when there is a dyadic relationship (Fletcher & Ragins, 2007). That is, outcomes for people in a relationship are based more on the interrelatedness of the characteristics of the relationship, instead of an independent exchange of resources. Mentoring research has supported this theory by showing that mentoring operates as a forum or exchange in which mentors and protégés regularly share their personal learning and other experiences (Kleinman, Siegel, & Eckstein, 2002; Kleinman, Siegel, & Eckstein, 2001). Drawing from LMX research, Bezujin and colleagues (2010) found a direct relationship between LMX and learning. The researchers suggest that higher-LMX employees are more likely to engage in learning in an effort to impress the leader by showing loyalty.

Given that mentors' and protégés' experiences are inter-related, mentor outcomes such as job stress may be affected by protégé experiences of learning. Similar to the relationship between

LMX and job stress, the relationship between protégé personal learning and mentor job stress may also be inter-related by relational cultural theory. If an employee is not engaging in personal learning, the mentor may feel stress because of a lack of loyalty and engagement. Conversely, if an employee is engaging in personal learning, the mentor may feel less stress, because the employee is showing loyalty and engagement.

*Hypothesis 5f**:** Protégés' learning, as rated by mentors, will be negatively related to mentors' job stress.*

Hypothesis 5g: Protégés' learning, as rated by protégés, will be negatively related to mentors' job stress.

Mentoring Functions Agreement

A mentoring meta-analysis conducted by Allen and colleagues (2008) raised a concern about the number of single-use or study-developed measures of mentoring functions and pointed out that very little research on mentoring functions measure development exists. Allen and colleagues (2008) called for more research focusing on mentoring functions as defined in Kram's (1985) seminal work on the topic. Specifically, one of the most common measures of mentoring functions – the *Mentoring Functions Questionnaire* (*MFQ*; Scandura & Ragins, 1993) – has only modest dimensional correlations between mentors and protégés (Allen, Eby, & Lentz, 2006). Thus, the current study seeks to provide additional evidence on the agreement – or lack thereof – of mentor and protégé ratings of mentoring functions using the *MFQ*.

While there is little research on the agreement between mentors and protégés, there is a considerable body of research on the agreement – or lack thereof – between leaders and subordinates in LMX literature (Gerstner & Day, 1997). A meta-analytic study by Sin, Nahrgang, and Morgeson (2009) explored the reasons that leaders and members ratings of LMX

functions may not agree and found moderate agreement (ρ = .37) between leader and member ratings of LMX. Sin and colleagues shared other results that are similar to the mentoring literature including the following: agreement was found to be more consistent as the length of the relationship and the intensity of the relationship between leader and member increased and the frequency of communication was not significantly related to agreement. Further, the intensity of the relationship explains the quality of interaction and frequency of the relationship explains the quantity of interaction. In other words, a leader may spend a great amount of time with an employee, but if the quality of the interactions is not high, LMX agreement may suffer. Given these results, and the similarity between LMX and mentoring as dyadic constructs, the current study expects similar results regarding mentor and protégé agreement about mentoring functions.

Hypothesis 6: Mentor and protégé reports of mentoring functions provided will exhibit moderate agreement.

CHAPTER 3: RESEARCH DESIGN

Theoretical exploration into negative mentoring relationships points to dysfunctional relationships as the source of negative outcomes for mentors (Feldman, 1999). Previous empirical research has presented evidence of negative outcomes for mentors, such as decreased relationship satisfaction (Eby & McManus, 2004), negative reflection on the mentor (Ragins & Scandura, 1999), concern about exploitation by protégés (Allen et al., 1997), feelings of wasted effort (Parise & Forret, 2008), mentor burnout and intentions to leave the mentoring relationship (Eby et al., 2008). Research by Eby and colleagues (2008) supported a three-dimensional model for mentor-based perceptions of negative mentoring, which includes protégé performance problems, interpersonal problems, and destructive relational patterns. However, to date, there is no measure of mentoring stress.

Study 1 (Qualitative Exploration of Mentoring Stressors and Item Development)

The overall thrust of the current research, including studies 1-4, is the exploration of the potential causes of mentor stress. This first study has two specific goals: exploration of the definition of mentor stress and the examination of the indicators of mentor stress. To develop a definition and measure of mentor stress, this study draws from a foundation of disconnected, yet related theories. Specifically, previous research suggests that negative mentoring experiences can have a debiliative effect on a mentor, including feelings of being used, betrayed, and simply looked over (Feldman, 1999). Further, subsequent research has presented evidence that supports the theory of negative mentoring from a mentor perspective (Eby et al., 2008). Independent of mentoring research, previous research has shown stress to be a generally negative force on people, and specifically on employees in the form of job stress (Selye, 1956; House & Rizzo, 1972; Harris & Bladen, 1994). Job stress includes feelings such as job tension, a general dislike of one's job, and not having enough time to do one's work. The current research seeks to create a connection between negative mentoring theory and stress research in the form of a measure of mentoring stress. Therefore, study 1 develops a theoretical foundation for mentor stress to explore the connection between negative mentoring relationships and mentor stress. Using qualitative research into mentor experiences, study 1 constitutes the first stage in the development of a scale for the measurement of mentoring stress. Studies 2, 3, and 4 further seek to develop of a measure of stress specific to the experience of mentoring.

Participants. The purpose of Study 1 was to gain an in-depth understanding of mentors' feelings, perceptions, and opinions related to mentoring stressors. Mentors (N = 24) were from academic (N = 5) and business environments (N = 19) spanning several business sectors, including consulting services (N = 6), financial services (N = 3), government (N = 2),

information technology (*N* = 2), and others (*N* = 6). The average age of interviewees was 49.4 years (*SD* = 10.8) with 11.9 years (*SD* = 8.9) at current employer. The sample was split evenly across genders (12 female and 12 male mentors). The majority of the mentors were Caucasian (83%) followed by African-American (13%) and Asian (4%). Mentors reported an average of 2.3 formal protégés and 3.2 informal protégés at the time of the interview. Over the course of their careers, mentors reported having mentored an average of 14.5 formal protégés and 21 informal protégés.

Procedures. Structured interviews were conducted with mentors (*N* = 24) who reported being involved in a mentoring relationship at the time of the interview. When possible, interviews were conducted in-person; however, eight interviews were conducted via phone when interviewees were not local to the primary researcher. The mentors were contacted through the primary researcher's business and academic networks. Interviews lasted for approximately 40 minutes (*M* = 40.42, *SD* = 10.98), and were recorded and transcribed verbatim for all content, using Wavepad 6.02 audio editing software.

Measures. Study 1 was designed to identify mentor stressors, so an interview protocol, including a mentoring definition and stress-related questions was developed and utilized with each participant. (see Appendix A)

Mentoring Definition. Since protégés were directed to identify the presence of a mentor, a critical consideration is the operational definition of a mentor. Haggard and colleagues (2011) suggested that a single definition of mentoring has not emerged to date; however, they did present core attributes (i.e., reciprocal relationship, production of developmental benefits, and regular/consistent interaction) of a mentoring definition that researchers should consider in context with their research direction and methodology. To apply Haggard and colleagues'

attributes to the current study, the chosen definition must focus on those attributes in a work-focused relationship and away from student-faculty mentoring, as well as general life mentoring (i.e., a familial relation or public figure; Lentz & Allen, 2010). The definition developed by Kram (1985) and cited in the most recent edition of the APA Handbook of I/O Psychology (Reich & Hershcovis, 2009, p. 232) is, "more experienced workers who take an interest in the professional (and sometimes personal) development of less experienced coworkers." This definition satisfies one of Haggard and colleagues' core attributes of mentoring (i.e., production of developmental benefits); however, the term "coworker" may confuse some participants as it could indicate a peer instead of a superior. Thus, the current study used the word "worker" in both clauses of the definition. To address the other two core attributes, a second clause, "through interaction and two-way communication," was added to the definition. The definition was changed to second-person voice to clarify the focus of the mentor and protégé in the relationship. Finally, a clarification for participants was included to add the possibility for a mentor to be a supervisor, but not a specific requirement. Thus, the final adapted operational definition of a mentor that was presented to protégés was, "*A more experienced worker from your organization who takes an interest in your professional (and sometimes personal) development through interaction and two-way communication. Additionally, it is possible for a mentor to be a supervisor, but not specifically required.*" A mentor-focused parallel version of the definition was "*A more experienced worker who takes an interest in a less experienced worker's professional (and sometimes personal) development through interaction and two-way communication. Additionally, it is possible for a mentor to be a supervisor, but not specifically required.*"

Participants were asked if the definition of mentoring agreed with their experiences as a mentor and to provide feedback if they wished to. All participants agreed that the definition accurately captured mentoring. None gave feedback that the definition should be changed in any way. Nine participants mentioned that they agreed with the inclusion of the possibility of a supervisor being a mentor, but not required.

Interview Structure. An interview protocol was developed to guide the interviewer to probe for participants' responses to stressful mentoring experiences (see Appendix A). Specifically, four questions were developed to probe into the mentor's stressful experiences with being a mentor. Two of these questions were created to probe specifically into more detailed elements of a mentor's experiences such as the mentor's relationship with his or her protégés and the involvement of the mentor's organization in any mentoring stressors. Finally, a question was developed to ask about any stresses that were not captured by previous questions or conversations. The goal of the interview was to have mentors provide in-depth information on their experiences without being primed by existing research.

Results. The purpose of this study was to build a measure of stressors of mentoring. To build this measurement instrument, mentoring stressors dimensions were identified and items were developed to measure these dimensions.

Mentoring Stressors Dimensions. To identify mentoring stressors, the process recommended by Hinkin (1995) was utilized for scale development. First, common themes were developed through an examination of critical incidents identified by participants. These critical incidents – or observations of human behavior that have some connection to underlying psychological functioning (Flanagan, 1954, Hinkin, 1995) – were gathered from an analysis of mentor responses to the interview questions on specific, stressful mentoring experiences. Critical

incident statements were examined for common themes of mentoring stressors and initial results suggested a five-dimensional structure. These five dimensions include: Stressful Protégé Behaviors, Poor Dyadic Fit, Mentor's Personal Issues, Structural Constraints, and Organizational Support. In forming the common themes, literature on negative mentoring was also consulted. Eby and colleagues (2008) found three dimensions of negative mentoring relationships: Protégé Performance Problems, Interpersonal Problems, and Destructive Relational Patterns. I consulted this literature since negative mentoring dimensions seem to be theoretically related to two of the dimensions of mentor stressors that emerged from interview data: Stressful Protégé Behaviors and Poor Dyadic Fit.

Stressful Protégé Behaviors are protégé behaviors that create stress for a mentor, such as protégé's unwillingness to learn. *Poor Dyadic Fit* involves general dysfunctionality or relationship-based strife between the mentor and the protégé that causes the mentor stress, such as different work values. *Mentor's Personal Issues* involve mentor's own concerns, anxieties or experiences that cause stress for the mentor, such as the mentoring relationship taking too much of the mentor's time. *Structural Constraints* are related to the organizational context in which the relationship is embedded, that can cause stress for a mentor, such as not giving mentors a choice in protégé selection. *Organizational Support* relates to stressors that are based specifically on the sort of support an organization provides or does not provide to mentors, such as being given enough time to mentor one's protégés (see Table 1 for an illustrative quote representative of each dimension).

Following the identification of these dimensions, interview transcripts were analyzed to determine the frequency of identification of these critical incidents in the interviews. Stressful Protégé Behaviors was mentioned in 29 (24.4%) of the critical incidents statements. Poor Dyadic

Fit was represented by 26 (21.8%) of the statements. Mentor's Personal Issues were represented by 32 (26.9%) of the critical incidents statements. Structural Constraints was represented by 23 (19.3%) of the statements. And finally, Organizational Support was mentioned in 9 (7.6%) of the critical incidents statements about mentoring stressors.

Measure Development. The first stage of measure development is item generation – creating items to measure a theorized dimension of a construct (Hinkin, 1995). Key to successful item generation is content validity (Schwab, 1980). While no clearly accepted quantitative index of content validity exists, good judgment and process is essential in validating a measure (Stone, 1978). One method, referred to as "logical partitioning" is deductive in nature, deriving items from a deep understanding of the domain of interest, and the use of subject matter experts (Hunt, 1991). This was the process used for item development.

An initial pool of 101 items was compiled to measure the five dimensions of mentoring stressors. Items were developed through consultation of previous research on negative mentoring and stress to represent each dimension as fully as possible (Burk & Eby, 2010; Eby et al., 2008; Eby & McManus, 2004; Ghosh et al., 2011; Lankau et al., 2006). An expert judge analysis – a method of deriving content validity by asking subject matter experts to respond to and rate potential items for construct relevance– was then conducted by three academic (one PhD and two PhD candidates) and two practitioner experts (DeVellis, 1991, Lawshe, 1975). These experts were asked to independently review the items for each dimension and select those items which were considered to be most representative of the given dimension.

After each rater reviewed the items and provided selections, their responses were examined and assessed for agreement (Hinkin, 1998). Items where at least three of the raters agreed were representative of the dimension were retained for further testing. This process

resulted in 40 items: 10 items for Stressful Protégé Behaviors (e.g. “My protégé does not seem willing to learn”), 8 items for Poor Dyadic Fit (e.g. “My protégé seems to expect quick advancement”), 8 for Mentor’s Personal Issues (e.g. “I feel inadequate as a mentor to my protégé”), 7 items for Structural Constraints (e.g. “My organization gives mentors choice in protégé selection.”), 7 for Organizational Support (e.g. “I don’t know how I’m doing as a mentor.”). Please see Table 2 for a complete list of the 49 items retained.

Study 2 (Item Validation)

The findings from Study 1 suggested a five-dimensional structure for mentoring stressors. These five dimensions are: Stressful Protégé Behaviors, Poor Dyadic Fit, Mentor’s Personal Issues, Structural Constraints, and Organizational Support. Items were identified for each dimension to create a measurement scale assessing mentoring stressors, which will be referred to as the *Stressors in Mentoring Questionnaire (SMQ)*. The purpose of Study 2 was to further refine the *SMQ* and identify the most parsimonious factor structure and scale items to represent the construct of mentoring stressors.

Participants and Procedure. The 40 *SMQ* items were administered to personal business contacts (N = 56), employees of a large Midwest-based insurance company (N = 55), and Executive MBA students at a large Midwestern public university (N = 3). In total, survey data were received from 114 participants. Participants responded to all 40 items using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree).

Data from two respondents were removed since they stated they were not in mentoring relationships as defined by the operational definition established in Study 1. Eleven respondents provided only demographic data, but did not respond to the scale items, leaving *N*=101 mentor responses in the final dataset. The majority of mentors were female (57.1%) and White (79.5%),

followed by African-American (13.4%), Asian (4.5%), and American Indian/Alaska Natives (0.9%). The largest group (20.5%) of mentors was 45-49 years of age (see Table 3). The majority of mentors had a bachelor's degree as their highest degree attained (41.1%), while the remaining had either master's (25%) or doctoral degree (14.3%; see Table 4). Additionally, the majority of mentors (63.4%) reported salaries that were in excess of $80,001 (see Table 5 for salary information).

The majority of mentors reported that their protégés were either subordinates outside of their chain-of-command (46.4%), peers (21.4%), or immediate subordinates (10.7%). Mentors reported that their mentoring relationships were initiated by a formal organizational program (38.4%), mutually (34.8%), or protégé initiated (21.4%), with a smaller number of mentoring relationships initiated by the mentors themselves (5.4%). Mentors reported spending an average of 2.44 hours per week mentoring their protégés (*SD* = 5.05) with an average of 2.89 mentoring relationships (*SD* = 3.05). Mentors had maintained mentoring relationships for an average of 1.5 years (*SD* = 1.55), had been a part of their organizations for an average of 14.76 years (*SD* = 9.95), had been in their positions for an average of 4.91 years (*SD* = 4.64), and had been mentoring for an average of 9.01years (*SD* = 8.19).

Data were examined for demographic differences and results revealed some gender differences in mentoring experiences. For example, female mentors were more likely to report being involved in a formal mentoring program (8.2% higher than males) and were more likely to have a protégé who was a member of another organization (8.2% higher than males). Male mentors were more likely to have a protégé who is a subordinate outside of their chain-of-command (53.2%). Male mentors were also more educated and earned higher salaries than their

female counterparts. Results suggested that 21.3% of the male respondents made in excess of $150,000 per year as compared with 9.4% of females.

Exploratory Factor Analysis. The 40-item *SMQ* was analyzed using exploratory factor analysis (*EFA*; see Table 6 for scale items). To explore the factor structure, the data was examined using maximum likelihood factoring with a Varimax orthogonal rotation (Brown, 2006). The Kaiser criterion was considered for the determination of the number of factors, but ultimately a parallel analysis was used to determine the number of factors that were the best fit to the data (Hayton, Allen, & Scarpello, 2005). Item-level factor-loadings were examined to further assess factor structure (Brown, 2006; Hinkin, 1998; Tabachnick & Fidell, 2006). Tabachnick and Fidell (2006) state that a good "rule-of-thumb" regarding item relation to a factor is for items to have a primary loading exhibited by a factor loading coefficient of at least 0.32. Additionally, cross-loadings on other factors (i.e., loading – on a second factor – of more than half the primary loading) must be considered when examining item-level results (Brown, 2006). Finally, it is important to note that *EFA* is an iterative procedure, frequently requiring multiple analyses to arrive at a final solution (Hinkin, 1998).

Initial Exploratory Factor Analysis. Using these criteria, an initial *EFA* was conducted using maximum likelihood estimation. Both unrotated and rotated factor pattern matrices were examined to assess dimensionality. First, while the unrotated factor pattern matrix provided some evidence of multidimensionality, a factor structure was unclear. That is, factors 1, 3, and 4 presented relatively good support for the theorized dimensions of Stressful Protégé Behaviors, Poor Dyadic Fit, and Organizational Support. However, Factor 2 (Mentor's Personal Issues) and Factor 5 (Structural Constraints) had less clear factor evidence (see Table 7). Cumulative variance for a five-factor solution was 58.90%. Preliminary eigenvalues were 11.90, 4.70, 2.70,

2.38, and 1.88. Each factor explained 29.75%, 11.75%, 6.74%, 5.94% and 4.72% of the variance. A scree plot of the eigenvalues supported a 5-factor solution, by showing a break in the pattern of plotted eigenvalues following the fifth factor (see Figure 4). Further examination via parallel analysis also supported a 5-factor solution. A parallel analysis plots random data with the same number of variables and number of observations as the original data. This creates a comparison data set which shows where the most reasonable number of factors is represented by where the random and study plots cross (See Figure 5). Additionally, an examination of model fit statistics for a 5-factor solution indicated acceptable model fit (χ^2 (590) = 916.54, $p < .05$, $\chi^2/df = 1.55$, *RMSEA* = .07). Thus, given the acceptability of the model fit and the indicated 5-factor solution, the theorized measure structure was retained.

To further assess dimensionality and increase interpretability of the individual items, the pattern matrix was rotated using Varimax factor rotation (see Table 8). Based on item-level EFA statistics and conceptual meaning, two items were removed from the *SMQ*. The first item removed from Stressful Protégé Behaviors was "My protégé repeatedly seeks my advice on similar issues" (SPB1). This item was removed because its content was addressed more directly by other items in the measure (e.g., "My protégé does not seem willing to learn," "My protégé needs too much of my support."). That is, this item speaks to a very specific behavior, which may or may not belie negative or stressful mentoring, whereas the other items in the measure address the same conceptual meaning, but more directly. Additionally, the factor loadings for this item range between -0.27 and 0.16 and its loading to its primary factor is 0.16. There is also no significant correlations between this item and any other item in the rest of the scale (see Table 9), indicating a lack of relation to the construct of interest.

The second item considered for removal (SC2), “I feel that my protégé’s other mentor(s) may be giving my protégé conflicting advice,” from Structural Constraints, may involve too specific of a mentoring situation. For a mentor to respond to this item he or she would have to have a protégé involved in multiple mentoring relationships. According to Murphy and Kram (2014), these relationships are increasing in frequency; however, they are still not a majority of the mentoring relationships in existence. Additionally, outcomes of this specific type of relationship may be better captured by other items (i.e., “I feel inadequate as a mentor to my protégé,” and “I feel unsure about the effectiveness of the advice I give my protégé”). Due to the degree of specificity in the item, the theoretical issues better addressed by other items in the scale, and its low loading of 0.05 to its primary factor, it was deleted.

The primary goal of *EFA* is the exploration of an underlying factor structure (Woods & Edwards, 2007). Thus, item-level factor loadings are an indicator of potential item performance; however, item-level statistical analysis in *EFA* should not outweigh the importance of content validity in terms of theoretical factor coverage. Some items in the current *EFA* analysis have factor coefficient scores that fall below Tabachnick and Fidell’s (2006) recommendation, but may be of importance to the meaning of the mentoring stress construct. Specifically, three items with less than ideal factor leadings (PDF2, PDF3, PDF5; see Table 6) are related to the quality of dyadic fit and removal of these items based on *EFA* would be premature at this stage of research. Respectively, these items represent alignment between a mentor and protégé regarding the amount of respect authority figures should be given, speed of advancement, and how mentors and protégés should interact regarding feedback. Three additional items (MP1, MP2, MP3) are related to a mentor’s personal challenges with mentoring. These items represent a mentor’s concerns about general inadequacy as a mentor, the quality of advice given to a protégé, and the

appropriateness of challenges given to a protégé. Three items (SC3, SC4, SC5) are related to the structure of a mentoring program. Respectively, these items represent advancement opportunities available to protégés, the need for remote mentoring, the efficacy of remote mentoring, and general structural integrity of the mentoring program. Finally, two items (OS6, OS7) are related to the amount of organizational support that is given to the mentor. Respectively, these items represent whether the organization gives a proportionate number of protégés and sufficient time to a mentor to support the mentoring relationship. As previously mentioned, each of these items represents theoretical aspects of challenges related to mentoring that may result in stress on the part of a mentor. Removal of any of these items based purely on statistical analysis would be premature during this stage of exploration of the construct. Thus, in order to best support the exploratory nature of *EFA* and in the interests of construct coverage, these items were retained and item-to-model fit was explored using more appropriate techniques in the next study.

Final Exploratory Factor Analysis. The remaining 38 items were subjected to a second maximum likelihood factoring with a Varimax orthogonal rotation. Using the model selection criteria established for the initial *EFA*, a 5-factor solution was supported using a scree plot (see Figure 6) and parallel analysis (see Figure 7). Model fit statistics for a 5-factor solution supported acceptable model fit ($\chi 2$ (523) = 823.45, $p < .05$, $\chi 2/df$ = 1.57, *RMSEA* = 0.07). The extracted eigenvalues for the five factors were 11.76, 4.46, 2.68, 2.32, and 1.79, respectively and they accounted for 60.59% of the variance. The final set of items included 9 for stressful protégé behaviors ($\alpha = 0.94$), 8 for poor dyadic fit ($\alpha = 0.85$), 8 for mentor's personal issues ($\alpha = 0.75$), 6 for structural constraints ($\alpha = 0.57$), and 7 for organizational support ($\alpha = 0.76$). Extracted factor loadings and communalities are listed in Table 10 and correlations are listed in Table 11.

Study 3 (Instrument Validation)

The results of the Exploratory Factor Analysis (*EFA*) from Study 2 supported a five-factor conceptualization of the *Stressors in Mentoring Questionnaire* (*SMQ*): Stressful Protégé Behaviors, Poor Dyadic Fit, Mentor's Personal Issues, Structural Constraints, and Organizational Support. As a result of the *EFA* analysis, 2 items were removed for theoretical reasons and poor item-level performance, leaving a total of 38 items in the measurement instrument. While *EFA* is a process generally reserved for exploration of the ideal factor structure of a measure, Confirmatory Factor Analysis (*CFA*) is better suited to the validation of measures and examination of the measure's consistency with the theoretical factor structure developed during the *EFA* process (Woods & Edwards, 2007). Thus, the purpose of Study 3 was to further refine the *SMQ* and identify the most parsimonious and theoretically and empirically appropriate item-level structure to represent the construct of mentoring stressors.

Participants and Procedure. The 38 *SMQ* items were administered to formal and informal mentors in a large Midwest-based insurance company. Survey data were collected from 214 participants. Data from one respondent was removed for indicating the lack of a mentoring relationship as defined by the operational definition established in Study 1. Five respondents provided only demographics data, but did not respond to the scale items that were the focus of the survey, leaving N=208 mentor responses in the final dataset.

The majority of mentors were female (51.4%) and White (68.5%), followed by African-American (19.7%), Asian (1.4%), American Indian/Alaska Natives (1.4%), and those reporting "Other" (1.4%). The largest group of mentors was 50-54 years of age (20.5%; see Tables 12 and 13). The majority of mentors achieved a bachelor's degree as their highest degree (54.3%), with the remaining majority having achieved either master's degrees (19.2%) or some non-degreed

Graduate School experience (12%; see Table 14). Additionally, the majority of mentors reported salaries that were between $100,001 and $130,000 (29.8%; see Table 15 for salary information).

Data were examined for potential differences due to demographics. Some gender-related differences were found. While significant educational differences between male and female mentors did not exist, there were salary differences. Specifically, male mentors were paid more than female mentors. Twice as many male mentors (30.9%) reported making in excess of $130,000 per year, as compared to their female counterparts (15.2%). A similar pattern was seen at the lower end of the salary band. Approximately twice as many female mentors (35.2%) reported making less than $80,000 per year than their male counterparts (17.5%). Additionally, females were more likely to rely on a formal mentoring program to initiate a mentoring relationship (40.6%), whereas male mentors were less likely to have relationships initiated by a program (28.7%). Mentor race was also examined, but no differences were found.

The majority of mentors reported that their protégés were either subordinates outside of their chain-of-command (57.7%), peers (26.4%), or an immediate subordinate (3.8%). Mentors reported that relationships were most often initiated by their protégés (35.1%), an organizational program (34.6%), or mutually (26.9%), with a small number initiated by the mentors themselves (2.9%). Mentors reported spending an average of 1.92 hours per week mentoring their protégés (*SD* = 4.54), while having an average of 3.51 mentoring relationships (*SD* = 3.82). Mentors had maintained mentoring relationships for an average of 1.34 years (*SD* = 1.10), been a part of their organizations for an average of 19.35 years (*SD* = 9.11), been in their positions for an average of 6.11 years (*SD* = 8.19), and been mentoring for an average of 10.14 years (*SD* = 7.19).

Measures. Mentors responded to the 38 items on the *Stressors in Mentoring Questionnaire* (*SMQ*). Participants responded to items using a 5-point Likert scale (1 = strongly

disagree to 5 = strongly agree). Data were examined for multivariate outliers using Mahalanobis' Distance. Compared to a threshold value of χ^2 (45) = 69.96, $p < .01$, six cases were identified as multivariate outliers. Responses to items or sub-scales were checked for contradictory responses that might indicate these cases were the result of inattentive responding. This examination provided no systematic reason for the participants' responses to be outliers. Thus, the data was not removed. However, Maximum Likelihood (ML) estimation with robust standard errors was used for subsequent analyses to account for any deviation of multivariate normality.

Results. The 38-item *SMQ* was analyzed using *CFA* to cross-validate the five-factor solution obtained in the *EFA* from Study 2. Participant data was used as input for the *CFA*, allowing the MPlus 7.2 software to calculate necessary covariance matrices. Bollen's (1989) recommendations on interpreting multiple fit indices were followed, including an examination of the chi-square test and standardized root-mean-square residual (*SRMR*). This model fit analysis was supplemented with an analysis of the comparative fit index (*CFI*; Bentler, 1990), root mean square error of approximation (*RMSEA*; Steiger, 1990), and the reduced chi-square statistic (chi-square divided by degrees of freedom), as recommended by (Hu & Bentler, 1999). To indicate satisfactory model fit, the *SRMR* should be less than 0.10, *CFI* should be greater than 0.90, and *RMSEA* should be less than 0.08 (Vandenburg & Lance, 2000).

Initial SMQ Model Analysis. An initial *CFA* was fitted to the data using Maximum Likelihood (ML) estimation. Using the above criteria, results suggested unacceptable fit to the data for a five-factor model (χ^2 (655) = 1898.62, $p < .05$, χ^2/df = 2.89, *RMSEA* = .10, *CFI* = .74, *SRMR* = .13). However, inspection of the modification indices, standardized residuals, and factor loadings indicated that a better fit could be achieved through some theoretically meaningful changes in model structure.

Modification indices were examined to guide scale development (Sorbom, 1989). One item from the Poor Dyadic Fit scale, “My protégé does not respect authority” (PDF2), showed a strong association with the Stressful Protégé Behaviors scale, consistent with *EFA* results from Study 2 (β = 0.69; see Table 10), in addition to a loading to the Poor Dyadic Fit scale (β = 0.88; see Table 16), indicating a cross-loading. Modification indices showed that model fit would be significantly improved if this item was modeled as a part of the Stressful Protégé Behaviors scale, instead of the Poor Dyadic Fit scale. This is consistent with the meaning behind the two theorized scales. Specifically, for this item to be an indicator of poor dyadic fit, a mentor-protégé relationship would have to exist wherein the mentor would accept a protégé who fails to respect authority. While this is possible, it would seem more reasonable that this behavior from a protégé would be considered generally unacceptable and stressful. Thus, this item was moved to be an indicator of the latent variable represented by the Stressful Protégé Behaviors scale.

Another item, “I am nervous about offending my protégé” (PDF5) also showed an association with the Stressful Protégé Behaviors scale, consistent with *EFA* results from Study 2 (β = 0.49; see Table 10), in addition to a strong loading to the Poor Dyadic Fit scale (β = 0.85; see Table 16), indicating a cross-loading. Modification indices suggested that model fit would be significantly improved if this item was modeled as part of the Stressful Protégé Behaviors Scale, instead of the Poor Dyadic Fit scale. While this item may not specifically appear related to protégé behaviors, it indicates a relationship that may be marked by stressful protégé behaviors. A mentor may begin to find interactions with a protégé stressful when the delivery of advice or feedback is met with resistance. That is, the item indicates a protégé who is prone to taking offense to mentor feedback. Given that a key element of the mentor-protégé relationship is the provision of career-related support and psychosocial support in the form of feedback, the protégé

role in the relationship is to be the recipient of that feedback (Kram, 1985). If a protégé is frequently offended by this feedback, then a mentor may begin to see that key element of the mentor-protégé relationship as highly stressful. Being concerned about offending a protégé could be thought of as a potential problem with a mentor's thinking; however, an alternate explanation is that this item addresses a protégé who is unreasonably offended by feedback. That is, since the *SMQ* is designed to measure the construct of mentor stress, this item would more likely address a protégé behavior (i.e., unreasonable reaction to feedback) than a mentor's personal issue (i.e., overly concerned with protégé offense). Thus, given these theoretical considerations, as well as data indicating an association with the Stressful Protégé Behaviors scale, this item was moved to be an indicator of the latent variable represented by the Stressful Protégé Behaviors scale.

Model fit was further improved by removal of 6 problematic items (Sorbom, 1989). Specifically, modification indices for an item from the Organizational Support scale, "My organization gives me too many protégés to manage" (OS6), presented cross-loadings on Stressful Protégé Behaviors and Poor Dyadic Fit scales. Additionally, while it presented a significant path coefficient ($\beta = 0.54$, $p < .05$; see Table 16), it also exhibited moderately high residual error variance ($\varepsilon = 0.71$; see Table 17). This high residual error variance indicates that this item is considerably influenced by a factor that is not the Organizational Support dimension. This is also consistent with the *EFA* results from Study 2 ($\varepsilon = 0.65$; see Table 10). The organizational component of this item would seem to indicate an organization that demands a mentor take on multiple protégés. However, the cross-loadings identified with this item may provide an alternate explanation; that the undue stress to a mentor could be caused by how those protégés behave. Specifically, if each relationship had better dyadic fit and the protégés did not perform in ways that caused undue stress, managing more mentoring relationships may be less

stressful to a mentor in functional mentoring relationships. Thus, due to poor high residual error variance and theoretical considerations this item was removed from the scale.

Two items from the Mentor's Personal Issues scale warranted examination. The first, "I feel I do not give my protégé enough personalized challenges unique to his/her strengths" (MP3) was removed. It presented a non-significant path coefficient (β = 0.16, p = .08; see Table 16), high residual error variance (ε = 0.98), and low amount of shared variance (r^2 = 0.03; see Table 17), also as suggested by a low loading (β = 0.12) in *EFA* results from Study 2. Additionally, this item presents a very specific situation for a mentor to endorse. That is, this requires that a mentor feel that the challenges presented must be unique to his or her protégé's strengths. Thus, the item may require too specific of a situation to be endorsed by mentors, and therefore was removed from the scale.

Another item from the Mentor's Personal Issues scale, "I feel that I give my protégé preferential treatment" (MP4) was also removed. This item presented a significant, but low path coefficient (β = 0.22, p < .05; see Table 16), but its residual error variance was high (ε = 0.95), also presenting a low amount of shared variance (r^2 = .05; see Table 17). From a conceptual standpoint, this item is at the heart of mentoring and may explain its poor performance. That is, two types of mentoring support–career-related assistance and psychosocial support-involve behavior which could be considered a form of preferential treatment. Therefore, this item may represent normal mentoring behaviors and not a stressful part of the mentoring experience.

Three items were removed from the Structural Constraints scale. The first item, "My organization's mentoring program lacks structure" (SC5) was removed. It presented a non-significant path coefficient (β = -.16, p = .10; see Table 16), high residual error variance (ε =.97), and low amount of shared variance (r^2 = .03; see Table 17). This item also had associations with

the Mentor Personal Issues scale and the Organizational Support scale. Considering the cross-loadings for these items, they may tap into theories of perceived organizational support for mentoring, which are better addressed by items already assessed by those that are a part of the Organizational Support scale (e.g. "My organization does not provide sufficient financial support for my protégé's training and development needs"). Thus, both of these items were removed from the scale.

The second item, "My protégé and I must frequently meet remotely" (SC3) was removed because it exhibited a low, non-significant path coefficient (β = -.13, p = .11; see Table 16), high residual error variance (ε =.98), and low amount of shared variance (r^2 = .02; see Table 17). The final item, "I have trouble gauging my protégé's engagement during our remote mentoring sessions" (SC4) was removed because it presented a low, non-significant path coefficient (β = -.07, p = .41; see Table 16), high residual error variance (ε = .99), and low amount of shared variance (r^2 = .01; see Table 17). Additionally, this item's modification indices presented cross-loadings with all other four dimensions in the measure. In addition to these empirical reasons, both of these items represent issues regarding remote-mentoring. The first of these items is better represented by a dichotomous item, simply asking if the mentoring pair is in a remote-mentoring pair. The second item assumes such a relationship, making it impossible for mentors not in a remote-mentoring relationship to respond to the item. Thus, both items were removed from the scale.

Model Modification. Deleting these 6 items and modeling two items to load on theoretically more related factors significantly improved model fit with the remaining 32 items ($\chi^2(454)$ = 1190.06, p <.05, χ^2/df = 2.62, *RMSEA* = 0.09, *CFI* = 0.82, *SRMR* = 0.12). The chi-square difference test ($\Delta\chi^2$ = 1536.67, Δdf = 525, p < .05) indicated that these changes resulted in

a significantly better fit to the data. However, while model fit is improved, fit indices are still outside of the range of acceptable fit. Thus, further examinations of modification indices and theoretical refinement were conducted to increase model parsimony.

One method of model modification involves the freeing of item-level residual variance to better represent theoretical relationships between the manifest indicators. That is, each manifest indicator is expected to represent variance from a latent variable as well as random error variance. Some manifest indicators may have system error variance that is not unique, but covary due to theoretical reasons. While representing this covaried residual variance can be considered controversial, it is accepted as long as the modeled relationships are statistically and theoretically sensible (Vandenberg, 2014). Upon examination of modification indices and theoretical relationships, four item pairs emerged as being best represented through modeling shared residual error variances.

The first pair of items from the Stressful Protégé Behaviors scale is "My protégé does not seem willing to learn," (SPB2) and "My protégé does not seem interested" (SPB3). These two items are strongly correlated (r = 0.92) and have relatively similar path coefficients (β = 0.89 and β = 0.91). They also represent two domains of protégé engagement. The first represents an unwillingness to engage in learning opportunities as a protégé, whereas the second represents an overall lack of drive. Thus, the first item might encompass an active disengagement from specific opportunities; the second item could represent a protégé who is generally apathetic. These two items share the concept of apathetic disengagement from the mentoring process and the personal learning a protégé is expected to engage in. Therefore, the relationship is best modeled by freeing the two manifest indicators' residual variance to covary.

The second pair of items is also from the Stressful Protégé Behaviors scale and includes "My protégé does not respect authority," (PDF2) and "I suspect my protégé may badmouth me to others" (SPB10). These two items share a strong correlation with each other (r = .90) and have relatively similar path coefficients (β = .88 and β = .86). They also represent facets of a protégé's respect for authority figures. That is, one represents a lack of respect for all authority figures, whereas the other represents a concern about the protégé not having respect for the mentor as an authority figure. Specifically, the mentor is an authority figure due to the power-differentiated dyadic relationship. Disagreements are a part of any relationship, but a mentor should be able to expect that a protégé will respectfully disagree with the mentor, even in private. The act of badmouthing the mentor to others does not show the respect to the authority figure that he or she is due. Thus, these two items share the concept of protégé respect for authority and are best modeled by freeing the two manifest indicators' residual variance to covary.

The third pair of items comes from the Poor Dyadic Fit scale, and is as follows: "My protégé is too quiet," (PDF9) and "My protégé is too passive about advancing his/her career" (PDF10). These items have a strong correlation (r = .40) and have relatively similar path coefficients (β = .71 and β = .73). This item-pair represents protégé passivity that may cause mentor stress. That is, a protégé who is quiet and does not advance his or her career at a pace the mentor feels is appropriate is a passive behavior. Thus, these two items share the concept of protégé passivity, so to better represent this in the model, their residual error variances were freed to covary.

Finally, the fourth pair of items from the Mentor Personal Issues scale are, "My personal work-related problems make it difficult to focus on mentoring my protégé," (MP7) and "My personal problems outside of work make it difficult for me to focus on mentoring my protégé"

(MP8). These two items share a strong correlation with one another (r = 0.79) and each have relatively similar path coefficients (β = 0.85 to 0.86). They represent diametric sides of a similar theoretical concept about mentor personal problems intruding on the mentoring relationship. An example of substantive reason for freeing error covariance is when two items are substantially similar in content, such as these two items (c.f. Kline, 1998). Thus, the residual variance of each manifest variable was freed to covary to better account for this relationship.

Final SMQ Measure. Making these theoretically meaningful changes to the model resulted in improved model fit to the data, χ^2 (449) = 942.61, p <.05, χ^2/df = 2.10, *RMSEA* = 0.08, *CFI* = 0.89, *SRMR* = 0.07 (see Figure 8). The chi-square difference test ($\Delta\chi^2$ = 247.45, Δdf = 5, p < .05) further indicated that these changes resulted in a significantly better fit to the data. The final measurement scale consists of 32 items, with 11 items representing Stressful Protégé Behaviors (α = 0.96), 6 items representing Poor Dyadic Fit (α =0.85), 6 items representing Mentor's Personal Issues (α = 0.78), 3 items representing Structural Constraints (α = 0.82), and 6 items representing Organizational Support (α = 0.76; see Table 18 for complete listing of items and item-level statistics). Additionally, the correlations among the factors can be seen in Table 19.

CHAPTER 4: RESULTS

Study 4 (Hypothesis Testing through SEM)

The purpose of Study 4 is to examine potential antecedents of mentor stress and turnover intentions by examining the influence of negative mentoring and trustworthiness on the provision and receipt of mentoring functions. Of additional interest is the specific mediating influence of protégé personal learning on mentor stress and the moderating effect of perceived organizational support for mentoring on mentor stress and turnover intentions. This study sought to answer questions about what might negatively impact a person's experience as a mentor and what elements of the relationship, characteristics of the individual participants of the relationship, and structure in the organization might help support or hinder mentor's experience.

Methods

Participants. Debates about the ideal sample size for structural equation modeling (SEM) to generate acceptable parameter estimation have been common in research literature. Traditional Monte Carlo studies have produced results that show parameter estimates using maximum likelihood (ML) estimation are possible with sample sizes as low as 50, but there can be serious deviations from known population values (Anderson & Gerbing, 1985; Gerbing, 1985). Out of these Monte Carlo studies came rules of thumb defining that "small" sample sizes are about 200 observations, and "large" samples being more than that (p. 268, Milsap, 2002). However, the proposed strength of variable relations can decrease problems with parameter estimates (MacCallum, Widaman, Zhang, & Hong, 1999). Current ad hoc guidelines about sample size requirements for structural equation modeling (*SEM*) suggest a need for approximately 10 observations per indicator (Muthén & Muthén, 2002; Schumacker & Lomax, 2004). Thus, given that several indicators in the proposed structural model (see Figure 1) are

expected to have at least moderate relationships, I strove for approximately 200 dyads to allow for data cleaning and any possible problems with outliers or missing data.

The current study is focused on mentors and protégés in formal and informal mentoring relationships. Participants were recruited from personal business connections as well as a large Midwest-based insurance company. In total, 584 protégés responded to survey invitations and 328 protégés provided contact information for their mentors. This resulted in 214 mentor responses that could be paired with protégé responses for dyadic analysis. The majority of the participants for Study 4 were from a large Midwestern-based insurance company (*N* = 204). Others were invited to participate from personal networks in academia and business (*N* = 10).

Protégés were most frequently female (59%), white (68.8%), between the ages of 25-29 (21.6%), possessing a bachelor's degree (62.6%), and earning between $50,001 and $80,000 per year (39.4%). African-American protégés were second most common (14.4%), followed by Hispanic (7.7%) and Asian protégés (3.8%) being least common. Additionally, protégés were members of an organization for an average of 9.79 years (*SD* = 8.79) and in their positions for 3.17 years (*SD* = 3.62). Complete demographics for the protégé population can be found in tables 21 to 24.

Mentors were most frequently female (51.4%), white (68.8%), between the ages of 50-54 (22.6%), possessing a bachelor's degree (54.3%), and earning between $100,001 and $130,000 per year (29.8%). African-American mentors were second most common (19.7%), followed by Hispanic (4.3%), Asian (1.4%), and American Indian mentors (1.4%). Additionally, mentors were members of an organization for an average of 19.35 years (*SD* = 9.09) and in their positions for 6.12 years (*SD* = 8.19). On average, mentors had been mentoring for 10.14 years (*SD* = 7.19),

and were currently mentoring 3.51 protégés (*SD* = 3.82). Complete demographics for the mentor sample can be found in Tables 12 to 15.

Regarding how the mentor-protégé relationship was formed, both mentors and protégés indicated that protégés initiated the relationship (dyadic average = 39.9%), were brought together by an organizational program (dyadic average = 32.0%), or the relationship was mutually initiated (dyadic average = 22.9%), as opposed to mentors initiating the relationship (dyadic average = 3.9%). Additionally, the mentor was most often a supervisor outside of the protégé's chain-of-command (dyadic average = 55.6%) or a peer within the organization (dyadic average = 23.1%). Complete information about dyadic comparative demographics can be seen in Tables 20 and 21.

Both mentors (M = 1.93, SD = 4.66) and protégés (M = 1.10, SD = 2.85) were asked to report how many hours each week the dyad met for mentoring meetings. A paired-samples t-test presented evidence that the amount of mentoring reported by mentors and protégés is significantly different (t (164) = 2.35, p <.05), with mentor estimates being much higher. However, mentor and protégé ratings were significantly correlated (r = .35, p < .05). Mentors (M = 16.14, SD = 12.78) and protégés (M = 15.91, SD = 13.60) also reported the length of the mentoring relationship in months. A paired-samples t-test presented evidence that the length of the mentoring relationships reported by mentors and protégés were not significantly different (t (180) = .282, p = .778; r = .66, p < .05).

Procedures. The data collection methodology for the current study uses the "ad hoc" method common in dyadic LMX research (Sin et al., 2009). Protégés were presented with a definition of mentoring and were given the chance to fill out the survey after identifying that they were involved in a mentoring relationship. In LMX research, the alternate to this method was

thought to be problematic – when the leader was first contacted, rather than the protégé – because the leader might refer a member that he or she is most familiar with or knows will respond more favorably to the survey. This problematic situation may also exist in mentoring research because mentors may view a protégé's actions as reflecting upon them, particularly in the absence of organizational support (Parise & Forret, 2008). Specifically, mentors may consciously or unconsciously select a protégé with whom he or she is more familiar or regards more favorably. This methodology of contacting the protégé first also addresses the problem of ensuring that the mentor is psychologically connecting his or her responses with the targeted referent. Instead of a "generic" protégé, the mentor was told to focus on the protégé who was referred to in the invitation survey link.

While it is possible that a protégé may intuitively select a mentor with whom he or she has the best relationship, the ad hoc method helps to reduce this problem. The current study's protégé sample reported having fewer mentors (M = 2.05) than mentors reported having protégé relationships (M = 4.78) which is consistent with current mentoring research (Allen & Eby, 2004; Finkelstein, 2003; Allen & Poteet, 1999; Fagenson-Eland, 1997; Garskill, 1991). Thus, the chance that a protégé would select a mentor with whom he or she has a more positive relationship with would be less than a mentor selecting a protégé. An independent t-test was performed to check mean differences on negative mentoring scale scores between protégés in single mentoring relationships (i.e., only mentored by the referred mentor) and those of protégés with multiple mentors. This test was to determine if protégés had systematically selected mentors with whom they did not have a negative mentoring relationship. Assuming a normal distribution of negative relationships in the population, there should be no mean differences based upon single versus multiple mentors. Results of this analysis presented evidence that there was no

significant difference in the negative mentoring scores (as rated by protégés) from mentors of protégés with multiple mentors (N = 99, M = 4.45, SD = .52) or those with a single mentor (N = 97, M = 4.54, SD = .57) on Destructive Relational Patterns (t (194) =-1.23, p = .22). There was also no significant difference in the scores from mentors of protégés with multiple mentors (M = 4.63, SD = .46) or those with a single mentor (M = 4.71, SD = .45) on Interpersonal Problems (t (193) = -1.19, p = .24). Finally, there was no significant difference in the scores from mentors of protégés with multiple mentors (M = 4.59, SD = .53) or those with a single mentor (M = 4.65, SD = .61) on Protégé Performance Problems (t (191) = -.72, p = .47).

The initial contact email inviting the participant to be a part of the study presented the definition of a mentor, and asked him or her to confirm the presence of a mentor. The protégé then followed a link to an online survey to be filled out. Protégé participants completed the Negative Mentoring, *MFQ*, Protégé Learning, and Trust scales, as well as the demographics questionnaire. Participants were provided informed consent information before beginning the survey and information to debrief them about the intent of the study after all measures were completed. Upon completion of the survey, protégé participants generated an individual and anonymous identifying code (i.e., first letter of first name, last letter of last name, day of birth = DE27). The protégé participants also submitted the email address of the mentor so that the mentor could be contacted with the hyperlink for the mentor version of the survey. The mentor was then contacted to complete the mentor survey.

Upon beginning the survey, the mentor was presented with the definition of a mentor. The mentor was then given the chance to identify whether or not he or she was a mentor of the indicated individual. Participants who did not identify as a mentor were thanked for their participation and the survey was ended. Those who identified themselves as mentors completed

online versions of the Negative Mentoring, Trust, *MFQ*, Protégé Personal Learning, Perceived Support for Mentoring, Turnover Intention, and Job Stress scales, as well as the demographics questionnaire. Mentors were provided informed consent information before beginning the survey and given information to debrief them about the intent of the study after all measures had been completed. To encourage honesty and candor, both protégé and mentor participants were given information prior to survey completion that explained how confidentiality of the dyad is ensured, as well as how the mentor's and protégé's answers are not shared with one another or any organization.

Measures.

Mentoring definition. A critical consideration of the current study's methodology was the operational definition of a mentor. Following Haggard and colleagues' (2011) recommendations and building on Kram's (1985) definition, the definition of a mentor presented to participants was, as designed and used in the first three studies: "A mentor is a more experienced person who takes an interest in your professional (and sometimes personal) development through interaction and two-way communication. It is possible for a mentor to be a supervisor, but not necessarily required."

Negative Mentoring (Mentor Perspective). To measure the mentor perspective of negative mentoring, I used revised versions of the measure developed by Eby and colleagues (2008). This measure has three subscales that address *Protégé Performance Problems*, *Destructive Relational Patterns*, and *Interpersonal Problems* in the mentoring relationship. Each subscale was revised to remove items that addressed excessively sensitive topics (e.g., "my protégé gives me unwanted sexual attention," or "I wonder if my protégé has some dependency problems (e.g., alcohol, drugs, gambling)") or were redundant (e.g., "my protégé has misled me,"

and “my protégé has deceived me,” are remarkably similar to “my protégé sometimes distorts the truth,” which was retained). The *Protégé Performance Problems* scale is originally a 9-item scale (Haggard et al., 2011) – reduced to 6 items representing a mentor’s perception of the negative aspects of the relationship that stem from protégé self-destructive behaviors and performance problems. The *Destructive Relational Patterns* scale is originally a 15-item scale – reduced to7 items) representing a mentor’s perception of the negative aspects of the relationship that stem from destructive patterns in the protégé’s behavior regarding the mentor. The *Interpersonal Problems* scale is originally a 12-item measure – reduced to 7 items representing the perception of relational problems between the mentor and the protégé. The *Protégé Performance Problems* (α = 0.96), *Destructive Relationship Patterns* (α = 0.91), and *Interpersonal Problems* (α = 0.94) scales all exhibited acceptable psychometric properties. Additionally, these scales as an overall measure of negative mentoring exhibited acceptable psychometric properties (α = 0.96). These scales can be found in Appendix B.

Negative Mentoring (Protégé Perspective). To measure the protégé perspective of negative mentoring, I used revised versions of the measure developed by Eby and colleagues (2004). The measure has five subscales that address *Mismatch Within the Dyad, Distancing Behavior, Manipulative Behavior, Lack of Mentor Expertise*, and *General Dysfunctionality* in the mentoring relationship. As with the mentor measure of negative mentoring, each subscale was revised to remove items that addressed excessively sensitive topics (e.g., “my mentor has lied to me,” “my mentor has personal problems (e.g., drinking problem, marital problems)”) or were redundant (e.g., “my work strategies are different from my mentor’s,” is remarkably similar to “my mentor and I have different work habits,” which was retained). *The Mismatch Within the Dyad* scale is originally a 9-item measure (reduced to 4 items) representing a protégé’s

perception that there are fundamental differences between him or her and the mentor in the dyad such as personalities or work strategies. The *Distancing Behavior* scale is originally a 7-item measure (reduced to 5 items) representing protégé perception of mentor reluctance to interact with the protégé. The *Manipulative Behavior* scale is originally an 11-item scale (reduced to 7 items) representing a protégé's perception of the negative aspects of the relationship that stem from mentor being dishonest in order to take advantage of the protégé. The *Lack of Mentor Expertise* scale is originally a 7-item scale (reduced to 4 items) representing a protégé's perception that a mentor does not have the experience to be a good mentor, through behavior such as a failure to communicate or teach. The *General Dysfunctionality* scale is originally an 8-item scale (reduced to 4 items) representing a protégé's perception of general negativity in the mentor that enters into the mentoring relationship. All scales exhibited acceptable psychometric properties: *Mismatch Within the Dyad* (α = 0.78), *Distancing Behavior* (α = 0.82), *Manipulative Behavior* (α = 0.89), *Lack of Mentor Expertise* (α = 0.92), and *General Dysfunctionality* (α = 0.92). Additionally, these scales as an overall measure of negative mentoring exhibited acceptable psychometric properties (α = 0.93). Scale items can be found in Appendix C.

Job Stress Measure. To measure the job stress of mentors, I used the revised version of the original Job Tension measure (House & Rizzo, 1972). This revised version of the measure has performed more reliably and exhibited negligible method variance when compared with other measures of job stress (Harris & Bladen, 1994). Additionally, the measure was adapted for the current study by making the focus of the items the mentoring relationship rather than other general work items. This measure uses 5-items and represents an individual's perception of job stress. This scale has exhibited acceptable psychometric properties in previous research (Lim & Cortina, 2005; Lim, Cortina, & Magley, 2008; Stanton et al., 2001). However, the scale

exhibited low reliability in the current study (α = 0.59). This may be due to the fact that two of the five items are reverse-coded. These two items (Q2 and Q3) exhibited highly kurtotic behavior and when subjected to maximum likelihood factor analysis, these two items load to one distinct factor, with the remaining three items (Q1, Q4 and Q5) on another distinct factor.

Additionally, an adaptation of a focused item from the Stress Diagnostic Survey is being used to measure how much general stress is present from the mentoring relationship (Ivancevich & Matteson, 1980). This item uses a 5-point scale that asks the respondent to rate how frequently the target item – the mentoring relationship, in this case – is a source of stress. Finally, a meta-analytic review presented four types of strain outcomes explored in stress research: dissatisfaction, withdrawal intentions, neuroticism, and burnout (Viswesvaran, Sanchez, & Fisher, 1999). Of these outcomes, dissatisfaction and withdrawal intentions were not represented in the revised job tension measure. Thus, two items derived from these strain outcomes were added to assess the multiple elements of stress in mentoring relationships. When considered together (Q1, Q4, Q5, Stress Diagnostic Item, and two strain items), these items exhibited acceptable psychometric properties (α = 0.78). All of these measures can be seen in Appendix D.

Intent to Turnover. To assess mentors' mentoring-related intentions to turnover, I used a measure adapted from Luchak and Gellatly (2007). This 3-item scale represents an individual's thoughts of quitting, searching for a new job, and intentions to quit. A referent phrase, "because of your role as a mentor," was added to focus mentors' turnover intentions back upon the mentoring relationship instead of other potential factors that may affect turnover intentions. This scale exhibited acceptable psychometric properties (α = 0.94). This measure can be seen in Appendix E (Luchak & Gellatly, 2007; Luchak & Pohler, 2010).

Trust Measure. To measure trust of mentors in protégés and also protégés in mentors, I used the measure developed by Meyer and colleagues (1995). This 25-item scale has 4 subscales representing an individual's idiosyncratic propensity to trust other people as well as his or her trust in another person's ability, benevolence, and integrity. The items of the scale were altered slightly to change the referent from "my supervisor" to "my mentor" or from "my employee" to "my protégé" to match the focus of the current study. This scale has been validated in numerous previous studies, and has found support amongst trust researchers (Mayer & Davis, 1999; Schoorman et al., 2007; Serva et al., 2005). For the mentor trust scales used in all analyses, scale scores exhibited acceptable psychometric properties (α = 0.92). Likewise, for all protégé trust scales used in all analyses, these scales exhibited acceptable psychometric properties (α = 0.93). All subscales of this measure of trust can be found in Appendix F.

Mentoring Functions Measure. Perceived mentoring functions were collected for mentors and protégés using a revised version of the 15-item Mentor Functions Questionnaire (*MFQ*-15; Scandura & Ragins, 1993). This 15-item scale is composed of three dimensions (i.e., career support, psychosocial support, and role modeling). The referents in the scale have been altered to address both mentors and protégés to address the dyadic focus of the current study. The MFQ-15 has been validated in many studies and exhibited acceptable psychometric properties in the past (Raabe & Beehr, 2003; Welsh & Wanberg, 2009). For mentor reports of Mentoring Functions, this scale exhibited acceptable psychometric qualities (α = 0.83). Likewise, for protégé reports of Mentoring Functions, this scale exhibited acceptable psychometric qualities (α = 0.91). This measure can be found in Appendix G.

Perceived Organizational Support for Mentoring Measure. To measure mentors' perception of support for mentoring, I used the measure developed by Eby and colleagues

(2006). This 6-item scale represents an individual's perception of how supportive organizations are of mentors and mentoring programs. The items of the scale were altered slightly to change the object in the scale from "university" to "organization," and one item was altered from "upper administration" to "top management" to match the current study's focus on businesses. This measure has exhibited acceptable psychometric properties in previous studies (Parise & Forret, 2008). Additionally, a confirmatory factor analysis presented evidence of perceived support for mentoring as a distinct construct from perceived accountability for mentors (Eby et al., 2006). The scale exhibited acceptable psychometric properties (α = 0.82).The measure can be found in Appendix H.

Personal Learning Measure. To measure protégé learning, I used a revised version of the measure developed by Lankau and Scandura (2002) as a 12-item scale comprised of two 6-item subscales of Relational Job Learning and Personal Skill Development. After removing redundant items from the scale, I used a 7-item scale representing two dimensions**.** For example, "I have a better understanding of organizational politics" was retained as a global item representing other items that addressed more granular topics of organizational politics (e.g., "I have learned about others' perceptions of me or my job," "I have increased my understanding of issues and problems outside my job,"). This measure exhibited acceptable psychometric properties for both mentor reports of protégé learning (α = 0.80), as well as protégé reports of their own learning (α = 0.86), and the items can be found in Appendix I (Pan, Sun, & Chow, 2011).

Demographics and Controls. Information about participants, relationship, and program characteristics were also collected from participants. A copy of all demographics and control items can be found in Appendix J and K.

Results

Basic Scale Characteristics. Prior to data analysis, all data were examined for univariate and multivariate normality. With the exception of the job stress measure (α = .59), the majority of variables exhibited acceptable psychometric properties (i.e., internal consistency greater than .70; Nunally, 1978). The two reverse-coded items noted above ("I have felt fidgety or nervous as a result of my relationship with my protégé," and "If I had a different protégé, my health would probably improve") exhibited highly kurtotic behavior and loaded to a different factor than the other stress measure items when subjected to a maximum likelihood factor analysis. Thus, after excluding these two items, the stress measure exhibited acceptable levels of internal consistency reliability (α = .78). Descriptive statistics and intercorrelations for all study variables can be seen in Tables 26 and 27.

All variables were also checked for univariate and multivariate outliers. Variables exhibited very few univariate outliers; outliers were less than 1.5% for any single variable and less than 1% for the entire data matrix. Additionally, only four cases were found to exhibit any deviations of multivariate normality. These four cases were examined individually and they appeared to be caused by high intent to turnover. Given the small number of cases and the low average intent to turnover (M = 1.13, SD = 0.65), each case appeared to represent viable participant responses. Further, due to the non-significant leverage effects of such cases and the robustness of estimators available in structural equation modeling (*SEM;* Schumacker & Lomax, 2004), all cases were retained.

Careless/Unmotivated Response Analysis. Recent research has helped to refine methods used to identify insufficient effort or careless responding by participants (Maniaci & Rogge, 2014; Huang, Curran, Keeney, Popski, & DeShon, 2012; Meade & Craig, 2012; Burns &

Christiansen, 2011). Responses provided by participants who are unmotivated can threaten the quality of data and, ultimately, any subsequent analyses. This line of research has identified several methods that may distinguish data from motivated, careful respondents from those who are unmotivated or providing careless responses. Specifically, three methods—LongString, individual reliability, and Psychometric Antonyms—can been used to search for this pattern of responding (Huang et al, 2012).

In general, these methods look for response patterns from participants that may indicate possible careless responding. Long string analysis identifies suspicious data by identifying a series of responses where the respondent is providing a string of the same responses from the participant (Costa & McCrae, 2008). The examination of individual reliability involves splitting an individual's data into two halves and performing a split-half reliability analysis (Jackson, 1976). The assumption of an individual reliability analysis is that items on the same scale should correlate with one another. Thus, if an individual split-half reliability analysis reveals a lack of this expected correlation, it may indicate a lack of motivation. Finally, a psychometric antonym analysis is based upon a similar assumption. Whereas, the idea of individual reliability is based on expected relatedness of scale items, psychometric antonym analysis is expects that diametrically opposed constructs would be negatively correlated (Johnson, 2005). Instead of using rational judgment about these constructs, this is an empirically-based analysis. For this analysis, the dataset is used to identify items that should correlate most negatively with one another, and then individual responses are analyzed for expected patterns of negative correlations. If these expected negative relationships are not present, then it may indicate a lack of motivation or careless responding. Because each of these methods may indicate careless responding, research has indicated that best practice is not to use any single method, but to use

multiple methods to identify patterns that may represent careless or unmotivated responding (Meade & Craig, 2012).

Thus, the current study's data were examined for potential patterns of careless or unmotivated responding. For this, each of the methods described were used to examine the current dataset and were considered individually and in aggregate. Protégé and mentor responses were analyzed using LongString methods. In general, a LongString pattern of eight responses in a row can be indicative of careless responding (Huang et al, 2012). Protégé responses indicated that approximately 78% of protégé responses may be indicative of careless or unmotivated responding, with the largest group of responders (N = 41) providing 20 consecutive responses (see Table 28 and Figure 9). Mentor responses indicated that approximately 95% of mentor responses may be indicative of careless or unmotivated responding, with the largest group of responders (N = 64) providing 20 consecutive responses (see Table 29 and Figure 10).

Additionally, the data were examined using Individual Reliability analysis (Jackson, 1976). Research has determined that the split-half reliability estimates under r = .30 may indicate a lack of motivation or care in responding (Huang et al, 2012). Protégé responses indicated that 9 cases, using this method may have indicated unmotivated or careless responding. However, mentor responses analyzed using this method indicated 132 responses that may indicate careless or unmotivated responding.

Finally, data were analyzed using psychometric antonym analysis. Previous research has determined that relationships between responses between psychometrically dissimilar items should exhibit differences of at least r = -.03 (Huang et al, 2012). Patterns of responses that are either positively correlated or do not reach this threshold may indicate careless or unmotivated responding. Analysis of protégé responses indicated that 28 participant responses may indicated

careless or unmotivated responding. Likewise, analysis of mentor responses indicated 126 participant responses indicated potential careless or unmotivated responding.

Examination of the aggregate findings from these analyses indicate that 16 protégé respondents were flagged with no indicators of careless or unmotivated responding, 167 protégé respondents were flagged with one indicator, 24 were flagged with 2 indicators, and 1 was flagged with all three indicators (see Table 30 and Figure 11). Likewise, examination of mentor responses indicated 1 respondent that was flagged with no indicators of careless or unmotivated responding, 47 were flagged with 1 indicators, 92 were flagged with 2 indicators, and 68 participants were flagged with 3 indicators (see Table 31 and Figure 12). Thus, results of the current study should be evaluated with these findings in consideration[1].

Data Analysis. All hypotheses represented in Figure 1 were tested using *SEM* in MPlus 7.2. There are five steps to test a model using *SEM*: Model Specification, Model Identification, Model Estimation, Model Testing, and Model Modification (Schumacker & Lomax, 2004). Each of these steps was addressed to test the hypotheses noted previously.

Model specification is the first step and involves defining the measurement model (see Figure 2) and the structural model (see Figure 3) by specifying the specific measurement choices as well as the relationship paths between the observed variables in the model, and the design of the structural equations to be analyzed (Milsap, 2002). The method for moderation testing in an

[1] Data analyses on the final models were run on a dataset without the participants who had three total inattention flags (N = 140). The parceled model with the PSOM moderator presented slightly less desirable global indices of fit (χ^2 (910) = 2040.99, χ^2/df (910) = 2.24, *CFI* = 0.74, *RMSEA* = 0.09, *SRMR* = 0.09). Additionally, the parceled model with the PSOM moderator removed for parsimony presented a similar pattern of less desirable global fit indices (χ^2 (473) = 913.46, χ^2/df (473) = 1.93, *CFI* = 0.87, *RMSEA* = 0.08, *SRMR* = 0.08). Specifically, in this model the path between protégé reports of negative mentoring to protégé reports of mentoring functions received and protégé reports of mentoring functions received to mentor reports of protégé learning, which were significant with all participants were non-significant in these models. All path estimates were reduced in these models. These paths becoming non-significant are not surprising, because they were the weakest paths in the models with all participants. It should also be noted that the number of participants retained in these models (N =140) may not be sufficient for SEM analysis with this number of variables. So, these results should be interpreted cautiously.

SEM structural model involves the calculation of an interaction term from the variable of interest and the moderator variables (Little, Card, Bovaird, Preacher, & Crandall, 2007). As can be seen in Figure 3, as well as structural equations 5 and 6 below, the moderation is represented by the interaction term "X" which joins two variables (e.g., MFQ_X_POSM.) Ideally, an interaction term should be orthogonal to its first-order effect terms for any multiple regression or path analytic technique (Little, Boviard, & Widaman, 2006).

Mean-centering – the often used technique historically – does not completely achieve ideal orthogonality of interaction terms (Lance, 1988). An alternate method of calculating interaction terms in *SEM* is through the use of residual centering (Little et al, 2007). This process is a two-stage method of calculating the interaction term, wherein the product-term is regressed on its first order effects, and then the residuals are used to represent the interaction effect. In this way, the new orthoganalized interaction term represents the unique variance of the interaction, which is independent of the first-order effect variance (Little, Bovaird, & Widaman, 2006). Thus, for testing of hypothesized moderated mediation, a residually-centered orthogonal interaction term was calculated, and the moderation effects predicted in hypotheses 4a and 4b were analyzed in this manner by rendering the moderated mediation, holistically as a complete model (Preacher, Rucker, & Hayes, 2007). The following structural equations were used to render and test the structural model shown in Figure 3:

(1) MentMFQ = MentNegMent + ProtTrust + ζ_1

(2) ProtMFQ = ProtNegMent + MentTrust + ζ_2

(3) ProtLearningM = ProtNegMent + MentNegMent + MentTrust + Prot Trust + ProtMFQ + MentMFQ + ζ_3

(4) ProtLearningP = ProtNegMent + MentNegMent + MentTrust + Prot Trust + ProtMFQ MentMFQ + ζ_4

(5) MentStress = MentNegMent + ProtTrust + ProtNegMent + MentTrust + ProtMFQ + MentMFQ + POSM + MFQ_X_POSM + ζ_5

(6) MentTO = MentNegMent + ProtTrust + MentMFQ + POSM + MFQ_X_POSM + ζ_6

The second step, model identification, seeks to answer the question, "can a unique solution be found given the data and model estimated?" by providing enough information for the parameters in the model to be identified. Model identification is assessed by comparing the number of free parameters and the number of distinct values in the identification (i.e., covariance) matrix. A model is considered to be overidentified when there are more distinct values in the covariance matrix than there are free parameters in the structural model. Underindentified models have fewer distinct values in the covariance matrix than free parameters, and a just-identified model has equal numbers of distinct values and free parameters. Because those conditions lead to zero or negative degrees of freedom, underidentified and just-identified models yield parameter estimates that cannot be trusted, if the models will converge at all. Essentially, an overidentified model is one that can have multiple estimates for a parameter because of the abundance of information in the covariance matrix used for analysis (Schumacker & Lomax, 2004).

A count of the free parameters in the structural model (see Figure 3) for the current study reveals 30 free parameters (16 path coefficients, 6 equation disturbance variables, 4 correlations among the predictor variables, and 4 predictor variables). The number of distinct variables in the identification matrix is calculated, using the following equation:

(1) $[\, p\,(\, p + 1\,)\,] / 2$, where p = the number of observed variables in the matrix

According to the structural model, there are 11 observed variables; therefore, the covariance matrix will have 66 distinct values. Therefore, the model for the current study is overidentified and the parameter estimates that are developed should be trustworthy.

The third step in *SEM* analysis is model estimation. During model estimation, the structural model and structural equations were used to estimate path coefficients using MPlus 7.2. Specifically, Maximum Likelihood (estimation) was used because of its robustness to violations of normality, generation of accepted indices of model fit, and accuracy in generation of parameter estimates. Large, complex models involving many indicators per latent variable – such as is the case in the current study – can be particularly challenging to estimate (Little et al, 2013). For example, a 5-factor personality model with two time-points and nine items per construct, creates a model with 3,825 degrees of freedom and approximately 270 parameter estimates and is nearly impossible to estimate. Little and colleagues (2002) present a solution in the form of parceling.

Parceling is a "measurement practice that is used most commonly in multivariate approaches to psychometrics, particularly for use with latent-variable analysis techniques (e.g., SEM)… [and] can be defined as an aggregate-level indicator comprised of the sum (or average) of two or more items, responses, or behaviors." (Little et al, 2002, p. 152). By creating three, 3-item parcels and using appropriate parceling procedures, the model becomes less complex to estimate path coefficients while retaining the same construct relations. Parceling allows the researcher to examine the relationship of the latent constructs with one another rather than the items with their associated constructs. Thus, as long as the underlying relationships are maintained by carefully-constructed parcels, the associated construct relationships are equivalent to using item-level measurement (Little, Rhemtulla, Gibson, & Schoemann, 2013).

Little and colleagues present a graphic example of parceling theory that explains how the correct use of parcels creates a less complex model from a calculative standpoint, without diminishing the ability of a model to be accurately estimated from the data (2013; see Figures 14a-14c). Figure 14a represents a universe of items and their respective relationships surrounding a theoretical construct centroid (i.e., the large dot in the middle). Figure 14b shows how items have been selected around the construct centroid, and parcels have been created that represent the most related items. These items that share the most common sources of variance (i.e., I1-I6) are used to create the parcels in theoretical space (i.e., P1-P3). Each parcel maintains the covariance of the individual items by being located at the geometric center of the parceled items. Finally, Figure 14C shows that when the parcels are used to triangulate on the theoretical construct centroid, the accuracy is enough to nearly locate the true centroid.

Given that Little and colleague's (2013) example model of computational complexity involved 3825 degrees of freedom and the current study's model uses over double that number (*df* = 7801), the current study will use parceling strategy (Little et al., 2002). Since the level of interest for the current study is that of second-order constructs and unidimensional constructs, correlational parceling was used to create parcels for analysis (Landis et al., 2000; Rogers & Schmitt, 2004). Similarly, other mentoring researchers have utilized correlational parceling for analysis (Eby et al., 2004; Eby et al., 2008). Specifically, data parcels were created for scales representing mentoring functions (mentor and protégé), negative mentoring (mentor and protégé), trust (mentor and protégé), protégé personal learning (mentor and protégé), and perceived organizational support (see Table 32 for parcel factor loadings).

The fourth step is model testing. The full structural model displayed in Figure 1 was tested using *SEM* path analysis. Global fit indices such as RMSEA, CFI, χ^2, and χ^2/df were

examined for model fit to data, as indicated by guidelines developed by Hu and Bentler (1999). However, before testing the full structural model displayed in Figure 1, the measurement model defined in Figure 2 was tested with Confirmatory Factor Analysis (*CFA*) to determine the construct validity of the measures. This is done to ensure that any rejections of a proposed theoretical model are not due to inherent problems in measurement (Schumacker & Lomax, 2004). The initial measurement model – estimated with Maximum Likelihood (ML) estimation – was a reasonable fit for the data, as evidenced by the high degrees of freedom in the model (χ^2 (7801) = 19414.91, χ^2/df (7801) = 2.49, *CFI* = 0.58, *RMSEA* = 0.08, *SRMR* = 0.07; see Figure 15). The fit statistic CFI was undesirably low; however, it is highly sensitive to models with many parameters, as is the case in the current study (Kenny & McCoach, 2003). Specifically, Kenny and McCoach performed Monte Carlo studies that presented a pattern wherein CFI and TLI would decrease substantially as model complexity increased, but other indices of global model fit would remain in acceptable parameters. It is for this reason that they urged future researchers to, "simultaneously examine the RMSEA and the CFI or TLI in models with a large number of variables. If the TLI and CFI seem slightly lower than hoped, but the RMSEA seems a bit better, then there may be no cause for concern" (p. 349). I ran a similar analysis of my model to confirm this phenomenon that Kenny and McCoach discussed. Specifically, I ran individual CFAs of each measure, then ran subsequently more complex models, terminating with the full measurement model, each time recording the average CFI of the models. These models showed a similar pattern of CFI reduction to what Kenny and McCoach describe (see Figure 13). Thus, considering the other fit indices (i.e., χ^2/df, *RMSEA*, and *SRMR*), the fit of the measurement model can be considered to be reasonable fit to the data.

After parcel assignment and construction and creation of the residually centered moderators, the full structural model was tested using Maximum Likelihood to estimate the path coefficients between latent variables in the model. Fit indices showed moderate model fit to the data (χ^2 (910) = 2159.90, χ^2/df (910) = 2.37, *CFI* = 0.84, *RMSEA* = 0.08, *SRMR* = 0.07; see Figure 16). While some fit indices presented acceptable model fit (i.e., χ^2/df, *RMSEA*), others were outside of acceptable bounds (i.e., *CFI*, *SRMR*; Bentler & Hu, 1999).

Therefore, the fifth step, model modification was considered. Examining the model, two paths (i.e., from mentor perceptions of mentoring functions to stress, and from mentor-reported mentoring functions to mentor turnover intent) were not significant; therefore, there was no relationship for perceived organizational support of mentoring (POSM) to moderate. Thus, the moderator (POSM) was removed and the model was tested again with Maximum Likelihood estimation. This final model presented evidence of good fit to the data (χ^2 (473) = 875.935, χ^2/df (473) = 1.851, *CFI* = 0.93, *RMSEA* = 0.06, *SRMR* = 0.06). Thus, this model (see Figure 17 and 18) was the most parsimonious, statistically well-fitting, theoretically meaningful model. Prior to discussing an additional model modifications, this model was used to address each of the hypothesized relationships.

Hypothesis Testing.

Throughout the discussion of hypothesis testing in the current study causal language may be used to discuss the exhibited relationships, however it is critical to note that these findings are based upon cross-sectional data, and do not suggest causality.

Hypothesis 1a stated that negative mentoring relationships would be negatively related to mentoring functions provided, as rated by mentors. The path between negative mentoring (as reported by mentors) and mentoring functions provided was examined to study if mentors who

experience negative mentoring relationships report providing less mentoring support. This relationship was not statistically significant (β = 0.02, *SE* = 0.08, $p > .05$). Thus, hypothesis 1a was not supported[2].

Hypothesis 1b stated negative mentoring relationships would be negatively related to negative mentoring functions received, as rated by protégés. The path between negative mentoring (as reported by protégés) and mentoring functions received was examined to see if protégés who experience negative mentoring report receiving less mentoring support. This relationship was significant and in the hypothesized direction (β = -0.17, *SE* = 0.09, $p < .05$). Thus, hypothesis 1b was supported.

Hypothesis 2a stated that protégé trustworthiness as rated by mentors would be positively related to mentoring functions provided. The path between protégé trustworthiness and reports of mentoring functions provided by mentors was examined to see if mentors who trusted their protégés were more likely to provide mentoring support. This relationship was significant and in the hypothesized direction (β = 0.64, *SE* = 0.07, $p < .05$). Thus, hypothesis 2a was supported.

Hypothesis 2b stated that mentor's trustworthiness would be positively related to mentoring functions received, as rated by protégés. The path between mentor trustworthiness and reports of mentoring functions received by protégés was examined to see if protégés who trusted their mentors were more likely to report receiving mentoring support. This relationship was significant and in the hypothesized direction (β = 0.56, *SE* = 0.09, $p < .05$). Thus, hypothesis 2b was supported.

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[2] Post-hoc regression analyses were conducted to explore potential curvilinear relationships between mentor-reported negative mentoring and mentoring functions. For these analyses, negative mentoring was regressed on mentoring functions using linear regression to test for linear, quadratic, and cubic relationships. Analysis of the relationship between mentor-reported mentoring functions and mentor job stress indicated a significant linear relationship, β = -.38, $t(204)$ = -4.46, p < .05. Likewise, a significant quadratic relationship also was indicated, β = -1.49, $t(203)$ = -2.20, p < .05. However, a significant cubic relationship was not indicated, β = 1.70, $t(202)$ = -1.86, p < .50 (see Figure 21).

Hypothesis 3a stated that mentoring functions provided would be negatively related to job stress, as rated by mentors. The path between mentoring functions provided by mentors and reported stress was examined to see if mentors who report providing more mentoring support are less likely to report stress associated with mentoring. This relationship was in the hypothesized direction, but was non-significant (β = -0.12, *SE* = 0.12, $p > .05$). Thus, hypothesis 3a was not supported.

Hypothesis 3b stated that mentoring functions provided would be negatively related to mentor turnover intentions, as rated by mentors. The path between mentoring functions provided and mentor turnover intentions was examined to see if mentors who provided mentoring functions were less likely to report intentions of leaving their organizations. This relationship was not statistically significant (β = -0.00, *SE* = 0.08, $p > .05$). Thus, hypothesis 3b was not supported[3].

Hypothesis 4a stated that mentors' perceptions of organizational support for mentoring would moderate the relationship between mentoring functions provided and reported job stress by mentors. A requirement of moderation is that there must be a significant path between a predictor and criterion variable for moderation to exist. Since the proposed path between provided mentoring functions and mentor stress was not significant, the proposed moderation cannot be supported. Thus, hypothesis 4a was not supported.

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[3] Post-hoc regression analyses were conducted to explore potential curvilinear relationships between mentor-reported mentoring functions and mentor job stress as well as mentor turnover intentions. For these analyses, mentoring functions was regressed on job stress and turnover intentions using linear regression to test for linear, quadratic, and cubic relationships. Analysis of the relationship between mentor-reported mentoring functions and mentor job stress did not indicate a significant linear relationship, β = -.05, $t(204)$ = -.69, p = .49. Likewise, a significant quadratic relationship was not indicated, β = .26, $t(203)$ = .57, p = .57, and a significant cubic relationship was also not indicated, β = -1.44, $t(202)$ = -.68, p = .50. Analysis of the relationship between mentor-reported mentoring functions and mentor turnover intentions did not indicate a significant linear relationship, β =.08, $t(204)$ = 1.07, p = .29. Likewise, a significant quadratic relationship was not indicated, β = -.14, $t(203)$ = -3.03, p = .76. However, a significant cubic relationship between mentoring functions and job stress was indicated, β = 5.16, $t(202)$ = 2.37, p < .05 (see Figure 22).

Hypothesis 4b stated that mentors' perceptions of organizational support for mentoring would moderate the relationship between mentoring functions provided and reported turnover intentions by mentors. As stated above, a requirement of moderation is that there must be a significant path between a predictor and criterion variable for moderation to exist. Since this path does not exist, hypothesis 4b was not supported.

Hypothesis 5a stated that mentoring functions, as rated by protégés, would be negatively related to mentor stress. The path between received mentoring support and reported mentor stress was examined to see if protégés who reported receiving more mentoring support also had mentors who report lower stress. This relationship was not statistically significant (β = -0.04, *SE* = 0.11, $p > .05$). Thus, hypothesis 5a was not supported.

Hypothesis 5b stated that mentoring functions received, as rated by protégés would be positively related to protégé personal learning as rated by mentors. The path between mentoring support received by protégés and mentor reports of protégé learning was examined to see if protégés who receive more mentoring functions have mentors who report their protégés having higher personal learning. This relationship was in the hypothesized direction, but was non-significant (β = 0.10, *SE* = 0.07, $p > .05$). Thus, hypothesis 5b was not supported.

Hypothesis 5c stated that mentoring functions received would be positively related to protégé reports of personal learning. The path between mentoring support received by protégés and protégé personal learning was examined to see if protégés who reported receiving mentoring support also reported higher amounts of personal learning. This relationship was significant in the hypothesized direction (β = 0.67, *SE* = 0.05, $p < .05$). Thus, hypothesis 5c was supported.

Hypothesis 5d stated that mentoring functions provided, as rated by mentors, would be positively related to protégés personal learning, as rated by protégés. The path between

mentoring support provided by mentors and protégés reports of personal learning was examined to see if mentors who provided more mentoring support had protégés who reported feeling more personal learning. The relationship was not statistically significant (β = -0.05, *SE* = 0.07, $p >$ .05). Thus, hypothesis 5d was not supported.

Hypothesis 5e stated that mentoring functions provided, as rated by mentors, would be positively related to protégé's personal learning, as rated by mentors. The path between mentors' reports of providing mentoring support and their reports of protégé learning was examined to see if mentors who provided more mentoring support also reported having protégés who also showed more evidence of learning about the organization. The relationship was positive and in the hypothesized direction and significant (β = 0.65, *SE* = 0.05, $p < .05$). Thus, hypothesis 5e was supported.

Hypothesis 5f stated that protégés personal learning, as rated by mentors, would be negatively related to mentors' job stress. The path between mentor reports of protégé learning was examined to see if mentors who reported their protégés learning more experienced less stress. The relationship was in the opposite direction of the hypothesis, but was non-significant (β = 0.17, *SE* = 0.11, $p > .05$). Thus, hypothesis 5f was not supported.

Hypothesis 5g stated that protégés' personal learning, as rated by protégés, would be negatively related to mentors' job stress. The path between protégé reports of protégé learning was examined to see if protégés who reported learning more would also have mentors who experience less stress. The relationship was in the hypothesized direction and significant (β = -0.27, *SE* = 0.11, $p < .05$). Thus, hypothesis 5g was supported.

Hypothesis 6 stated that mentor and protégé reports of mentoring functions would exhibit moderate agreement ($r > .30$;Kenny, Kashy, & Cook, 2006). Agreement is a dyadic index which

gives an assessment of the correspondence between two sets of measures, and in this case the correspondence is similarity of ratings between mentors and protégés. Similarity can be examined at the construct level, or at the level of the individual items. Kenny and colleagues suggest utilizing the most parsimonious dyadic index possible, unless other hypotheses require a more complex unit of analysis. That is, if the level of agreement that is desired is at a construct level (e.g., mentoring functions received) then an average correlation coefficient is the most parsimonious unit of analysis. Further, when the dyad members are easily distinguishable, as they are in a mentoring relationship due to the seniority differential, construct level agreement is satisfactory. In contrast, an indistinguishable dyadic relationship would be where differentiating qualities between the individual members of the dyad are lacking, such as two co-workers. Using these guidelines for analysis, I examined agreement of mentoring functions at the construct level using the dyadic index of an average correlation coefficient. A significant uncorrected correlation exists between mentor ratings of mentoring functions and protégé ratings of mentoring functions ($r = .35$, $p < .05$).

Another issue surrounding the examination of agreement involves the possibility of correlation attenuation due to measurement error (Nunnally & Bernstein, 1994). A correction to this attenuation is calculated for by dividing the correlation by the product of the square root of the reliabilities. In the current study, this correction yields a significant correlation between mentor and protégé ratings of mentoring functions ($r = .38$, $p < .05$). With correlations in this range, the dyadic index of similarity of mentoring functions indicates at least moderate agreement between mentors and protégés. Thus, hypothesis 6 is supported.

Alternate Measure of Mentor Stress (*SMQ*).

A new measure of mentor stress—the *Stress in Mentoring Questionnaire* (*SMQ)*—was developed in Study 3. Examination of the correlations amongst the factors supports a multidimensional construct. Due to some negative correlations among the dimensions of the SMQ, it is not possible to combine the five dimensions and use SMQ as a higher order scale to address mentor stress in the current model. However, the first three dimensions of the measure (Stressful Protégé Behaviors, Poor Dyadic Fit, and Mentor's Personal Issues) seem to represent the "relationship-based" elements of the construct, whereas Organizational Support dimension represents the "organizational-based" element of mentoring stress. Thus these four dimensions are sufficiently related to warrant the running of an alternate SEM model to explore the influence of this construct as a measurement of mentoring stress for future researchers.

This model, wherein the mentor stress variable was replaced with the *SMQ* variable presented moderately good fit to the data (χ^2 (1459) = 3137.95, χ^2/df (1459) = 2.15, *CFI* = 0.82, *RMSEA* = 0.07, *SRMR* = 0.09). This model also presented similar path estimates, with one exception (see Figure 20). A positive path coefficient between mentoring functions provided as reported by mentors and mentoring stress (β = 0.31, *SE* = 0.12, $p < .05$). All other paths to mentoring stress were similar to paths related to job stress as measured in the current study's main model used for hypothesis testing (see Figure 20).

CHAPTER 5 – DISCUSSION

The current research extends mentoring literature by providing insight into how characteristics of mentoring relationships affect mentor stress and turnover intentions. The results of Studies 1, 2, and 3 provided insight into the mentoring stressors construct and suggested a new measure of mentor stress. Specifically, this study provided an answer to the question of, "what causes mentors to feel stress?" The results of Study 4 explored the complex relationships involved in mentoring from both mentor and protégé perspectives and the moderating mechanisms of perceived organizational support on mentor turnover intentions and mentor stress.

Discussion of *SMQ* Development

The purpose of this research was an expansion of negative mentoring theory into the realm of stressors for mentors. This research was conducted through the following series of studies: the illumination of the construct of mentoring stress and development of potential items to measure this construct (Study 1), the exploration of the underlying factor structure of this construct (Study 2), and the refinement of the measurement instrument (Study 3). This series of research indicated that mentors' negative experiences in their relationships are represented by a multidimensional construct. Results of an *EFA* conducted on data collected from mentors provided evidence that this multidimensional construct includes five components of mentor experiences that cause stress: Stressful Protégé Behaviors, Poor Dyadic Fit, Mentor's Personal Issues, Structural Constraints, and Organizational Support.

The results of the *CFA*, supported by conceptual differences among the five types of mentoring stressors, indicated that these five scales should be used separately in subsequent research and practice rather than combined into one overall measure of mentoring stress. Future

researchers interested in exploring the construct of mentoring stress may wish to explore this as a singular construct. Specifically, future researchers may wish to explore the first three dimensions (Stressful Protégé Behaviors, Poor Dyadic Fit, and Mentor's Personal Issues) as a measure of person-related mentoring stress, and the remaining two dimensions (Structural Constraints and Organizational Support) as organizationally-related mentoring stress. However, use of these scales to measure a single overarching factor should be done with careful consideration to the implications of distilling these elements into a single factor. Specifically, compression of these scales into a single measure may mask important facets of the overarching construct (Ashton, 1998; Chapman, 2007; Dudley, Orvis, Lebieki, & Cortina, 2006).

Discussion of Hypothesis Testing

Negative Mentoring Relationships → Mentoring Functions

Hypothesis 1a extended the research of Eby, Durley, Evans, and Ragins (2008) on the relationship between negative mentoring and mentoring functions provided. While Eby and colleagues found negative relationships between mentor reports of negative mentoring and protégé reports of mentor functions received, they did not explore mentor-reported provision of mentor functions. Contrary to expectations, the current study found that reports of negative mentoring experiences by mentors were not significantly related to mentor-reported provision of mentor functions. The current study found a non-significant relationship between negative mentoring and mentor reported provision of mentor functions ($\beta = .02$, $p > .05$). However, while the path estimate is non-significant, the correlation between these two variables is negative and significant ($r = -.31$, $p < .05$, see Table 24). A possible explanation for these findings lies in the fact that SEM models all relationships in a single simultaneous equation, whereas bivariate correlations only consider the single relationship between two variables (Kline, 1998;

Schumacker & Lomax, 2004; LeBreton, Wu, & Bing, 2009). Additionally, mentors reported a fairly low incidence of negative mentoring with relatively low variance; therefore, the non-significant finding may be due to range restriction in negative mentoring (*M* = 4.61, *SD* = .46).

Statistical limitations aside, the discrepancy between expectations and the study findings could be due to the general dedication of mentors to protégés' well-being. Mentors are dedicated to improving the careers and work lives of their protégés; this dedication may mitigate the challenges of negative relationships. However, similar to recent findings in LMX relationship research there may be a tipping point where a mentor will begin to tire and cease providing mentoring functions. Specifically, Harris and Kacmar (2006) found that the increased expectations, obligations, and roles required for leaders in high- and low-quality LMX relationships resulted in more stress, whereas leaders in moderate-quality LMX relationships had lower stress, resulting in a U-shaped relationship.

The current study did not hypothesize this potential curvilinear relationship; however, post-hoc curve estimation analysis did provide evidence of a U-shaped relationship. Specifically, mentoring relationships with moderate levels of negative mentoring indicate higher levels of mentoring functions. Conversely, in mentoring relationships marked by low or high levels of negative mentoring, mentoring functions are lower. This seems to indicate that mentors are more likely to engage in more mentoring with protégés who are struggling with mentoring-related challenges, but begin to disengage when negative mentoring reaches levels that may indicate a relationship that the mentor believes is beyond repair. Burk and Eby (2010) explored why protégés stay in bad mentoring relationships in depth and urged future research into why mentors might stay in bad relationships. Similarly, mentors may also have reasons for staying in bad relationships, which may provide variables of interest to future researchers (e.g. high affective

commitment to the organization, high propensity to trust in the mentor, existence of a positive relationship with a mentor). The current study provides—through these post-hoc findings—an extension of that research by providing new detail on this topic. Understanding that there may be a point "when enough is enough," in the mind of a mentor would have great implications for theory as well as practice.

Hypothesis 1b stated negative mentoring relationships would be negatively related to negative mentoring functions received, as rated by protégés. The finding of a significant, negative path estimate (β = -.17, p < .05) supported this hypothesis. Thus, when protégés recognize the elements of a negative mentoring relationship, they may also be more likely to report fewer mentoring functions received. An examination of the bivariate correlation also indicated a significant, negative relationship (r =-0.55, p < .05; see Table 24). These findings are a replication of work by Eby, Butts, Lockwood, and Simon (2004) on the development of a measure of protégé-reported negative mentoring. Specifically, Eby and colleagues theorized that for the exhibition of career-related and psychosocial mentoring, a mentor must have quality interaction time with his or her protégé, skills and expertise to pass on, and an interest in doing so. Since these elements of a functioning mentoring relationship are counterintuitive to negative mentoring, their findings of negative relationships between all dimensions of negative mentoring and career-related support and psychosocial support are evidence supporting these theories. In sum, Hypotheses 1a and 1b provide evidence that in the bounds of a negative mentoring relationship, a mentor may recognize the presence of a negative relationship, yet still feel that he or she is providing sufficient mentoring functions. In contrast, a protégé in a negative mentoring relationship may feel that the mentoring functions he or she is receiving are reduced.

Trustworthiness → Mentoring Functions

The current study answered calls for specific research to explore how trust influences the mentor-protégé relationship (Eby, 2009; Scandura & Pellegrini, 2007). Recent meta-analytic research found positive relationships between trust and mentoring support (M_{wr} = .59, p < .05, 95% CI [.42, .76], Ghosh, 2014). Findings in the current study mirror these recent meta-analytic results and provide additional insight through research on both sides of the mentoring pair instead of singularly the mentor or protégé. Both mentor and protégé have much to gain in a functioning relationship. Likewise, there is much to be lost by each party in a negative mentoring relationship. Thus, trust—the willingness to be vulnerable to another party—is integral to the positive experiences and outcomes from a mentoring relationship. The current study presented evidence of this, in that as a mentor perceives a protégé to be more trustworthy, he or she reports providing more mentoring support functions (β = .64, p < .05). Additionally, as a protégé perceives a mentor as being more trustworthy, he or she is more likely to report receiving more mentoring functions (β = .56, p < .05). Thus, in support of both hypothesis 2a and 2b, trust is an integral part of an effective mentor-protégé relationship.

A main characteristic of trust is a "willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor (Mayer et al., 1995, p. 712)." However, of particular interest to trust researchers is the issue of reciprocal trust (Schoorman et al., 2007). For example, a mentor and a protégé are both a trustor and a trustee. Recent research has found that reciprocal trust is integral to leader-subordinate relationships (Park & Kim, 2012). Thus, the results of this model have presented supporting evidence that reciprocal trust between the protégé and mentor is related to provision and receipt of mentoring functions. Thus, the current study successfully extended research from Schoorman and colleagues (2007) about the reciprocal nature of trust in dyadic relationships by

presenting evidence of the relatedness of protégé and mentor trustworthiness and the outcome of those trust relationships. Additionally, the current study extends mentoring research by not addressing only the mentor's influence on the relationship or the protégé's influence, but also the influnce of the dyad on the relationship through reciprocal trust.

Moderating Role of Perceived Organizational Support of Mentoring (POSM)

Hypothesis 4 answered a call for research from Eby and colleagues (2006) about the impact of POSM and mentor outcomes. Since previous research had found no significant relationships (Ragins & Scandura, 1999), the current research explored this variable as a moderator of mentor stress and mentor turnover intentions. Specifically, the current research hypothesized that supported mentors would report less stress (Hypothesis 4a) and report fewer intentions to leave their organizations (Hypothesis 4b). However, the results of these analyses failed to present evidence of a moderating influence of POSM in the proposed model. One explanation may be a non-linear relationship between mentoring functions and intent to turnover as well as between mentoring functions and mentor's stress. It may be that providing too much mentoring support could be "too much of a good thing" and may have potential disadvantages. Post-hoc analyses in the current study found a significant cubic relationship between the mentor provision of mentoring functions and mentor turnover intentions (see Figure 22). This finding is similar to other research showing that effects are evidenced only at the more extreme range of variables of interest (Harris & Kacmar, 2006; Le et al., 2011). Similar to the work of Harris and Kacmar (2006), Le and colleagues (2011) explored the current understanding of the relationship between personality traits and job performance and found at the extreme ends of some personality traits a point of inflection where the personality trait predicts poor job performance. For example, while conscientiousness is generally understood to be a positive predictor of job

performance due to the dutifulness of an employee, people with a very high level of conscientious may exhibit poor job performance behaviors. That is, a worker with this level of conscientiousness may be so focused on only turning out perfect work to the point that production rate suffers greatly.

Similar to the results of these studies, the curvilinear relationship exhibited in the current research presents evidence that while a mentor may not consider leaving an organization due to moderately negative mentoring relationship, there may be a point of inflection wherein mentors may begin to consider exiting the organization due to more severe cases of negative mentoring experiences. Thus, this post-hoc finding could provide support for future research into negative mentoring and extend the theoretical work of other researchers of negative mentoring and its effects (Eby et al., 2008; Eby & McManus, 2004; Ragins et al., 2000; Eby et al., 2010).

Mentoring Functions → Protégé Learning

In general, dyadic relationships may or may not have a defined end (Kenny, 2006); however, most mentor-protégé relationships have stages of life with a defined end (Kram, 1985). It is possible for a mentor-protégé relationship to last for a long period of time, but the relationship is usually redefined into relationship—such as peers or friendship—that lacks the power-differentiation of the mentoring relationship. A major element of the mentor-protégé relationship-progression is protégé personal learning (Kram, 1996; Lankau & Scandura, 2002). Specifically, as the protégé learns more and more, the relationship may be redefined into peers or friendship as the protégé has maximally learned what the mentor can provide, or the mentor feels unable to provide new learning. The current study attempted to explore the influence of protégé personal learning on mentor stress.

The current research expected relationships between the provision or receipt of mentoring functions and the protégé learning as rated by protégés and mentors. Hypotheses 5a and 5b examined cross-linked relationships (i.e., mentor reported mentoring functions and protégé-reported personal learning) and Hypotheses 5c and 5e examined direct-linked relationships (i.e., protégé-reported mentoring functions and protégé-reported personal learning). The current research did not find support for the cross-linked hypotheses (hypothesis 5b and hypothesis 5d). However, support was found for direct-linked hypotheses related to protégé-reported mentoring functions received and protégé reports of personal learning, and mentor-reported mentoring functions provided and mentor reports of protégé learning (Hypothesis 5c and Hypothesis 5e).

Specifically, the current study found that mentors who reported providing more mentoring functions, also reported that they felt their protégés exhibited personal learning. Likewise, protégés who reported receiving more mentoring functions, also felt that they learned more from the relationship. The involvement of a mentor and his or her advanced experience and skill providing the protégé with an opportunity to learn different skills and abilities is an expected outcome of a mentoring relationship, theorized by previous research (Kram, 1996; Lankau & Scandura, 2002). However, a reciprocal relationship between mentors and protégés reports was not supported. Specifically, mentors who reported providing more mentoring functions did not necessarily have protégés who reported more personal learning. Likewise, protégés who reported receiving more mentoring functions, did not necessarily have mentors who reported beliefs that their protégés exhibited more personal learning.

The current study did not find evidence of a dyadic reciprocal relationship between mentoring functions and protégé learning. As previously discussed, a correlation of measures between dyad members can indicate construct correspondence (Kenny et al., 2006). Mentor-rated

protégé personal learning and protégé-rated personal learning were not significantly related (r = -.08, p > .05), indicating a lack of correspondence between the measures. It is possible that this divergence is due to the nature of the measurement of each aspect of personal learning and goal alignment. From the protégé perspective, this measure is a self-report measure based upon the goals of learning that he or she understands. Conversely, from the mentor perspective, this measure is focused on the goals for the learning of another person – the protégé. Thus, if protégé and mentor understanding of learning goals are not in alignment, this measure may also lack agreement. Specifically, the personal learning scale for protégés asks for the respondent to report upon their own personal learning. Whereas the mentor personal learning scale asks for the mentor to report upon his or her beliefs about the amount of personal learning the protégé is experiencing. That is, the mentor is reporting on a belief about another individual, whereas the protégé is self-reporting his or her own experiences. Thus, the construct in question for each measure is similar, but distinctly different, thus correspondence—and thus the hypothesized relationships of the two measures would not be expected.

However, the current study did find evidence that protégés who feel they receive mentoring support also feel they personally learn. This is supported by previous literature which found similar results (Lankau & Scandura, 2002). The opposite side of this finding—that mentors who feel they provide mentoring support also perceive that their protégés personally learn—is an extension of previous research that only focused on the protégé experience. A potential mechanism for this finding could be a self-fulfilling prophecy. Specifically, mentors who report providing mentoring functions may be more likely to report seeing personal learning in their protégés as an outcome, due to their own expectations—and belief in their own value—as a quality mentor (Eden, 2003). Thus, a lack of convergence is possible because of this self-

fulfilling prophecy regarding one's own ability as a mentor and this relationship could provide a fruitful new direction for future research.

Mediators → Mentor Outcomes (Turnover Intentions and Stress)

Turnover Intentions. The current study's exploration of turnover intentions as a potential outcome of interest was driven by theoretical arguments about the effect of negative mentoring on mentor career damage (Bozionelos, 2004; Parise & Forret, 2008). It was expected that mentors reporting higher provision of mentoring functions would have lower turnover intentions (Hypothesis 3b). Analysis of the data did not support this hypothesis ($\beta = .00$, $p > .05$). A recent meta-analysis had a similar finding regarding the provision of mentoring functions and mentor turnover intent (Ghosh & Reio, 2013). Specifically, Ghosh and Reio found partial support for their hypothesis that provision of mentoring functions were associated with lessened turnover intentions. They reported a small, significant correlation (weighted mean $r = -.04$, $p < .05$), but the 95% confidence interval associated with the mean included zero (-.09 to .02). It is possible that the small effect noted by Ghosh and Reio might have been found in a sample different than the current study. The sample of mentors for the current study had exceptionally long tenures ($M = 19.53$ years, $SD = 9.11$) as compared to other similar studies (M = 7.00 years, SD = 7.04; Lankau & Scandura, 2002) and this may have masked the effect found by Ghosh and Reio (2013). An organization with a higher than average tenure in mentors might mask these effects because of more continuance organizational commitment in mentors (Allen & Meyer, 1990). Specifically, mentors with higher tenures in an organization have more to lose (e.g. organization-specific networks, organization-based retirement benefits, etc.).

Stress. The current study sought to answer the question, "what is/are the key factors that cause mentors undue stress?" To answer this question, several hypotheses were posed and the

structural model analyzed. Of these analyses, hypotheses involving provision of mentoring functions by mentors, receipt of mentoring functions by protégés, and mentor reported protégé personal learning were not supported. However, Hypothesis 5g stated that protégé-reported personal learning would be negatively related to mentor stress, and this hypothesis was supported.

A critical outcome of interest for a mentor is the success of his or her protégé. In general, while these individuals do receive benefits from the mentoring relationship, including the development of a loyal support network, new knowledge, and job-related assistance (Allen, Poteet, Russell, & Dobbins, 1997), mentors are generally other-focused people who are interested in the success of their protégés (Kram, 1985; Kram 1996). A key element to protégé success is personal learning (Lankau & Scandura, 2002), and the current study presents support for the relationship between a protégé's sense of personal learning and the mentor's stress about the mentoring relationship. That is, while a mentor may be concerned about his or her well-being, he or she is an advocate for the success of the protégé, and the protégé's belief of personal learning—not the mentor's—is of greater importance.

A Discussion of Alternate Models and Exploratory Analyses

As an additional part of model estimation, alternative models are frequently tested to determine if hypothesized models are the best fit to data (Kline, 1989). For the current study, three additional alternate models were examined: a model that uses only Stress as a criterion variable, a Mentor Perceptions model to test explained variance of protégé perceptions, and a model wherein POSM is included as an predictor variable instead of a moderator. Additionally, a model wherein mentoring functions was modeled using a dyadic measure of *MFQ* was created to explore calls for dyadic measures in relationship research (Kenny, 2006).

Initially, a model was tested wherein POSM was included as a moderator – to examine the hypothesized relationships – but only included mentor stress as the only criterion variable. While this model indicated a significant chi-square difference test ($\Delta\chi^2$ = 178.21, Δdf = 122, p < .05), the other global indices of fit were negatively impacted (see Table 34). Consistent with hypothesis testing, alternate models were then tested against the final model (without POSM as a moderator). Similar to the previous alternate model, the majority of these models provided significant chi-square difference tests, but other indices of global fit did not change or were impacted negatively (see Table 35). However, an alternate model, wherein POSM was modeled as an antecedent variable indicated a significant improvement on model fit ($\Delta\chi^2$ = 117.52, Δdf = 93, p < .05) as well as some improvement of global indices of model fit (χ^2/df (566) = 1.75, *CFI* = 0.93, *RMSEA* = 0.06, *SRMR* = 0.06; see Table 35). Thus, future research may benefit from exploration into POSM as an antecedent of mentor outcomes such as stress and turnover intentions.

In the current study, mentoring functions were measured using the *Mentoring Functions Questionnaire* (*MFQ*) from the perspective of protégés and mentors separately. This was modeled as separate perspectives, so that a hypothesis examining mentor-protégé agreement could be tested (see Hypothesis 6). The results of the current study supported previous research (Kenny, 2006). To extend the previous research, a dyadic measure of mentoring functions was created by using the existing parcels of mentoring functions to calculate a mean score for each case (Kenny, 2006). Using these new dyadic scores, the current study's model was retested, replacing the protégé and mentor perspectives of mentoring functions with this new single dyadic measure of mentoring functions. This new model did indicate a significant chi-square difference test ($\Delta\chi^2$ = 125.05, Δdf = 85, p < .05). As with other alternate models, there was little

change to other indices of global fit (χ^2/df (388) = 1.93, *CFI* = 0.93, *RMSEA* = 0.07, *SRMR* = 0.08), although any changes to these indices were negative (see Table 36). Additionally, the paths of interest to the current study were not significantly changed. That is, significant path coefficients indicating supported hypothesis in the previous model remained significant (see Figure 19). Thus, while the current study utilized perspectives of both protégés and mentors for hypothesis testing, exploration of this alternate model seems to indicate that a more parsimonious model wherein mentoring functions is modeled as a dyadic measure is equivalent to reports of mentors and protégés separately.

Implications for Research

The results of the current study offer significant implications for mentoring theory. Specifically, the study explored the construct of mentoring stress as a focal variable. Results of the examination of this construct in Study 1 presented evidence that sources of mentor stress are likely evidence of a multidimensional construct. The qualitative nature of this research has provided rich detail about the construct and should provide more possibilities for research into other areas of negative mentor experiences.

Additionally, the current study sought to answer calls for dyadic research connections by Kenny and colleagues (2006). Results of the current study found a connection between how protégés feel about their own personal learning and the stress felt by mentors. These findings provide more support for Kenny and colleagues' calls for research into dyadic experiences. Beyond mentoring relationships, dyadic effects should extend into other relationship types including leader-member relationships or even personal relationships. Thus, the current study provides an extension of this research into several other areas of mentoring research.

Given that all mentoring relationships involve some sort of personal learning for the protégé, the results of the current study may have implications for other types of mentoring relationships such as youth mentoring, coaching, or other non-work related mentoring relationships. That is, because of the link in the current study between a protégé's sense of personal learning and the stress reported by mentors, similar effects may be found in these alternate mentoring relationships. This may provide a new line of research for these alternate areas of mentoring research. Additionally, the current study has confirmed the relationship between mentor-reported provision of mentoring functions and mentor-reports of protégé personal learning, as well as the lack of correspondence in mentor perceptions and protégé perceptions of protégé personal learning. Thus, these findings should provide future researchers with new questions to answer about these measures of personal learning when exploring mentoring relationships.

With the development of the *SMQ* and the specific stresses of work-based mentoring relationships, the construct of mentor stress has implications for these alternate non-work mentoring relationships. While all mentoring relationships likely have similarities (e.g., elements of stressful protégé behaviors, poor dyadic fit, and the influence of the mentor's personal issues), there may be differences between mentoring in work and non-work based relationships. Companies likely provide different kinds of structure and support for mentoring than non-work based organizations. Exploration of this is outside the scope of the current research, however current findings provide groundwork for new research into stress effects for mentors in these non-work relationships.

Additionally, the current study has provided new information about the effect of negative mentoring experiences on mentor turnover intentions. With the discovery of a curvilinear

relationship in post-hoc analyses, this opens theoretical exploration of how mentors may experience negative mentoring relationships. Future researchers should specifically examine negative mentoring relationships for curvilinear relationships with mentor turnover intentions as well as other mentor outcomes, such as organizational commitment, counterproductive work behaviors, and organizational politics. Like in the current study, it may be that the exhibition of these behaviors may only be present in highly negative relationships.

Finally, the current study examined the dyadic nature of negative mentoring, and found a low correlation between measures of mentor and protégé ratings of mentoring (r = .10). Given that measures in dyadic relationships should exhibit at least moderate agreement to be considered being similar at the construct level (r > .30 ;Kenny, Kashy, & Cook, 2006), this raises questions for the construct of negative mentoring. One explanation for this result is potential range restriction in the data. That is, those who would report negative mentoring may have opted out of the study rather than reporting the negative mentoring. Another potential explanation could be that the perspectives of mentors and protégés regarding negative mentoring result in wholly different constructs. Specifically, the measure of negative mentoring for mentors (Eby et al., 2008) and the measure of negative mentoring for protégés (Eby et al., 2004) were developed independently and may represent specific perspectives on negative mentoring, such that they represent separate constructs. Thus, future research would benefit from a focused exploration of this dyadic relationship, but the chosen perspective may have significant implications for this research and future practice. Specifcally, one should take care not to make the mistake that data gathered from the protégé's point of view reflects the mentor's viewpoint and vice versa.

Implications for Practice

The results of the current study provide implications for mentoring practice. All organizations have people in informal, if not formal mentoring relationships. The discovery that mentor stress is significantly impacted by how a protégé feels about his or her learning and progression through the life of the mentoring relationship should be of important concern to organizations. Specific advice to organizations that have mentoring programs should include monitoring of protégé learning—either through formal measures—or through communication training for mentors and protégés. Mentor-protégé pairs should communicate clear goals for protégé learning and progression so that there is no confusion as to what constitutes protégé success for the duration of the relationship.

The current study supported the hypothesis that mentor and protégé mentoring functions are significantly related to one another. While this finding requires more support in a research setting, the practical implications of this finding provides an opportunity for organizations to better track mentoring relationships without troubling the busy lives of mentors with multiple surveys. Given the significant, moderate relationship presented by the current study, organizations can poll protégés who are in mentoring relationships about mentoring functions provided and accept that the ratings will be an acceptable rating of the health of the mentoring relationship.

The current study also found potential careless or unmotivated responding by mentors. It is possible that mentors in an organizational setting may also provide similar types of responding. The current research into this careless responding provides information that may prove useful to current organizational mentoring programs when seeking feedback on surveys or measures of mentoring program health (Huang et al, 2012). Specifically, this research provides

advice that involves providing respondents—mentors in this case—with information about the importance of their active and honest participation, attention-based items as a part of the survey, and breaks in survey response if necessary. This advice may help gain organizations more actionable feedback about their mentoring programs.

Additionally, the current study explored the construct of mentor stress and developed a measure for mentoring stress. The factors in this measure – Stressful Protégé Behaviors, Poor Dyadic Fit, Mentor's Personal Issues, Structural Constraints, and Organizational Support – could be used by organizations to develop mentor training programs, as well as how to structure organizational checks into relationship health. For example, the individual elements of stressful protégé behaviors could be explained to mentors and they could be taught how to better address these behaviors with potential protégés. Further, how mentor stress can become a part of a dyadic relationship could also be included in mentor training programs to help mentors prepare for challenges of such a relationship. Finally, the associated scales of the *SMQ* might be used by practitioners to assess mentor-related stress to inform targeted interventions.

Limitations

A limitation of the current study is that it uses a cross-sectional design. In fact, Allen (2008) reports that the over-reliance on cross-sectional designs in mentoring research is problematic. However, the current study was exploratory in nature, delving into aspects of negative mentoring that have not previously been explored. Additionally, many of the variables involved in the current study are unlikely to have reverse causality relationships. For example, one of the key findings in the study was a negative relationship between protégé reported personal learning and mentor stress. It is unlikely that lower mentor stress would cause higher protégé learning and vice versa.

Another limitation of the current study is that the focus of the study was on the self-reported stress of mentors and did not use other measures of mentor stress, such as physiological measures or supervisor assessments of stress or performance. Expansion of the scope of the variables in the study may have resulted in more findings that are outside of the awareness of mentors. Additionally, there could have been some measure of social desirability that influenced self-report mentor responses.

An additional limitation relates to the results of the careless/unmotivated responding analyses (Huang et al, 2012). The current study examined three possible indicators of careless or unmotivated responding: LongString, individual reliability, and Psychometric Antonyms. In general, these methods revealed potential minor problems with the protégé side of this data sample, showing only 25 protégé participants were flagged with two or more indicators. However, mentor data may have been more heavily affected by careless or unmotivated responding. In contrast to protégé participants, 160 mentors were flagged with two or more indicators. Thus, for this reason, the results of the current study should be interpreted cautiously.

Another limitation of the current study involves the specific sample used in the study. The organization that made up the majority of the study has a low level of turnover. This low turnover creates a mentor and protégé sample with very long tenures. While this may have created rich mentoring relationships. It could have created a confound that influenced the measure of turnover intentions in mentors. That is, since the average employee is much less likely to turnover, this may have truncated potential results of mentors who would have reported turnover intentions. Furthermore, there may have been a high-degree of socially desirable responding surrounding the self-report nature of turnover intentions.

A final limitation is that relatively few mentors and protégés reported negative mentoring. Specifically, when responding to negative mentoring measures, mentors (*M* = 4.61, *SD* = .46) and protégés (*M* = 4.42, *SD* = .41) provided distinctly few negative ratings of their mentoring experiences. A potential explanation of these data is that negative mentoring may be a particularly low-base rate experience in organizational relationships. However, a more reasonable explanation of these data is that language included in participant consent forms for protégés may have resulted in participants experiencing negative relationships to opt-out of the current study, creating a restriction of range (e.g. "It is possible that your mentor may be sensitized to evaluate your performance more harshly following survey completion, due to the content of the surveys [...] In other words, your mentor may be more critical of your performance following the survey completion."). In fact, foundational research into negative mentoring relationships found mentor (*M* = 3.54, *SD* = .48, Eby et al., 2008) and protégé (*M* = 3.02, *SD* = .67, Eby et al., 2004) reports of negative mentoring tend to result in more normal data distributions. Thus, these findings may support this potential explanation. Additionally, in Eby and colleagues' seminal work on negative mentoring with protégés (2004) and mentors (2008) using these scales results in no adverse events, complaints, or problems related to the scales (L.Eby, personal communication, November 7, 2012). Thus, future researchers may want to consider how language in consent forms may adversely impact data collection and associated findings.

Suggestions for Future Research

To address some of the current study's limitations and expand this research, several opportunities for future research exist. First, in order to better understand the directionality of the relationships proposed in the current study's model, longitudinal research should be conducted.

Formal mentoring relationships could be followed from initiation to separation, measuring stress and other outcome variables for both mentors and protégés at several time points during the relationships (Kram, 1983). This type of research has been conducted using a dyadic model to assess how mentoring functions are associated with positive post-mentoring outcomes (i.e., transformational leadership, affective well-being, and organizational commitment; Chun, Sosik, & Yun, 2012), but not negative mentoring outcomes, such as stress or turnover intent. With this type of design, it would be possible to see how relationships change over time and better examine what variables may change during the formation of a negative mentoring relationship.

Second, while the current study has explored negative mentoring in the context of a dyadic relationship and its negative effects on mentors, future research could benefit from exploring stress outcomes for protégés using a similar dyadic model. Previous mentoring research into negative relationships has been generally conducted on one side of the mentoring dyad (e.g. Ghosh et al., 2011; Burk & Eby, 2010; Eby et al., 2010), and when paired dyads are collected it is for the purpose of measure development (Eby et al., 2008; Eby et al., 2004). The current study found that mentor stress is better predicted by protégé reports of personal learning than mentor reports of a protégé's personal learning. Thus, dyadic research should be conducted, examining how mentor-reported experiences may influence negative outcomes for protégés, such as work stress and turnover intentions.

Third, the current study explored what aspects of the mentor-protégé relationship and organizational influence may impact negative mentor outcomes; future research should include individual differences of both the mentor and protégé that may affect these relationships. For example, personality variables are important predictors of employee outcomes including task performance, job satisfaction, counter-productive work behaviors (Barrick & Mount, 2005).

Further, emotional stability is related to positive and negative affectivity, as well as stress (Ployhart, Schneider, & Schmidt, 2006). In previous mentoring research, proactive mentor personality has been shown to have a significant relationship with positive mentoring relationships (Wang, Hurst, & Yang, 2014). Likewise, qualitative research has presented evidence that intrinsic motivation may also have an influence on positive mentoring relationships (Janssen, van Vurren, & de Jong, 2014). Thus, future dyadic research into negative mentoring and stress-related outcomes for mentors could benefit from the inclusion of personal variables including personality.

Finally, future research should examine the role of similarity in mentor-protégé relationships. Recent paired dyadic research found that protégés who reported higher perceived similarity with their mentors reported higher organizational and professional commitment, mediated by mentor provision of mentoring functions (i.e., role-modeling; Mitchell, Eby, & Ragins, 2015). Specifically, "The mentor's responsive and supportive actions serve to confirm the protégé's positive expectations about how other should behave; likewise, the securely attached protégé's willingness to receive caregiving confirms the mentor's positive expectations of others." Rationale for this finding can be drawn from Attachment Theory which is a typology that describes the interconnectedness between people (Bowlby, 1973). This is very similar to research regarding mentors' locus of control being positively related to a willingness to mentor (Allen et al., 1997). This seems to indicate that positivity feeds on positivity, and negativity may feed upon negativity. Additionally, models of how Attachment Theory can be applied to organizational contexts, and specifically to the dyadic relationships represented in mentoring have been proposed that could aid future research (Scandura & Pellegrini, 2004). Thus, future research should explore this relationship in a dyadic model to explore how perceived similarity

might influence negative mentoring relationships. Specifically, a lower incidence of negative mentoring relationships may result among those who possess an internal locus of control and have perceived similarity with a mentor who shares secure attachment.

Conclusions

The purpose of the current research was to examine the antecedents of mentor stress and explore the construct of mentoring stress through the development of a measurement instrument. Results from a series of studies provided insight into how mentor and protégé perceptions of negative mentoring, trustworthiness, perceived organizational support for mentoring (POSM), mentoring functions, and personal learning relate to mentor stress and mentors' intentions to turnover. This research also developed a new measure of mentoring stress. Analysis of a structural equation model indicated that protégé perceptions of personal learning are a key connection point from mentoring functions to the exhibition of mentoring stress. Additionally, post-hoc analyses presented evidence that the outcomes of negative mentoring may be best modeled with curvilinear relationships. It is my hope that this study will incite new discussion and further research into mentors' experiences in mentoring relationships. Mentoring is an important, growing, and evolving part of business today, creating new potential relationships between the leaders of today and the leaders of tomorrow. Thus, more research is needed to understand the benefits, challenges, and unique stresses of mentoring relationships on a finite—but valuable organizational resource—the mentor.

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TABLES

Table 1: *Illustrative Interview Quotes for Stressors in Mentoring Questionnaire (SMQ)*

Stressful protégé behaviors	"I just have one person I'm mentoring, where it feels like there's a lot of repetitiveness that goes into it. It's just repeat, repeat, repeat, repeat. So, that's stressful. That goes back to that being teachable. And if you're open and teachable, then you learn it and you get to move on."
Poor dyadic fit	"For instance, in China if you are not the manager, it's good to stay quiet. Respect for elders or others in power or a place of prestige. […] If you're the mentee and one of your objectives is to be in a management path, it can be difficult. They're very quiet in meetings, and they're very quiet in the mentoring relationship. So, you're fighting an uphill battle against culture here in America."
Mentor's personal issues	"I think that most definitely I might be oversharing, but when I was going through my divorce, I definitely cut back on the amount of people I was in contact. Especially with those people who depended on me, wanting answers, or to talk about things. I mean, my mental capacity just wasn't in a place […] to take on other people's problems […] I was in a place where I was trying to work through my problems."
Structural constraints	"When there's conflicting guidance. They do say that most people should find one or two mentors to help you with your career. […] There are times when I feel that another mentor has been giving advice that will be in direct conflict with my suggestions. I feel that's unfortunate because the poor mentee is in the middle trying to make a decision about whose advice they're going to take. That's stressful for me because occasionally, I sort of want to beat up on the other mentor. I just get frustrated… Maybe it's even jealousy. Protective of the relationship. I want to know that I'm the primary mentor, and the other people are just helping them along."
Organizational support	"Oh, I can tell you, my organization does nothing to support. They recommend mentoring. But, there is nothing that supports a mentor in our organization. They don't support time. They don't support materials or development. That makes it really challenging for me. I have to invest that time—and sometimes my personal time, not my work time. Above and beyond my work load […]. It almost seems like that's a benefit—the mentoring program—but it lacks structure. And, I've been told during review processes, that that's part of my responsibility—to mentor in the organization—and then the expectation is there, but no support."

Table 2: *Items Developed Based on Interview Data (49 items; Study 1)*

Stressful protégé behaviors	1. My protégé repeatedly seeks my advice on similar issues. 2. My protégé does not seem willing to learn. 3. My protégé does not seem interested. 4. My protégé is not living up to his/her potential. 5. My protégé passes up developmental opportunities. 6. My protégé does not deliver high quality work.* 7. My protégé has performance issues on the job.* 8. My protégé is too casual with me. 9. My protégé needs too much of my support. 10. I suspect my protégé may badmouth me to others.
Poor dyadic fit	1. My protégé does not respect authority. 2. My protégé seems to expect quick advancement. 3. I am nervous about offending my protégé. 4. My protégé and I have different personalities. 5. My protégé and I have different work values. 6. My protégé is too quiet. 7. My protégé is too passive about advancing his/her career. 8. My protégé and I struggle to interact. *
Mentor's personal issues	1. I feel inadequate as a mentor to my protégé. 2. I feel unsure about the effectiveness of the advice I give my protégé. 3. I feel I do not give my protégé enough personalized challenges unique to his/her strengths. 4. I feel that I give my protégé preferential treatment. 5. I feel that my advice to my protégé may result in me being involved in workplace politics. 6. My personal problems outside of work make it difficult for me to focus on mentoring my protégé. 7. My personal work-related problems make it difficult to focus on mentoring my protégé. 8. My mentoring relationship takes too much time.
Structural constraints	1. I feel that my protégé's other mentor(s) may be giving my protégé conflicting advice. 2. My protégé and I must frequently meet remotely. 3. I have trouble gauging my protégé's engagement during our remote mentoring sessions. 4. My organization's mentoring program lacks structure. 5. My organization's mentoring program is voluntary.

	6. My organization gives mentors choice in protégé selection. 7. My organization gives protégés choice in mentor selection.
Organizational support	1. I don't know how I'm doing as a mentor. 2. My organization doesn't emphasize mentoring in its performance management. 3. My organization does not provide relationship skills training. 4. My organization gives me too many protégés to manage. 5. My organization doesn't give me enough time to mentor my protégé. 6. My organization does not provide sufficient financial support for my protégé's training and development needs. 7. My organization does not emphasize the importance of mentoring.

* Adapted from Eby et al.(2008)

**Adapted from Parise and Forret (2008)

Table 3: *Mentor Participant Age*

Age	Frequency	Percent
18-24	3	2.7
25-29	4	3.6
30-34	10	8.9
35-39	16	14.3
40-44	15	13.4
45-49	23	20.5
50-54	17	15.2
55-59	18	16.1
60-64	4	3.6
65-69	1	0.9
Missing	1	0.9
Total	112	100

Table 4: *Mentor Participant Education*

Education Level	Frequency	Percent
High School	1	0.9
Some College (non-degreed)	3	2.7
Associate's Degree	2	1.8
Bachelor's Degree	46	41.1
Some Graduate School (non-degreed)	15	13.4
Master's Degree	28	25
Doctorate	16	14.3
Missing	1	0.9
Total	112	100

Table 5: *Mentor Participant Salary*

Salary	Frequency	Percent
Less than $30,000	1	0.9
$30,001 to $50,000	8	7.1
$50,001 to $80,000	20	17.9
$80,001 to $100,000	25	22.3
$100,001 to $130,000	26	23.2
$130,001 to $150,000	4	3.6
More than $150,001	16	14.3
Missing	12	10.7
Total	112	100

Table 6: *Items mapped to variable names for interpretability*

Factor	Item Content	Variable Name
Stressful Protégé Behaviors	My protégé repeatedly seeks my advice on similar issues.	SPB1
	My protégé does not seem willing to learn.	SPB2
	My protégé does not seem interested.	SPB3
	My protégé is not living up to his/her potential.	SPB4
	My protégé passes up developmental opportunities.	SPB5
	My protégé does not deliver high quality work.*	SPB6
	My protégé has performance issues on the job.*	SPB7
	My protégé is too casual with me.	SPB8
	My protégé needs too much of my support.	SPB9
	I suspect my protégé may badmouth me to others.	SPB10
Poor dyadic fit	My protégé does not respect authority.	PDF2
	My protégé seems to expect quick advancement.	PDF3
	I am nervous about offending my protégé.	PDF5
	My protégé and I have different personalities.	PDF6
	My protégé and I have different work values.	PDF7
	My protégé is too quiet.	PDF9
	My protégé is too passive about advancing his/her career.	PDF10
	My protégé and I struggle to interact. *	PDF13
Mentor's personal issues	I feel inadequate as a mentor to my protégé.	MP1
	I feel unsure about the effectiveness of the advice I give my protégé.	MP2
	I feel I do not give my protégé enough personalized challenges unique to his/her strengths.	MP3
	I feel that I give my protégé preferential treatment.	MP4
	I feel that my advice to my protégé may result in me being involved in workplace politics.	MP5
	My personal problems outside of work make it difficult for me to focus on mentoring my protégé.	MP7
	My personal work-related problems make it difficult to focus on mentoring my protégé.	MP8
	My mentoring relationship takes too much time.	MP9

Table 6: *Items mapped to variable names for interpretability (continued)*

Factor	Item Content	Variable Name
Structural constraints	I feel that my protégé's other mentor(s) may be giving my protégé conflicting advice.	SC2
	My protégé and I must frequently meet remotely.	SC3
	I have trouble gauging my protégé's engagement during our remote mentoring sessions.	SC4
	My organization's mentoring program lacks structure.	SC5
	My organization's mentoring program is voluntary.	SC6
	My organization gives mentors choice in protégé selection.	SC7
	My organization gives protégés choice in mentor selection.	SC8
Organizational support	I don't know how I'm doing as a mentor.	OS 2
	My organization doesn't emphasize mentoring in its performance management.	OS 3
	My organization does not provide relationship skills training.	OS 5
	My organization gives me too many protégés to manage.	OS 6
	My organization doesn't give me enough time to mentor my protégé.	OS 7
	My organization does not provide sufficient financial support for my protégé's training and development needs.	OS 8
	My organization does not emphasize the importance of mentoring.	OS 9

* Adapted from Eby et al.(2008)

Table 7: *Initial Unrotated Factor Pattern Matrix for SMQ Data*

Observed Variable	Factor 1 *Stressful Protégé Behaviors*	Factor 2 *Poor Dyadic Fit*	Factor 3 *Mentor's Personal Issues*	Factor 4 *Structural Constraints*	Factor 5 *Organizational Support*	Item Content
SPB1	**.012**	-.040	.272	-.121	-.170	My protégé repeatedly seeks my advice on similar issues.
SPB2	**.718**	.277	.329	-.127	-.013	My protégé does not seem willing to learn.
SPB3	**.711**	.224	.324	-.169	.139	My protégé does not seem interested.
SPB4	**.661**	.286	.507	-.166	.070	My protégé is not living up to his/her potential.
SPB5	**.648**	.118	.497	-.088	.070	My protégé passes up developmental opportunities.
SPB6	**.712**	.134	.339	-.203	.221	My protégé does not deliver high quality work.*
SPB7	**.657**	.157	.404	-.265	.071	My protégé has performance issues on the job.*
SPB8	**.650**	-.018	.472	-.037	-.102	My protégé is too casual with me.
SPB9	**.659**	.041	.486	.101	-.260	My protégé needs too much of my support.
SPB10	**.643**	.026	.397	-.136	-.403	I suspect my protégé may badmouth me to others.
PDF2	.585	**.023**	.536	.049	-.327	My protégé does not respect authority.
PDF3	.365	**.078**	.481	.010	-.265	My protégé seems to expect quick advancement.
PDF5	.578	**-.002**	.226	.214	-.281	I am nervous about offending my protégé.
PDF6	.250	**.207**	.286	.006	.173	My protégé and I have different personalities.
PDF7	.432	**.141**	.470	-.188	.187	My protégé and I have different work values.
PDF9	.416	**-.008**	.476	.100	.380	My protégé is too quiet.
PDF10	.657	**.111**	.478	-.080	.386	My protégé is too passive about advancing his/her career.

PDF13	.719	**.172**	.267	.000	-.043	My protégé and I struggle to interact. *
MP1	.986	-.006	**-.136**	.004	-.001	I feel inadequate as a mentor to my protégé.
MP2	.828	.041	**.148**	.059	-.100	I feel unsure about the effectiveness of the advice I give my protégé.
MP3	.159	.053	**.020**	.272	.067	I feel I do not give my protégé enough personalized challenges unique to his/her strengths.
MP4	.109	-.117	**.183**	.610	-.051	I feel that I give my protégé preferential treatment.
MP5	.168	.291	**.285**	.510	-.203	I feel that my advice to my protégé may result in me being involved in workplace politics.
MP7	.333	.148	**.039**	.350	-.283	My personal problems outside of work make it difficult for me to focus on mentoring my protégé.
MP8	.260	.237	**.042**	.412	-.284	My personal work-related problems make it difficult to focus on mentoring my protégé.
MP9	.187	.171	**.256**	.474	-.274	My mentoring relationship takes too much time.
SC2	.150	.082	.304	**.484**	.197	I feel that my protégé's other mentor(s) may be giving my protégé conflicting advice.
SC3	.033	-.125	-.138	**.116**	.017	My protégé and I must frequently meet remotely.
SC4	.427	.016	.185	**.398**	.171	I have trouble gauging my protégé's engagement during our remote mentoring sessions.
SC5	.185	.010	-.014	**.408**	.139	My organization's mentoring program lacks structure.
SC6	-.002	-.369	.080	**-.053**	.176	My organization's mentoring program is voluntary.
SC7	.090	-.982	.060	**.024**	-.004	My organization gives mentors choice in protégé selection.

SC8	.095	-.902	.117	**-.050**	.098	My organization gives protégés choice in mentor selection.
OS2	.324	.064	-.065	.272	**.191**	I don't know how I'm doing as a mentor.
OS3	.112	-.053	.198	.436	**.374**	My organization doesn't emphasize mentoring in its performance management.
OS5	.094	.204	-.069	.358	**.506**	My organization does not provide relationship skills training.
OS6	.072	.114	.263	.496	**-.163**	My organization gives me too many protégés to manage.
OS7	-.037	.081	.201	.567	**-.100**	My organization doesn't give me enough time to mentor my protégé.
OS8	.110	.156	.019	.635	**.089**	My organization does not provide sufficient financial support for my protégé's training and development needs.
OS9	.114	.156	.056	.788	**.212**	My organization does not emphasize the importance of mentoring.

Table 8: *Initial Rotated Factor Pattern Matrix with Communalities and Uniquenesses for SMQ Data*

Observed Variable	Factor 1 *Stressful Protégé Behaviors*	Factor 2 *Poor Dyadic Fit*	Factor 3 *Mentor's Personal Issues*	Factor 4 *Structural Constraints*	Factor 5 *Organizational Support*	Communality (h^2)	Uniqueness ($1-h^2$)
SPB1	**0.16**	0.05	-0.27	0.05	-0.13	0.50	0.50
SPB2	**0.82**	0.08	0.03	-0.17	0.12	0.93	0.07
SPB3	**0.82**	-0.02	0.13	-0.10	0.06	0.91	0.09
SPB4	**0.88**	0.08	0.02	-0.14	-0.08	0.91	0.09
SPB5	**0.82**	0.12	0.03	0.03	-0.05	0.85	0.15
SPB6	**0.83**	-0.08	0.17	0.00	0.03	0.86	0.14
SPB7	**0.83**	-0.06	-0.01	-0.04	0.00	0.80	0.20
SPB8	**0.76**	0.21	-0.10	0.13	0.06	0.85	0.15
SPB9	**0.74**	0.40	-0.17	0.07	0.13	0.93	0.07
SPB10	**0.73**	0.21	-0.37	0.02	0.22	0.87	0.13
PDF2	0.71	**0.39**	-0.27	0.07	0.07	0.85	0.15
PDF3	0.53	**0.30**	-0.26	0.00	-0.05	0.74	0.26
PDF5	0.50	**0.40**	-0.09	0.06	0.29	0.75	0.25
PDF6	0.39	**0.08**	0.15	-0.10	-0.16	0.73	0.27
PDF7	0.67	**-0.02**	0.05	-0.01	-0.20	0.84	0.16
PDF9	0.58	**0.14**	0.31	0.19	-0.24	0.75	0.25
PDF10	0.84	**0.01**	0.30	0.08	-0.15	0.89	0.11
PDF13	0.74	**0.17**	0.06	-0.07	0.20	0.86	0.14
MP1	0.72	0.02	**0.23**	0.06	0.65	0.88	0.12
MP2	0.72	0.19	**0.07**	0.04	0.39	0.87	0.13
MP3	0.08	0.23	**0.21**	0.00	0.07	0.64	0.36
MP4	0.01	0.60	**0.18**	0.19	0.03	0.71	0.29
MP5	0.18	0.65	**0.05**	-0.21	-0.02	0.75	0.25
MP7	0.20	0.45	**-0.01**	-0.13	0.28	0.74	0.26

MP8	0.14	0.51	**0.01**	-0.21	0.23	0.71	0.29
MP9	0.17	0.62	**-0.03**	-0.11	0.05	0.77	0.23
SC2	0.18	0.47	0.33	**0.05**	-0.17	0.76	0.24
SC3	-0.09	0.04	0.09	**0.11**	0.14	0.51	0.49
SC4	0.35	0.37	0.35	**0.11**	0.08	0.76	0.24
SC5	0.05	0.31	0.33	**0.05**	0.10	0.70	0.30
SC6	0.01	-0.11	0.05	**0.39**	-0.08	0.61	0.39
SC7	-0.05	-0.03	-0.12	**0.97**	0.15	0.93	0.07
SC8	0.02	-0.10	-0.07	**0.91**	0.05	0.92	0.08
OS2	0.18	0.17	0.36	0.00	**0.17**	0.54	0.46
OS3	0.10	0.31	0.46	0.18	**-0.17**	0.66	0.34
OS5	0.02	0.12	0.64	-0.10	**-0.09**	0.68	0.32
OS6	0.07	0.59	0.04	-0.04	**-0.05**	0.66	0.34
OS7	-0.06	0.60	0.11	-0.02	**-0.08**	0.74	0.26

Table 9: *Correlations for Exploratory Factor Analysis 1*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1 . SPB1	0.50																																							
2 . SPB2	0.12	0.93																																						
3 . SPB3	0.00	0.86	0.91																																					
4 . SPB4	0.21	0.81	0.73	0.91																																				
5 . SPB5	0.16	0.65	0.70	0.73	0.85																																			
6 . SPB6	0.12	0.65	0.74	0.71	0.78	0.86																																		
7 . SPB7	0.17	0.70	0.65	0.79	0.66	0.70	0.80																																	
8 . SPB8	0.19	0.56	0.61	0.66	0.64	0.57	0.62	0.85																																
9 . SPB9	0.18	0.57	0.59	0.69	0.70	0.57	0.61	0.77	0.93																															
10 . SPB10	0.22	0.61	0.48	0.63	0.60	0.53	0.57	0.65	0.67	0.87																														
11 . PDF2	0.21	0.62	0.55	0.62	0.61	0.50	0.54	0.72	0.72	0.75	0.85																													
12 . PDF3	0.27	0.46	0.34	0.49	0.47	0.35	0.42	0.39	0.50	0.62	0.63	0.74																												
13 . PDF5	0.03	0.53	0.42	0.41	0.35	0.27	0.36	0.49	0.54	0.54	0.62	0.42	0.75																											
14 . PDF6	-0.06	0.32	0.26	0.45	0.21	0.26	0.41	0.29	0.32	0.15	0.20	0.17	0.21	0.73																										
15 . PDF7	0.05	0.50	0.55	0.54	0.55	0.55	0.57	0.40	0.41	0.44	0.41	0.51	0.41	0.47	0.84																									
16 . PDF9	-0.05	0.40	0.47	0.48	0.43	0.48	0.42	0.52	0.45	0.27	0.39	0.27	0.37	0.49	0.49	0.75																								
17 . PDF10	0.08	0.61	0.68	0.74	0.71	0.77	0.67	0.64	0.51	0.50	0.53	0.38	0.37	0.39	0.65	0.69	0.89																							
18 . PDF13	0.05	0.65	0.65	0.63	0.58	0.63	0.64	0.47	0.58	0.65	0.56	0.37	0.58	0.27	0.62	0.38	0.62	0.86																						
19 . MP1	-0.03	0.66	0.66	0.58	0.57	0.65	0.59	0.58	0.58	0.58	0.50	0.30	0.54	0.21	0.36	0.35	0.58	0.67	0.88																					
20 . MP2	0.04	0.62	0.58	0.61	0.61	0.62	0.58	0.64	0.74	0.61	0.57	0.36	0.55	0.29	0.39	0.41	0.56	0.63	0.80	0.87																				
21 . MP3	-0.05	-0.03	0.01	0.05	0.15	0.14	0.02	0.17	0.08	0.10	0.02	0.02	0.02	-0.01	-0.07	0.17	0.16	0.19	0.15	0.31	0.64																			
22 . MP4	0.09	0.05	0.03	0.04	0.08	0.02	-0.10	0.14	0.16	0.07	0.32	0.21	0.29	-0.04	-0.12	0.18	0.11	0.02	0.09	0.14	0.21	0.71																		
23 . MP5	-0.02	0.29	0.20	0.21	0.22	0.11	0.14	0.21	0.36	0.19	0.30	0.17	0.39	0.21	0.12	0.18	0.16	0.36	0.13	0.29	0.19	0.35	0.75																	
24 . MP7	-0.06	0.31	0.19	0.21	0.13	0.20	0.14	0.25	0.29	0.33	0.31	0.16	0.34	0.16	0.05	0.06	0.15	0.29	0.32	0.29	0.14	0.32	0.39	0.74																
25 . MP8	-0.02	0.19	0.07	0.15	0.12	0.12	0.08	0.21	0.30	0.28	0.22	0.24	0.32	0.19	0.09	0.14	0.09	0.23	0.25	0.29	0.20	0.20	0.43	0.54	0.71															
26 . MP9	-0.08	0.09	0.16	0.21	0.19	0.09	0.13	0.26	0.53	0.18	0.31	0.18	0.33	0.19	0.07	0.22	0.15	0.26	0.15	0.27	0.14	0.29	0.51	0.39	0.55	0.77														
27 . SC2	-0.14	0.17	0.16	0.13	0.33	0.20	0.12	0.20	0.17	0.13	0.17	0.10	0.14	0.07	0.14	0.34	0.32	0.23	0.11	0.22	0.39	0.24	0.54	0.26	0.26	0.24	0.76													
28 . SC3	-0.06	-0.06	-0.06	-0.06	-0.06	0.01	-0.07	-0.13	-0.01	-0.12	-0.06	-0.11	-0.07	0.09	-0.10	-0.12	-0.06	-0.01	0.05	-0.01	-0.09	0.15	-0.03	0.13	-0.06	0.13	-0.15	0.51												
29 . SC4	-0.03	0.31	0.34	0.33	0.35	0.40	0.30	0.33	0.37	0.14	0.29	0.30	0.28	0.18	0.27	0.33	0.39	0.33	0.39	0.46	0.35	0.27	0.28	0.42	0.27	0.33	0.40	0.26	0.76											
30 . SC5	-0.01	-0.03	-0.02	0.11	0.07	0.02	0.01	0.12	0.21	0.00	0.09	0.10	0.18	0.32	0.04	0.20	0.17	0.05	0.19	0.15	0.10	0.27	0.04	0.07	0.26	0.26	-0.01	0.23	0.37	0.70										
31 . SC6	0.15	-0.03	-0.01	-0.04	-0.04	-0.01	-0.01	0.04	-0.10	0.03	0.01	0.14	0.04	-0.20	0.05	0.09	0.05	-0.08	-0.01	-0.05	-0.03	0.07	-0.27	-0.36	-0.14	-0.29	-0.02	-0.25	-0.04	0.15	0.61									
32 . SC7	0.06	-0.19	-0.14	-0.20	-0.03	-0.05	-0.07	0.09	0.06	0.05	0.06	-0.01	0.07	-0.15	-0.07	0.07	-0.03	-0.09	0.09	0.04	-0.05	0.15	-0.24	-0.10	-0.20	-0.12	-0.04	0.13	0.05	0.02	0.37	0.93								
33 . SC8	0.04	-0.12	-0.06	-0.09	0.00	-0.02	-0.04	0.17	0.01	0.07	0.06	-0.06	0.04	-0.16	-0.05	0.16	0.09	-0.06	0.08	0.04	0.04	0.10	-0.24	-0.12	-0.23	-0.15	0.01	0.06	0.02	-0.07	0.32	0.90	0.92							
34 . OS2	-0.24	0.20	0.18	0.15	0.14	0.23	0.15	0.13	0.12	0.14	0.08	0.05	0.25	-0.06	0.07	0.24	0.25	0.24	0.33	0.31	0.33	0.17	0.13	0.18	0.22	0.05	0.32	-0.16	0.30	0.20	0.03	-0.04	0.01	0.54						
35 . OS3	-0.08	0.13	0.14	0.11	0.16	0.06	0.02	0.04	0.11	-0.04	0.15	0.09	0.11	0.08	0.13	0.39	0.25	0.15	0.09	0.14	0.06	0.39	0.14	-0.11	0.13	0.07	0.30	0.00	0.22	0.32	0.24	0.08	0.06	0.23	0.66					
36 . OS5	-0.12	0.05	0.07	0.11	0.08	0.13	0.01	-0.02	0.01	-0.20	-0.21	-0.19	-0.05	0.05	0.00	0.22	0.21	0.06	0.10	0.02	0.07	0.19	0.04	0.12	0.00	0.01	0.26	0.01	0.24	0.16	0.01	-0.19	-0.16	0.26	0.37	0.68				
37 . OS6	0.03	0.13	0.14	0.08	0.24	0.09	0.03	0.15	0.30	0.17	0.14	0.15	0.21	-0.09	0.04	0.06	0.05	0.23	0.04	0.13	0.28	0.34	0.51	0.38	0.27	0.40	0.46	-0.05	0.29	-0.02	-0.15	-0.08	-0.07	0.10	0.10	0.25	0.66			
38 . OS7	-0.04	0.04	-0.05	0.04	0.11	-0.10	-0.11	0.00	0.15	0.14	0.15	0.15	0.15	-0.15	-0.12	0.01	-0.02	0.10	-0.06	-0.05	0.18	0.41	0.25	0.15	0.22	0.31	0.33	-0.09	0.09	0.16	0.02	-0.05	-0.10	0.15	0.31	0.34	0.53	0.74		
39 . OS8	0.11	0.13	0.02	0.09	0.05	-0.01	0.05	0.05	0.13	-0.04	0.10	0.07	0.07	0.02	-0.15	-0.01	0.04	0.08	0.11	0.09	0.15	0.37	0.39	0.24	0.14	0.22	0.32	0.12	0.38	0.30	-0.07	-0.13	-0.13	0.25	0.28	0.40	0.37	0.47	0.76	
40 . OS9	-0.06	0.05	0.02	0.04	0.03	-0.03	-0.08	0.04	0.12	-0.12	0.13	0.10	0.22	0.22	0.08	0.23	0.12	0.10	0.11	0.09	0.12	0.49	0.43	0.20	0.31	0.36	0.46	0.07	0.37	0.47	0.01	-0.12	-0.17	0.23	0.51	0.38	0.31	0.45	0.66	0.85

Note: Communalities are on the diagonal

Table 10: *Second Rotated Factor Pattern Matrix with Communalities and Uniquenesses for SMQ Data*

Observed Variable	Factor 1 *Stressful Protégé Behaviors*	Factor 2 *Poor Dyadic Fit*	Factor 3 *Mentor's Personal Issues*	Factor 4 *Structural Constraints*	Factor 5 *Organizational Support*	Communality (h^2)	Uniqueness ($1-h^2$)
SPB2	**0.82**	0.15	-0.01	-0.15	0.03	0.93	0.07
SPB3	**0.83**	0.01	0.05	-0.11	0.09	0.91	0.09
SPB4	**0.88**	0.08	0.07	-0.14	-0.05	0.90	0.10
SPB5	**0.82**	0.10	0.07	0.02	0.00	0.82	0.18
SPB6	**0.84**	-0.07	0.04	-0.03	0.20	0.86	0.14
SPB7	**0.83**	-0.02	-0.05	-0.04	0.03	0.79	0.21
SPB8	**0.75**	0.25	-0.02	0.15	-0.02	0.85	0.15
SPB9	**0.72**	0.45	-0.03	0.12	0.03	0.93	0.07
SPB10	**0.71**	0.38	-0.29	0.11	-0.14	0.86	0.14
PDF2	0.69	**0.47**	-0.05	0.15	-0.27	0.85	0.15
PDF3	0.51	**0.35**	-0.01	0.08	-0.36	0.74	0.26
PDF5	0.49	**0.50**	0.01	0.13	0.00	0.74	0.26
PDF6	0.39	**0.01**	0.21	-0.12	-0.01	0.71	0.29
PDF7	0.68	**-0.08**	0.13	-0.01	-0.15	0.83	0.17
PDF9	0.58	**-0.03**	0.41	0.13	-0.03	0.74	0.26
PDF10	0.84	**-0.09**	0.29	0.02	0.04	0.88	0.12
PDF13	0.73	**0.24**	0.00	-0.05	0.15	0.85	0.15
MP1	0.72	0.19	**-0.04**	0.08	0.42	0.87	0.13
MP2	0.72	0.31	**-0.05**	0.05	0.34	0.87	0.13
MP3	0.08	0.18	**0.12**	-0.06	0.29	0.63	0.37
MP4	-0.01	0.49	**0.42**	0.20	-0.01	0.68	0.32
MP5	0.16	0.58	**0.20**	-0.20	0.07	0.70	0.30

MP7	0.18	0.54	**-0.04**	-0.10	0.30	0.72	0.28
MP8	0.12	0.56	**0.06**	-0.18	0.15	0.70	0.30
MP9	0.14	0.60	**0.14**	-0.08	0.09	0.76	0.24
SC3	-0.09	0.05	0.04	**0.10**	0.27	0.49	0.51
SC4	0.35	0.28	0.34	**0.06**	0.38	0.74	0.26
SC5	0.05	0.23	0.43	**0.05**	0.11	0.66	0.34
SC6	0.03	-0.20	0.16	**0.40**	-0.20	0.59	0.41
SC7	-0.05	-0.06	-0.06	**0.99**	0.12	0.93	0.07
SC8	0.02	-0.15	-0.04	**0.89**	0.10	0.92	0.08
OS2	0.19	0.13	0.24	-0.05	**0.32**	0.46	0.54
OS3	0.11	0.08	0.65	0.14	**-0.05**	0.65	0.35
OS5	0.03	-0.08	0.57	-0.20	**0.28**	0.68	0.32
OS6	0.05	0.49	0.19	-0.05	**0.10**	0.65	0.35
OS7	-0.08	0.47	0.37	0.01	**-0.13**	0.70	0.30
OS8	-0.04	0.41	0.51	-0.10	**0.17**	0.72	0.28
OS9	-0.04	0.44	0.75	-0.06	**0.07**	0.80	0.20

Table 11: *Correlations for Exploratory Factor Analysis 2*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
1 . SPB2	0.93																																					
2 . SPB3	0.86	0.91																																				
3 . SPB4	0.81	0.73	0.90																																			
4 . SPB5	0.65	0.70	0.73	0.82																																		
5 . SPB6	0.65	0.74	0.71	0.78	0.86																																	
6 . SPB7	0.70	0.65	0.79	0.66	0.70	0.79																																
7 . SPB8	0.56	0.61	0.66	0.64	0.57	0.62	0.85																															
8 . SPB9	0.57	0.59	0.69	0.70	0.57	0.61	0.77	0.93																														
9 . SPB10	0.61	0.48	0.63	0.60	0.53	0.57	0.65	0.67	0.86																													
10 . PDF2	0.62	0.55	0.62	0.61	0.50	0.54	0.72	0.72	0.75	0.85																												
11 . PDF3	0.46	0.34	0.49	0.47	0.35	0.42	0.39	0.50	0.62	0.63	0.74																											
12 . PDF5	0.53	0.42	0.41	0.35	0.27	0.36	0.49	0.54	0.54	0.62	0.42	0.74																										
13 . PDF6	0.32	0.26	0.45	0.21	0.26	0.41	0.29	0.32	0.15	0.20	0.17	0.21	0.71																									
14 . PDF7	0.50	0.55	0.54	0.55	0.55	0.57	0.40	0.41	0.44	0.41	0.51	0.41	0.47	0.83																								
15 . PDF9	0.40	0.47	0.48	0.43	0.48	0.42	0.52	0.45	0.27	0.39	0.27	0.37	0.49	0.49	0.74																							
16 . PDF10	0.61	0.68	0.74	0.71	0.77	0.67	0.64	0.51	0.50	0.53	0.38	0.37	0.39	0.65	0.69	0.88																						
17 . PDF13	0.65	0.65	0.63	0.58	0.63	0.64	0.47	0.58	0.65	0.56	0.37	0.58	0.27	0.62	0.38	0.62	0.85																					
18 . MP1	0.66	0.66	0.58	0.57	0.65	0.59	0.58	0.58	0.58	0.50	0.30	0.54	0.21	0.36	0.35	0.58	0.67	0.87																				
19 . MP2	0.62	0.58	0.61	0.61	0.62	0.58	0.64	0.74	0.61	0.57	0.36	0.55	0.29	0.39	0.41	0.56	0.63	0.80	0.87																			
20 . MP3	-0.03	0.01	0.05	0.15	0.14	0.02	0.17	0.08	0.10	0.02	0.02	0.02	-0.01	-0.07	0.17	0.16	0.19	0.15	0.31	0.63																		
21 . MP4	0.05	0.03	0.04	0.08	0.02	-0.10	0.14	0.16	0.07	0.32	0.21	0.29	-0.04	-0.12	0.18	0.11	0.02	0.09	0.14	0.21	0.68																	
22 . MP5	0.29	0.20	0.21	0.22	0.11	0.14	0.21	0.36	0.19	0.30	0.17	0.39	0.21	0.12	0.18	0.16	0.36	0.13	0.29	0.19	0.35	0.70																
23 . MP7	0.31	0.19	0.21	0.13	0.20	0.14	0.25	0.29	0.33	0.31	0.16	0.34	0.16	0.05	0.06	0.15	0.29	0.32	0.29	0.14	0.32	0.39	0.72															
24 . MP8	0.19	0.07	0.15	0.12	0.12	0.08	0.21	0.30	0.28	0.22	0.24	0.32	0.19	0.09	0.14	0.09	0.23	0.25	0.29	0.20	0.20	0.43	0.54	0.70														
25 . MP9	0.09	0.16	0.21	0.19	0.09	0.13	0.26	0.53	0.18	0.31	0.18	0.33	0.19	0.07	0.22	0.15	0.26	0.15	0.27	0.14	0.29	0.51	0.39	0.55	0.76													
26 . SC3	-0.06	-0.06	-0.06	-0.06	0.01	-0.07	-0.13	-0.01	-0.12	-0.06	-0.11	-0.07	0.09	-0.10	-0.12	-0.06	-0.01	0.05	-0.01	-0.09	0.15	-0.03	0.13	-0.06	0.13	0.49												
27 . SC4	0.31	0.34	0.33	0.35	0.40	0.30	0.33	0.37	0.14	0.29	0.30	0.28	0.18	0.27	0.33	0.39	0.33	0.39	0.46	0.35	0.27	0.28	0.42	0.27	0.33	0.26	0.74											
28 . SC5	-0.03	-0.02	0.11	0.07	0.02	0.01	0.12	0.21	0.00	0.09	0.10	0.18	0.32	0.04	0.20	0.17	0.05	0.19	0.15	0.10	0.27	0.04	0.07	0.26	0.26	0.23	0.37	0.66										
29 . SC6	-0.03	-0.01	-0.04	-0.04	-0.01	-0.01	0.04	-0.10	0.03	0.01	0.14	0.04	-0.20	0.05	0.09	0.05	-0.08	-0.01	-0.05	-0.03	0.07	-0.27	-0.36	-0.14	-0.29	-0.25	-0.04	0.15	0.59									
30 . SC7	-0.19	-0.14	-0.20	-0.03	-0.05	-0.07	0.09	0.06	0.05	0.06	-0.01	0.07	-0.15	-0.07	0.07	-0.03	-0.09	0.09	0.04	-0.05	0.15	-0.24	-0.10	-0.20	-0.12	0.13	0.05	0.02	0.37	0.93								
31 . SC8	-0.12	-0.06	-0.09	0.00	-0.02	-0.04	0.17	0.01	0.07	0.06	-0.06	0.04	-0.16	-0.05	0.16	0.09	-0.06	0.08	0.04	0.04	0.10	-0.24	-0.12	-0.23	-0.15	0.06	0.02	-0.07	0.32	0.90	0.92							
32 . OS2	0.20	0.18	0.15	0.14	0.23	0.15	0.13	0.12	0.14	0.08	0.05	0.25	-0.06	0.07	0.24	0.25	0.24	0.33	0.31	0.33	0.17	0.13	0.18	0.22	0.05	-0.16	0.30	0.20	0.03	-0.04	0.01	0.46						
33 . OS3	0.13	0.14	0.11	0.16	0.06	0.02	0.04	0.11	-0.04	0.15	0.09	0.11	0.08	0.13	0.39	0.25	0.15	0.09	0.14	0.06	0.39	0.14	-0.11	0.13	0.07	0.00	0.22	0.32	0.24	0.08	0.06	0.23	0.65					
34 . OS5	0.05	0.07	0.11	0.08	0.13	0.01	-0.02	0.01	-0.20	-0.21	-0.19	-0.05	0.05	0.00	0.22	0.21	0.06	0.10	0.02	0.07	0.19	0.04	0.12	0.00	0.01	0.01	0.24	0.16	0.01	-0.19	-0.16	0.26	0.37	0.68				
35 . OS6	0.13	0.14	0.08	0.24	0.09	0.03	0.15	0.30	0.17	0.14	0.15	0.21	-0.09	0.04	0.06	0.05	0.23	0.04	0.13	0.28	0.34	0.51	0.38	0.27	0.40	-0.05	0.29	-0.02	-0.15	-0.08	-0.07	0.10	0.10	0.25	0.65			
36 . OS7	0.04	-0.05	0.04	0.11	-0.10	-0.11	0.00	0.15	0.14	0.15	0.15	0.15	-0.15	-0.12	0.01	-0.02	0.10	-0.06	-0.05	0.18	0.41	0.25	0.15	0.22	0.31	-0.09	0.09	0.16	0.02	-0.05	-0.10	0.15	0.31	0.34	0.53	0.70		
37 . OS8	0.13	0.02	0.09	0.05	-0.01	0.05	0.05	0.13	-0.04	0.10	0.07	0.07	0.02	-0.15	-0.01	0.04	0.08	0.11	0.09	0.15	0.37	0.39	0.24	0.14	0.22	0.12	0.38	0.30	-0.07	-0.13	-0.13	0.25	0.28	0.40	0.37	0.47	0.72	
38 . OS9	0.05	0.02	0.04	0.03	-0.03	-0.08	0.04	0.12	-0.12	0.13	0.10	0.22	0.22	0.08	0.23	0.12	0.10	0.11	0.09	0.12	0.49	0.43	0.20	0.31	0.36	0.07	0.37	0.47	0.01	-0.12	-0.17	0.23	0.51	0.38	0.31	0.45	0.66	0.80

Note: Communalities are on the diagonal

Table 12: *Mentor Participant Age*

Age	Frequency	Percent
25-29	7	3.4
30-34	17	8.2
35-39	33	15.9
40-44	32	15.4
45-49	43	20.7
50-54	47	22.6
55-59	23	11.1
60-64	3	1.4
65-69	1	0.5
Missing	2	1
Total	208	100

Table 13: *Mentor Race*

Race	Frequency	Percent
Hispanc or Latino	9	4.3
Black or African American	41	19.7
White	143	68.8
Asian	3	1.4
American Indian or Alaska Native	3	1.4
Native Hawaiian or Other Pacific Islander	1	0.5
Other	3	1.4
Missing	5	2.4
Total	208	100

Table 14: *Mentor Participant Education*

Education Level	Frequency	Percent
Some College (non-degreed)	13	6.3
Associate's Degree	4	1.9
Bachelor's Degree	113	54.3
Some Graduate School (non-degreed)	25	12.0
Master's Degree	40	19.2
Doctorate	12	5.8
Missing	1	0.5
Total	208	100

Table 15: *Mentor Participant Salary*

Salary	Frequency	Percent
$30,001 to $50,000	10	4.8
$50,001 to $80,000	44	21.2
$80,001 to $100,000	40	19.2
$100,001 to $130,000	62	29.8
$130,001 to $150,000	12	5.8
More than $150,001	34	16.3
Missing	6	2.9
Total	208	100

Table 16: *Initial SMQ CFA Items and Scales*

		Path Coefficients				
Variable Name	Item Content	SPB	PDF	MPI	SC	OS
SPB2	My protégé does not seem willing to learn.	0.89				
SPB3	My protégé does not seem interested.	0.91				
SPB4	My protégé is not living up to his/her potential.	0.86				
SPB5	My protégé passes up developmental opportunities.	0.85				
SPB6	My protégé does not deliver high quality work.*	0.94				
SPB7	My protégé has performance issues on the job.*	0.91				
SPB8	My protégé is too casual with me.	0.91				
SPB9	My protégé needs too much of my support.	0.94				
SPB10	I suspect my protégé may badmouth me to others.	0.84				
PDF2	My protégé does not respect authority.		0.88			
PDF3	My protégé seems to expect quick advancement.		0.64			
PDF5	I am nervous about offending my protégé.		0.85			
PDF6	My protégé and I have different personalities.		0.34			
PDF7	My protégé and I have different work values.		0.68			
PDF9	My protégé is too quiet.		0.70			
PDF10	My protégé is too passive about advancing his/her career.		0.72			
PDF13	My protégé and I struggle to interact. *		0.81			
MP1	I feel inadequate as a mentor to my protégé.			0.39		
MP2	I feel unsure about the effectiveness of the advice I give my protégé.			0.42		
MP3	I feel I do not give my protégé enough personalized challenges unique to his/her strengths.			0.16		
MP4	I feel that I give my protégé preferential treatment.			0.22		
MP5	I feel that my advice to my protégé may result in me being involved in workplace politics.			0.45		
MP7	My personal problems outside of work make it difficult for me to focus on mentoring my protégé.			0.84		
MP8	My personal work-related problems make it difficult to focus on mentoring my protégé.			0.84		
MP9	My mentoring relationship takes too much time.			0.74		
SC3	My protégé and I must frequently meet remotely.				-0.13	
SC4	I have trouble gauging my protégé's engagement during our remote mentoring sessions.				-0.07	

SC5	My organization's mentoring program lacks structure.	-0.16	
SC6	My organization's mentoring program is voluntary.	0.47	
SC7	My organization gives mentors choice in protégé selection.	0.93	
SC8	My organization gives protégés choice in mentor selection.	0.95	
OS2	I don't know how I'm doing as a mentor.		0.35
OS3	My organization doesn't emphasize mentoring in its performance management.		0.47
OS5	My organization does not provide relationship skills training.		0.52
OS6	My organization gives me too many protégés to manage.		0.54
OS7	My organization doesn't give me enough time to mentor my protégé.		0.75
OS8	My organization does not provide sufficient financial support for my protégé's training and development needs.		0.77
OS9	My organization does not emphasize the importance of mentoring.		0.67

* Adapted from Eby et al.(2008)

Table 17: *Initial SMQ CFA Residual/Shared Variance*

Variable Name	Item Content	Residual Variance	Shared Variance
SPB2	My protégé does not seem willing to learn.	0.21	0.79
SPB3	My protégé does not seem interested.	0.18	0.82
SPB4	My protégé is not living up to his/her potential.	0.27	0.73
SPB5	My protégé passes up developmental opportunities.	0.27	0.73
SPB6	My protégé does not deliver high quality work.*	0.12	0.88
SPB7	My protégé has performance issues on the job.*	0.18	0.83
SPB8	My protégé is too casual with me.	0.17	0.83
SPB9	My protégé needs too much of my support.	0.13	0.88
SPB10	I suspect my protégé may badmouth me to others.	0.27	0.73
PDF2	My protégé does not respect authority.	0.21	0.79
PDF3	My protégé seems to expect quick advancement.	0.59	0.41
PDF5	I am nervous about offending my protégé.	0.28	0.72
PDF6	My protégé and I have different personalities.	0.88	0.12
PDF7	My protégé and I have different work values.	0.52	0.48
PDF9	My protégé is too quiet.	0.51	0.49
PDF10	My protégé is too passive about advancing his/her career.	0.49	0.51
PDF13	My protégé and I struggle to interact. *	0.34	0.66
MP1	I feel inadequate as a mentor to my protégé.	0.85	0.15
MP2	I feel unsure about the effectiveness of the advice I give my protégé.	0.82	0.18
MP3	I feel I do not give my protégé enough personalized challenges unique to his/her strengths.	0.98	0.03
MP4	I feel that I give my protégé preferential treatment.	0.95	0.05
MP5	I feel that my advice to my protégé may result in me being involved in workplace politics.	0.80	0.20
MP7	My personal problems outside of work make it difficult for me to focus on mentoring my protégé.	0.29	0.71
MP8	My personal work-related problems make it difficult to focus on mentoring my protégé.	0.30	0.70
MP9	My mentoring relationship takes too much time.	0.45	0.55
SC3	My protégé and I must frequently meet remotely.	0.98	0.02
SC4	I have trouble gauging my protégé's engagement during our remote mentoring sessions.	1.00	0.00
SC5	My organization's mentoring program lacks structure.	0.97	0.03
SC6	My organization's mentoring program is voluntary.	0.78	0.22

SC7	My organization gives mentors choice in protégé selection.	0.14	0.86
SC8	My organization gives protégés choice in mentor selection.	0.10	0.90
OS2	I don't know how I'm doing as a mentor.	0.88	0.12
OS3	My organization doesn't emphasize mentoring in its performance management.	0.78	0.22
OS5	My organization does not provide relationship skills training.	0.73	0.27
OS6	My organization gives me too many protégés to manage.	0.71	0.11
OS7	My organization doesn't give me enough time to mentor my protégé.	0.43	0.57
OS8	My organization does not provide sufficient financial support for my protégé's training and development needs.	0.41	0.59
OS9	My organization does not emphasize the importance of mentoring.	0.55	0.45

* Adapted from Eby et al.(2008)

Table 18: *Final SMQ Items and Scales*

		Path Coefficients				
Variable Name	Item Content	SPB	PDF	MPI	SC	OS
SPB2	My protégé does not seem willing to learn.	0.87				
SPB3	My protégé does not seem interested.	0.89				
SPB4	My protégé is not living up to his/her potential.	0.84				
SPB5	My protégé passes up developmental opportunities.	0.84				
SPB6	My protégé does not deliver high quality work.*	0.94				
SPB7	My protégé has performance issues on the job.*	0.91				
SPB8	My protégé is too casual with me.	0.91				
SPB9	My protégé needs too much of my support.	0.95				
SPB10	I suspect my protégé may badmouth me to others.	0.87				
PDF2	My protégé does not respect authority.	0.88				
PDF5	I am nervous about offending my protégé.	0.82				
PDF3	My protégé seems to expect quick advancement.		0.61			
PDF6	My protégé and I have different personalities.		0.44			
PDF7	My protégé and I have different work values.		0.78			
PDF9	My protégé is too quiet.		0.76			
PDF10	My protégé is too passive about advancing his/her career.		0.80			
PDF13	My protégé and I struggle to interact. *		0.86			
MP1	I feel inadequate as a mentor to my protégé.			0.76		
MP2	I feel unsure about the effectiveness of the advice I give my protégé.			0.87		
MP5	I feel that my advice to my protégé may result in me being involved in workplace politics.			0.31		
MP7	My personal problems outside of work make it difficult for me to focus on mentoring my protégé.			0.38		
MP8	My personal work-related problems make it difficult to focus on mentoring my protégé.			0.37		
MP9	My mentoring relationship takes too much time.			0.45		
SC6	My organization's mentoring program is voluntary.				0.48	
SC7	My organization gives mentors choice in protégé selection.				0.94	
SC8	My organization gives protégés choice in mentor selection.				0.94	
OS2	I don't know how I'm doing as a mentor.					0.37
OS3	My organization doesn't emphasize mentoring in its performance management.					0.51
OS5	My organization does not provide relationship skills training.					0.52
OS7	My organization doesn't give me enough time to mentor my protégé.					0.69
OS8	My organization does not provide sufficient financial support for my protégé's training and development needs.					0.79
OS9	My organization does not emphasize the importance of mentoring.					0.71

* Adapted from Eby et al.(2008)

Table 19: *SMQ Factor Correlation Matrix*

	1	2	3	4	5
1. Stressful Protégé Behaviors	1.00				
2. Poor Dyadic Fit	.83*	1.00			
3. Mentor's Personal Problems	.70*	.80*	1.00		
4. Structural Constraints	-.18	-.26*	-.32*	1.00	
5. Organizational Support	.32*	.14	.24*	-.22*	1.00

Note: $p < .05$

Table 20: *Relationship Initiator (Mentor and Protégé)*

Relationship Initiator	Protégé Frequency	Protégé Percent	Mentor Frequency	Mentor Percent
Self	93	44.7	6	2.9
Other Dyad Member	10	4.8	73	35.1
Both	39	18.8	56	26.9
Program	61	29.3	72	34.6
Missing	5	2.4	1	0.5
Total	208	100	208	100

Table 21: *Protégé Position in Relation to Mentor (Mentor and Protégé)*

Position Relationship	Protégé Frequency	Protégé Percent	Mentor Frequency	Mentor Percent
Immediate Supervisory Relationship	8	3.8	8	3.8
Mentor is Superior but Outside CoC	111	53.4	120	57.7
Mentor is Member of Another Organization	1	0.5	7	3.4
Mentor is Peer	41	19.7	55	26.4
Mentor is Superior Within CoC	15	7.2	5	2.4
Other	27	13	13	6.3
Missing	5	2.4	0	0
Total	208	100	208	100

Table 22: *Protégé Participant Age*

Age	Frequency	Percent
18-24	11	5.3
25-29	45	21.6
30-34	32	15.4
35-39	28	13.5
40-44	30	14.4
45-49	27	13
50-54	13	6.3
55-59	14	6.7
60-64	2	1
Missing	6	2.9
Total	208	100

Table 23: *Protégé Participant Education*

Education Level	Frequency	Percent
High School	4	1.9
Some College (non-degreed)	19	9.1
Associate's Degree	14	6.7
Bachelor's Degree	127	61.1
Some Graduate School (non-degreed)	5	2.4
Master's Degree	27	13
Doctorate	7	3.4
Missing	5	2.4
Total	208	100

Table 24: *Protégé Participant Salary*

Salary	Frequency	Percent
Less than $30,000	21	10.1
$30,001 to $50,000	46	22.1
$50,001 to $80,000	82	39.4
$80,001 to $100,000	28	13.5
$100,001 to $130,000	21	10.1
$130,001 to $150,000	2	1
More than $150,001	1	0.5
Missing	7	3.4
Total	208	100

Table 25: *Protégé Race*

Race	Frequency	Percent
Hispanic or Latino	16	7.7
Black or African American	30	14.4
White	143	68.8
Asian	8	3.8
American Indian or Alaska Native	1	0.5
Other	1	0.5
Missing	9	4.3
Total	208	100

Table 26: *Mentor Descriptives (Key Study Variables)*

	N	Mean	SD	Skewness	Kurtosis	α
Mentoring Functions	195	2.07	0.49	0.08	-0.20	0.83
Negative Mentoring	197	4.61	0.46	-1.04	0.16	0.96
Mentoring Stress	188	2.00	1.00	1.07	0.16	0.78
Turnover Intentions	208	1.13	0.65	7.73	65.54	0.94
Trust in Protégé	191	1.75	0.49	0.30	-0.73	0.92
Protégé Learning	199	2.00	0.46	0.19	1.24	0.80
Perceived Support of Mentoring	199	2.37	0.46	0.16	-0.27	0.82

Table 27: *Protégé Descriptives (Key Study Variables)*

	N	Mean	SD	Skewness	Kurtosis	α
Mentoring Functions	203	1.95	0.65	0.84	1.15	0.91
Negative Mentoring	193	4.42	0.41	-0.92	0.54	0.93
Protégé Learning	200	1.80	0.57	0.35	-0.35	0.86
Trust in Mentor	193	1.49	0.47	0.94	0.10	0.93

Table 28: *Long String Analysis – Protégés*

Number of Consecutive Responses	Frequency	Percent
0	2	0.96%
5	3	1.44%
6	3	1.44%
7	7	3.37%
8	10	4.81%
9	6	2.88%
10	3	1.44%
11	5	2.40%
12	23	11.06%
13	7	3.37%
14	13	6.25%
15	20	9.62%
16	4	1.92%
17	16	7.69%
18	8	3.85%
19	7	3.37%
20	41	19.71%
21	4	1.92%
22	2	0.96%
23	4	1.92%
24	20	9.62%
Total	208	

Table 29: *Long String Analysis - Mentors*

Number of Consecutive Responses	Frequency	Percent
6	1	0.48%
7	4	1.92%
8	6	2.88%
9	6	2.88%
10	12	5.77%
11	4	1.92%
12	6	2.88%
13	6	2.88%
14	9	4.33%
15	5	2.40%
16	7	3.37%
17	11	5.29%
18	9	4.33%
19	23	11.06%
20	64	30.77%
21	1	0.48%
22	2	0.96%
24	6	2.88%
25	10	4.81%
26	5	2.40%
27	3	1.44%
28	3	1.44%
30	2	0.96%
31	2	0.96%
36	1	0.48%
Total	208	

Table 30: *Protégé Total Flags*

	Frequency	Percent
0	16	7.69%
1	167	80.29%
2	24	11.54%
3	1	0.48%
Total	208	

Table 31: *Mentor Total Flags*

	Quantity	Percent
0	1	0.48%
1	47	22.60%
2	92	44.23%
3	68	32.69%
Total	208	

Table 32: *Parcel Factor Loadings*

	Path Coefficient	S.E.
Mentoring Functions (MFQ)		
Parcel 1 (Mentor)	0.780*	0.035
Parcel 2 (Mentor)	0.858*	0.029
Parcel 3 (Mentor)	0.758*	0.037
Parcel 1 (Protégé)	0.834*	0.024
Parcel 2 (Protégé)	0.895*	0.017
Parcel 3 (Protégé)	0.947*	0.013
Negative Mentoring		
Parcel 1 (Mentor)	0.988*	0.004
Parcel 2 (Mentor)	0.955*	0.007
Parcel 3 (Mentor)	0.955*	0.007
Parcel 1 (Protégé)	0.943*	0.012
Parcel 2 (Protégé)	0.869*	0.020
Parcel 3 (Protégé)	0.946*	0.012
Trust Scales		
Parcel 1 (Mentor)	0.881*	0.018
Parcel 2 (Mentor)	0.940*	0.013
Parcel 3 (Mentor)	0.943*	0.012
Parcel 1 (Protégé)	0.833*	0.023
Parcel 2 (Protégé)	0.955*	0.011
Parcel 3 (Protégé)	0.958*	0.010
Protégé Personal Learning		
Parcel 1 (Mentor)	0.913*	0.026
Parcel 2 (Mentor)	0.732*	0.038
Parcel 3 (Mentor)	0.789*	0.033
Parcel 1 (Protégé)	0.863*	0.026
Parcel 2 (Protégé)	0.834*	0.028
Parcel 3 (Protégé)	0.842*	0.027
Perceived Organizational Support		
Parcel 1 (Mentor)	0.721*	0.039
Parcel 2 (Mentor)	0.917*	0.027
Parcel 3 (Mentor)	0.852*	0.030

Note. *p < .05

Table 33: *Means, standard deviations, and intercorrelations for all measures*

Measure	N	M	SD	1	2	3	4	5	6
1. MFQ_1	195	2.07	0.49	(0.83)					
2. Protégé $Learning_1$	186	2.00	0.46	0.62**	(0.80)				
3. Negative $Mentoring_1$	187	4.61	0.46	-0.31**	-0.31**	(0.96)			
4. $Stress_1$	176	2.00	1.00	-0.02	-0.01	-0.18*	(0.78)		
5. Turnover $Intentions_1$	195	1.13	0.65	0.05	-0.01	0.03	0.25**	(0.94)	
6. Trust in $Protégé_1$	181	1.75	0.49	0.56**	0.50**	-0.56**	0.11	-0.03	(0.92)
7. Perceived Support for $Mentoring_1$	186	2.37	0.46	0.09	0.27**	-0.19**	0.10	0.02	0.20**
8. MFQ_2	190	1.95	0.65	0.32**	0.31**	-0.03	-0.18*	0.05	0.25**
9. Protégé $Learning_2$	187	1.80	0.57	0.11	0.30**	-0.08	-0.24**	-0.01	0.12
10. Negative $Mentoring_2$	180	4.42	0.41	-0.22**	-0.16*	0.10	0.06	-0.10	-0.26**
11. Trust in $Mentor_2$	181	1.49	0.47	0.32**	0.23**	-0.03	-0.13	0.03	0.34**

Note. *p < .05; **p < .01; Internal consistency alpha values are listed in parentheses on the diagonal, 1 = measure rated by the mentor, 2 = measure rated by the protégé

Table 33 (cont.): Means, standard deviations, and intercorrelations for all measures

Measure	N	M	SD	7	8	9	10	11
1. MFQ_1	195	2.07	0.49					
2. Protégé $Learning_1$	186	2.00	0.46					
3. Negative $Mentoring_1$	187	4.61	0.46					
4. $Stress_1$	176	2.00	1.00					
5. Turnover $Intentions_1$	195	1.13	0.65					
6. Trust in $Protégé_1$	181	1.75	0.49					
7. Perceived Support for $Mentoring_1$	186	2.37	0.46	(0.82)				
8. MFQ_2	190	1.95	0.65	-0.02	(0.91)			
9. Protégé $Learning_2$	187	1.80	0.57	0.07	0.61**	(0.86)		
10. Negative $Mentoring_2$	180	4.42	0.41	0.04	-0.55**	-0.44**	(0.93)	
11. Trust in $Mentor_2$	181	1.49	0.47	0.01	0.63**	0.45**	-0.72**	(0.93)

Note. *p < .05; **p < .01; Internal consistency alpha values are listed in parentheses on the diagonal, 1 = measure rated by the mentor, 2 = measure rated by the protégé

Table 34: *Fit Indices for Comparison Models (Including POSM as Moderator)*

Model	χ^2	df	$\Delta\chi^2$	Δdf	χ^2/df	CFI	RMSEA	SRMR
Main with POSM as Moderator	2159.90	910	--	--	2.37	0.84	0.08	0.07
Stress as only Criterion	1981.69	788	178.21*	122	2.51	0.83	0.09	0.07

Note: * $p < .05$

Table 35: *Fit Indices for Comparison Models (Not Including POSM as Moderator)*

Model	χ^2	df	$\Delta\chi^2$	Δdf	χ^2/df	CFI	RMSEA	SRMR
Main	875.94	473	--	--	1.85	0.93	0.06	0.06
Stress as only Criterion	726.43	385	149.51*	88	1.88	0.93	0.07	0.07
Mentor Perceptions only	359.22	181	516.72*	292	1.98	0.95	0.07	0.08
POSM as an Predictor	993.46	566	117.52*	93	1.75	0.93	0.06	0.06

Note: * $p < .05$

Table 36: *Fit Indices for Comparison Models (Not Including POSM as Moderator)*

Model	χ^2	df	$\Delta\chi^2$	Δdf	χ^2/df	CFI	RMSEA	SRMR
Main	875.94	473	--	--	1.85	0.93	0.06	0.06
Dyadic measure of MFQ	750.89	388	125.05*	85	1.93	0.93	0.07	0.08

Note: * $p < .05$

Table 37: *Hierarchical Regression Analysis of Linear and Nonlinear Terms predicting Mentor Turnover Intent*

Predictors	β	Adj. R^2	ΔR^2
Step 1			
Mentor_MFQ	.075	.001	
Sample $F(1,204) = 1.14$			
Step 2			
Mentor_MFQ^2	.217	-.003	.004
Sample $F(2,203) = .68$			
Step 3			
Mentor_MFQ^3	5.155*	.019	.022*
Sample $F(3,204) = 2.34^{\dagger}$			

Note. Standardized betas are provided, MFQ = Mentoring Functions Questionnaire, $N = 205$, † $p < .10$, * $p < .05$

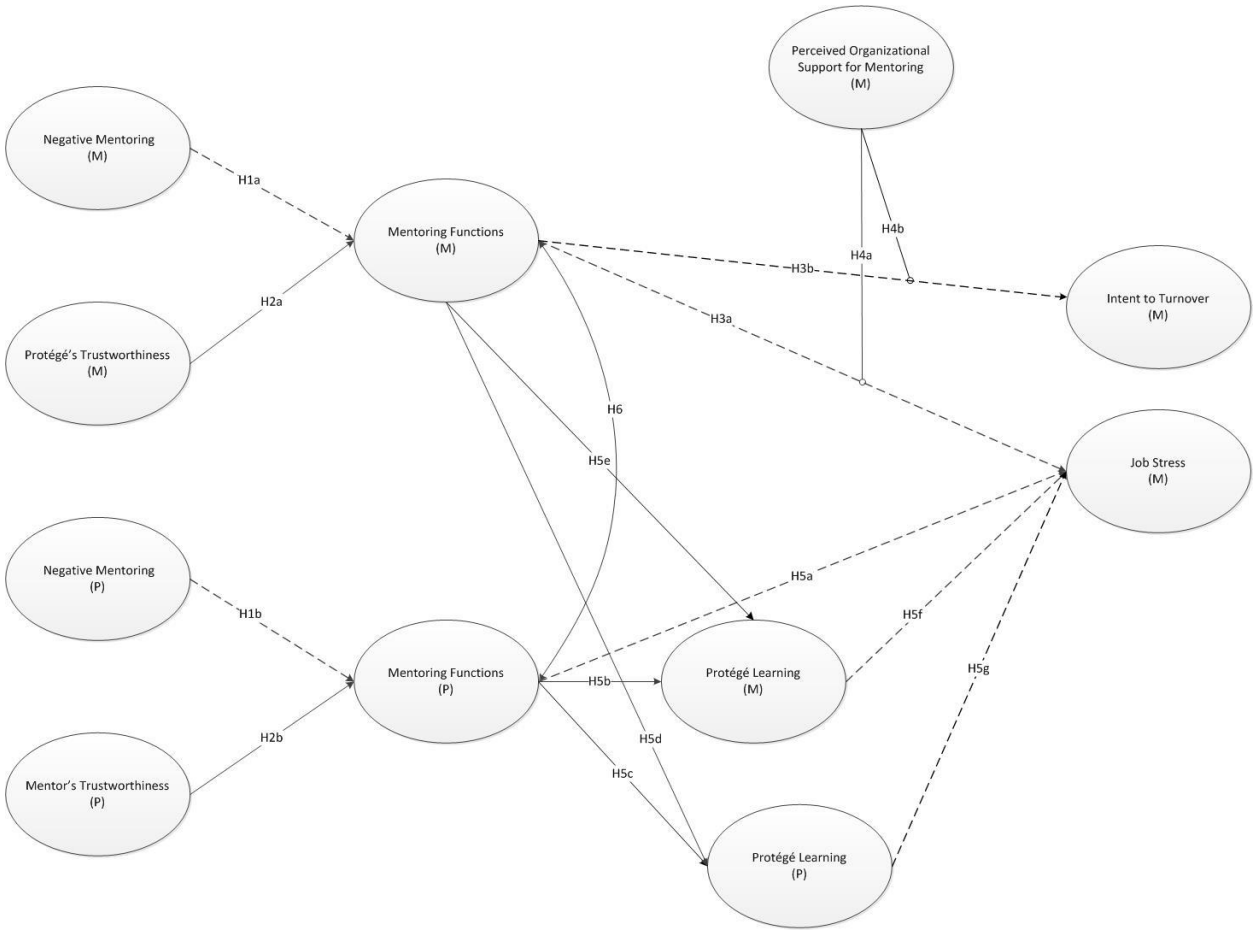
Table 38: *Hierarchical Regression Analysis of Linear and Nonlinear Terms predicting Mentor Reported Negative Mentoring*

Predictors	β	Adj. R^2	ΔR^2
Step 1			
Mentor_MFQ	-.298*	.084	
Sample $F(1,204) = 19.86$*			
Step 2			
Mentor_MFQ^2	.756*	.093	.009
Sample $F(2,203) = 11.52$*			
Step 3			
Mentor_MFQ^3	.695	.089	.005
Sample $F(3,204) = 7.68$*			

Note. Standardized betas are provided, MFQ = Mentoring Functions Questionnaire, $N = 205$, * $p < .05$

FIGURES

Figure 1. Model for Research Showing Hypotheses



Note: (M): ratings provided by mentors
(P): ratings provided by protégés
Dashed line indicates negative relationships

Figure 2. Measurement Model for *SEM* Analysis

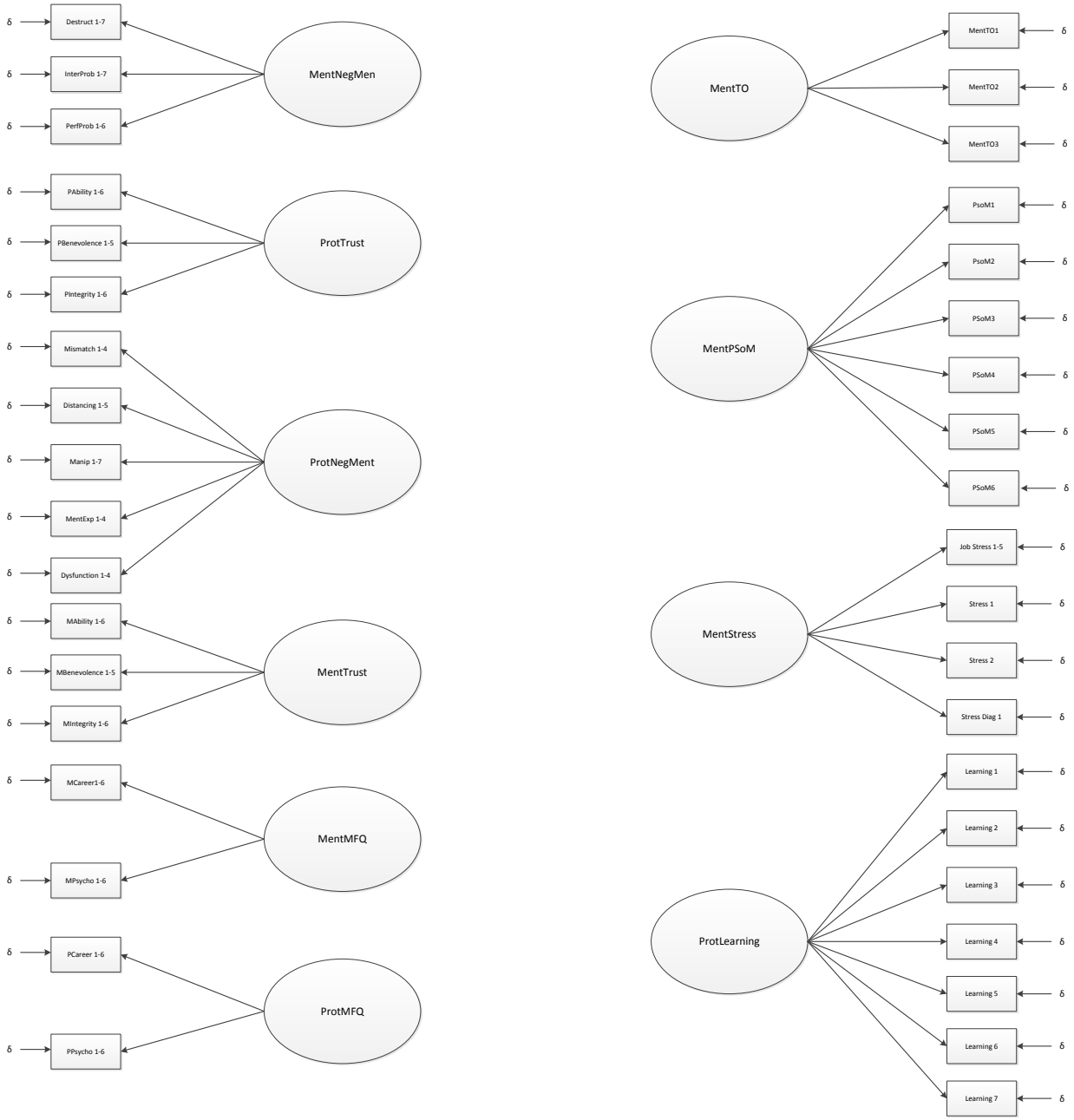


Figure 3. Structural Model for *SEM* Analysis

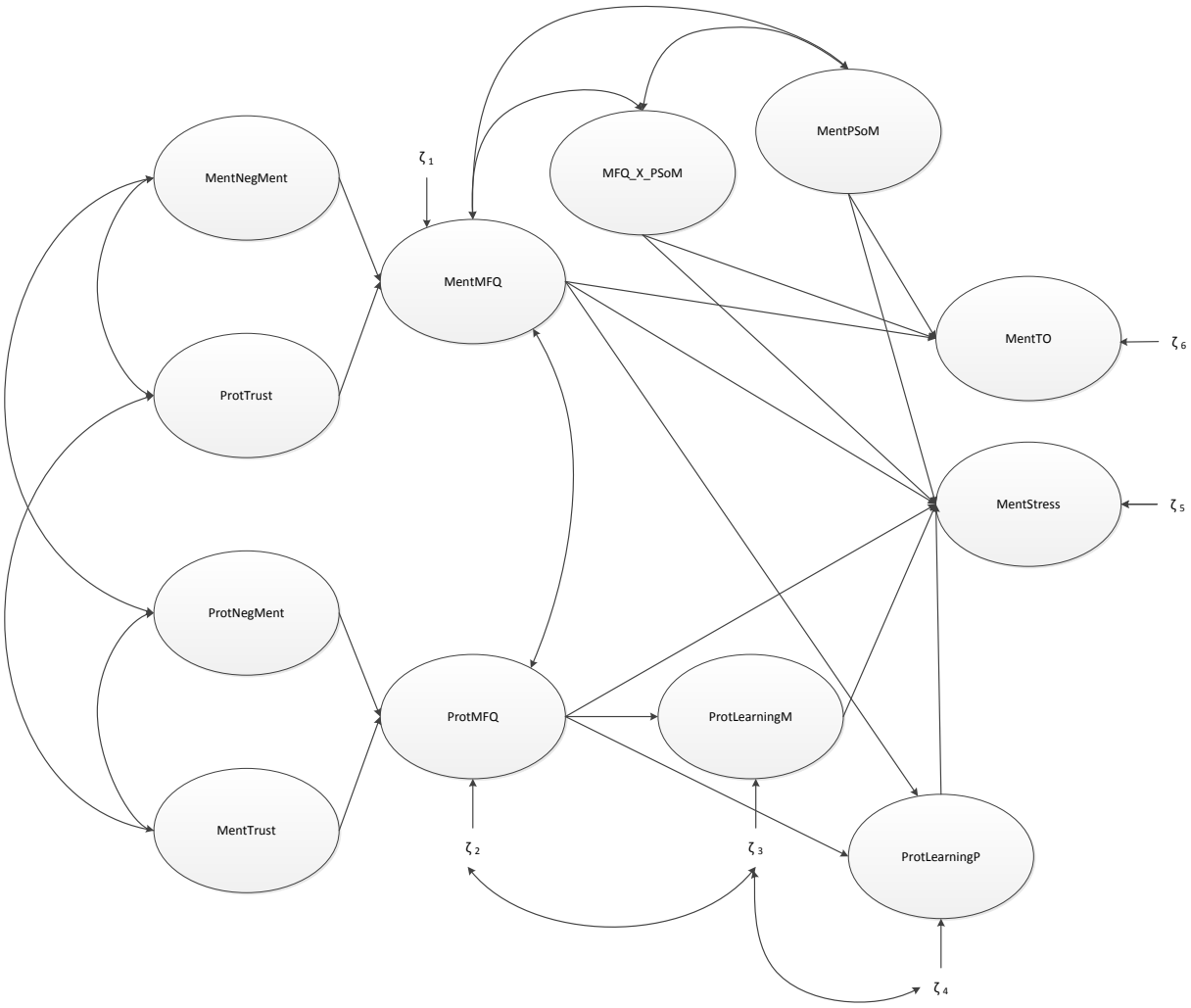


Figure 4. Scree Plot for EFA 1

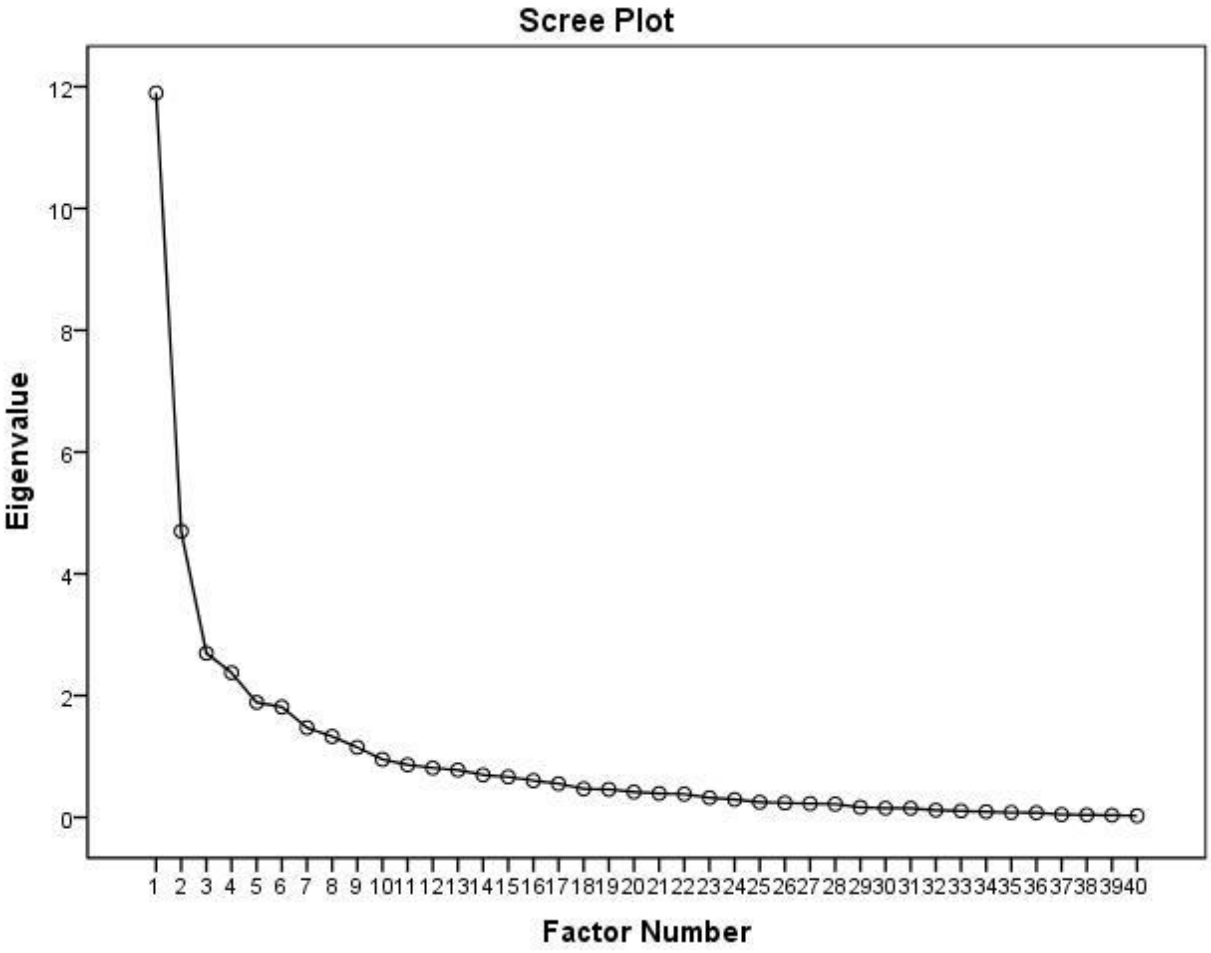


Figure 5. Parallel Analysis for EFA 1

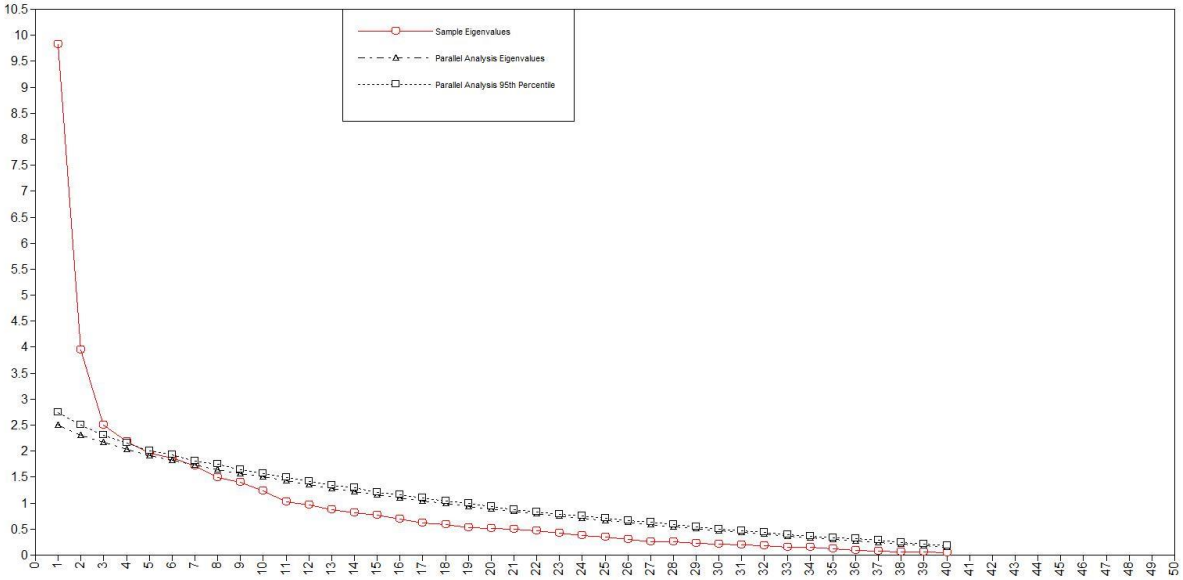


Figure 6. Scree Plot for EFA 2

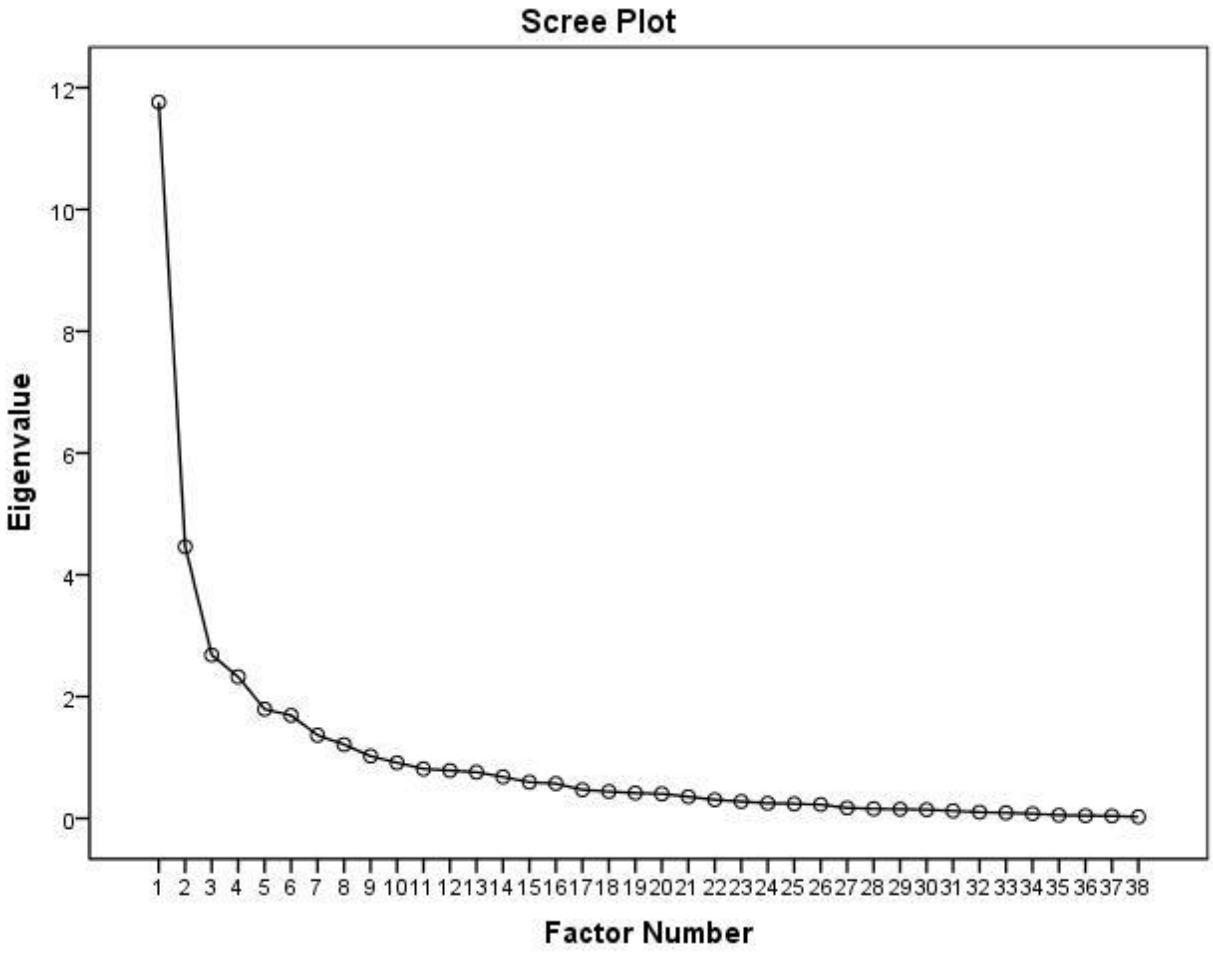


Figure 7. Parallel Analysis for EFA 2

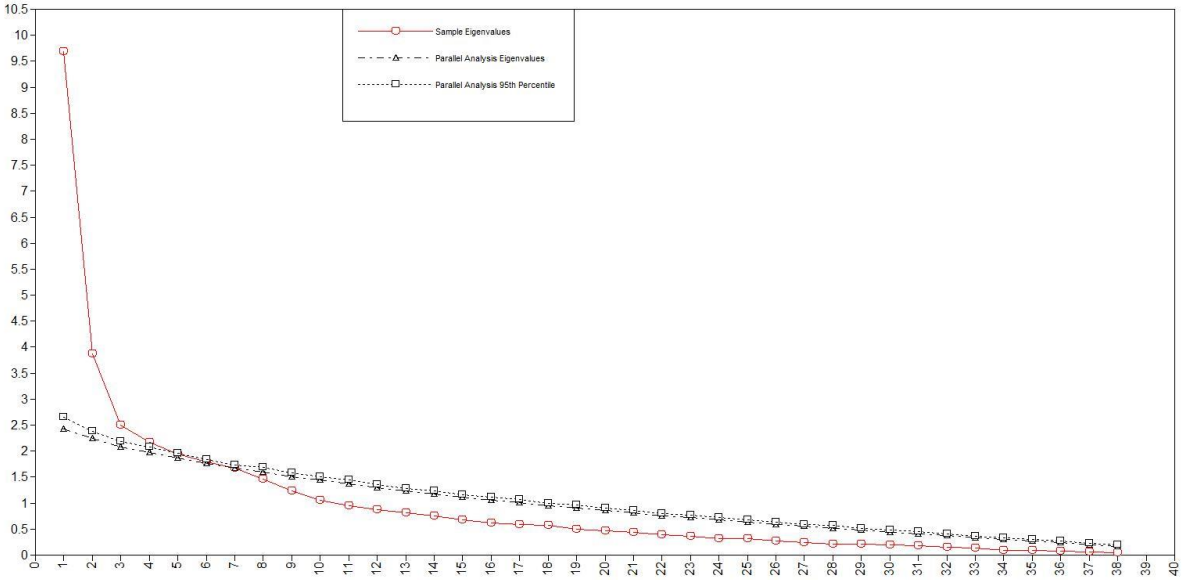


Figure 8. Final Path Model for SMQ

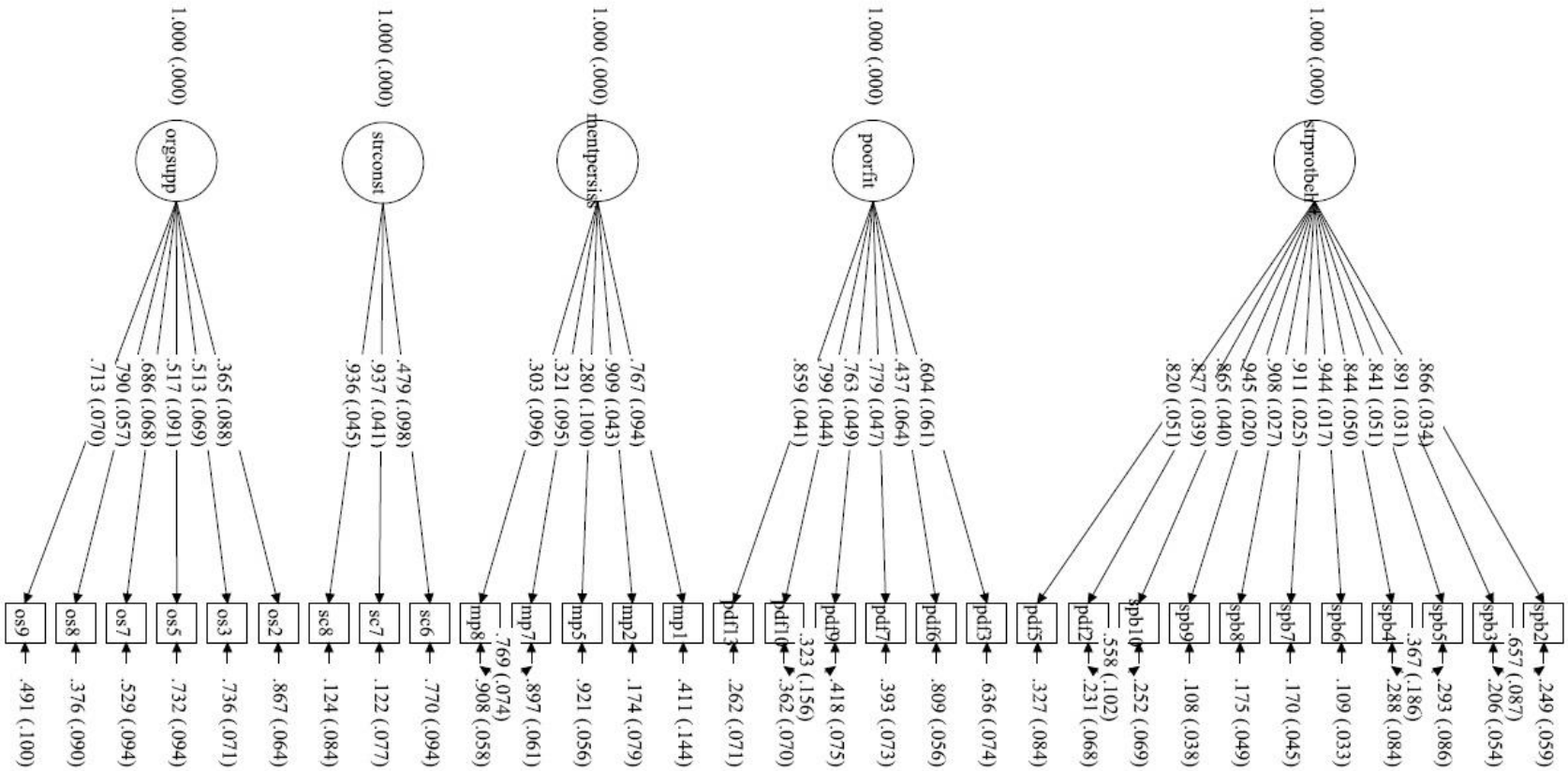


Figure 9. Protégé Long String Responses

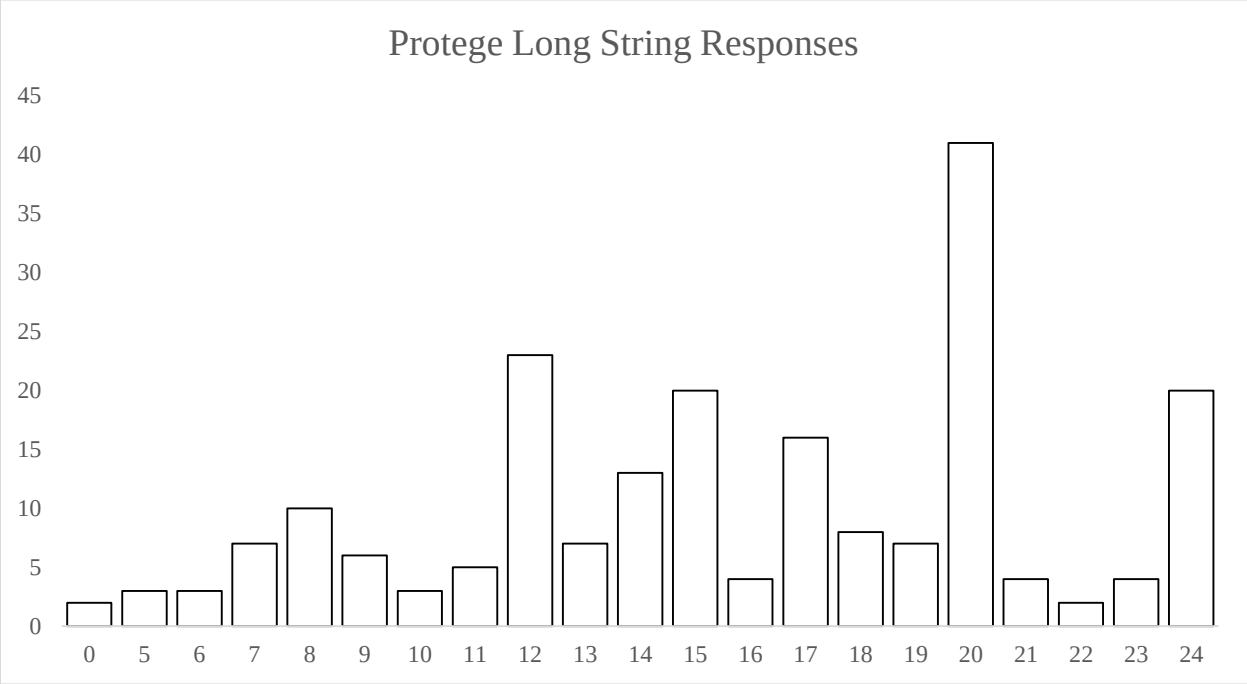


Figure 10. Mentor Long String Responses

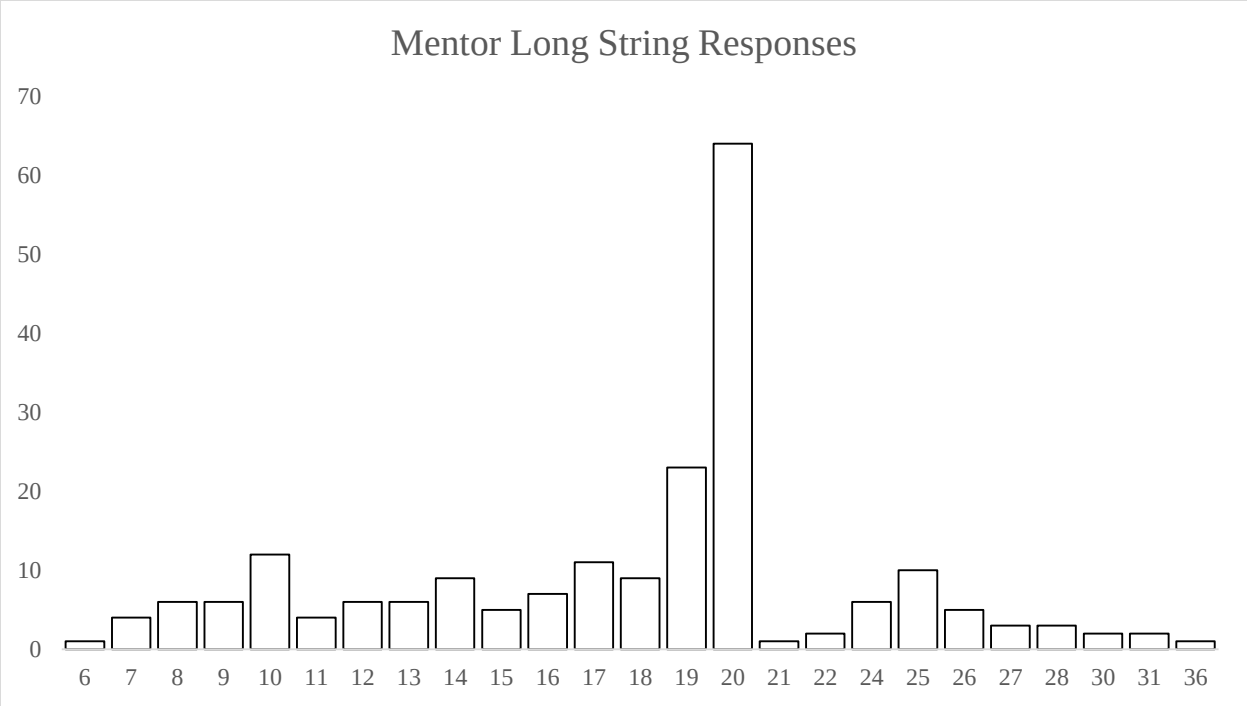


Figure 11. Protégé Total Flags

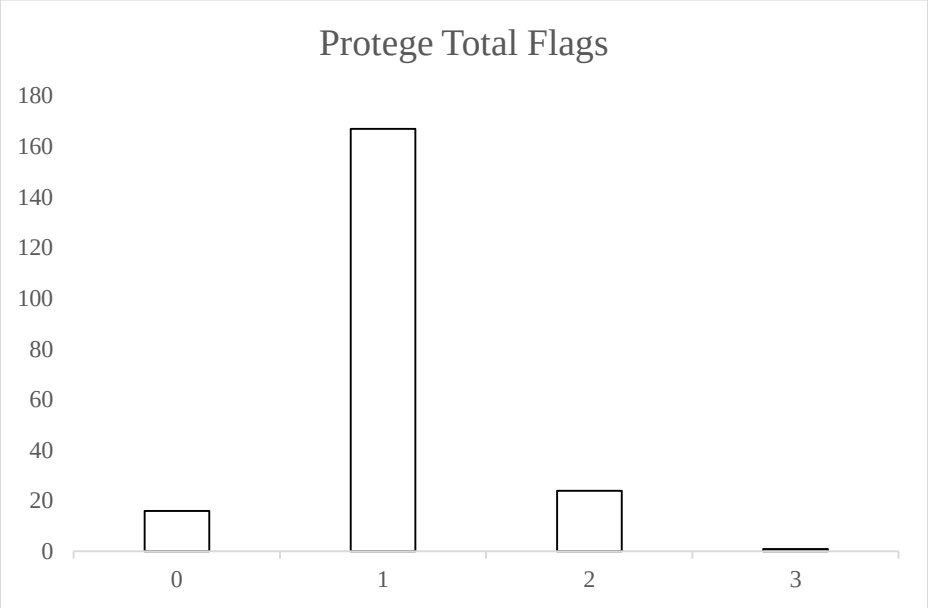


Figure 12. Mentor Total Flags

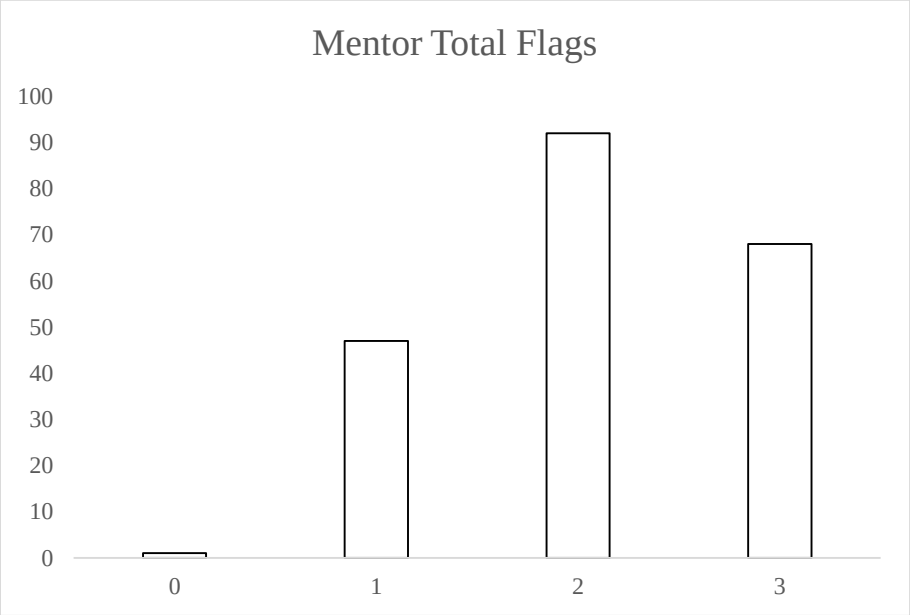


Figure 13. CFI Analysis

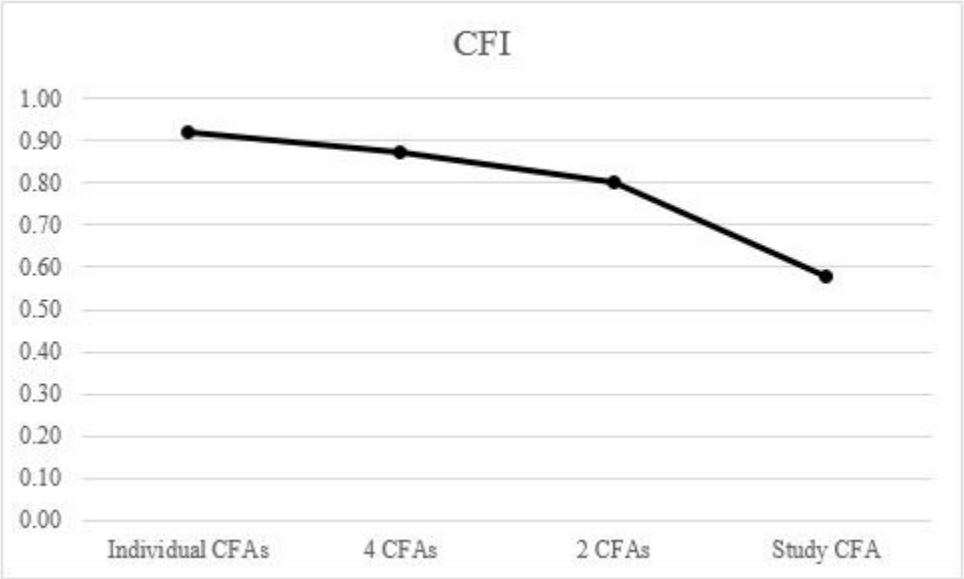


Figure 14. Parceling Theory

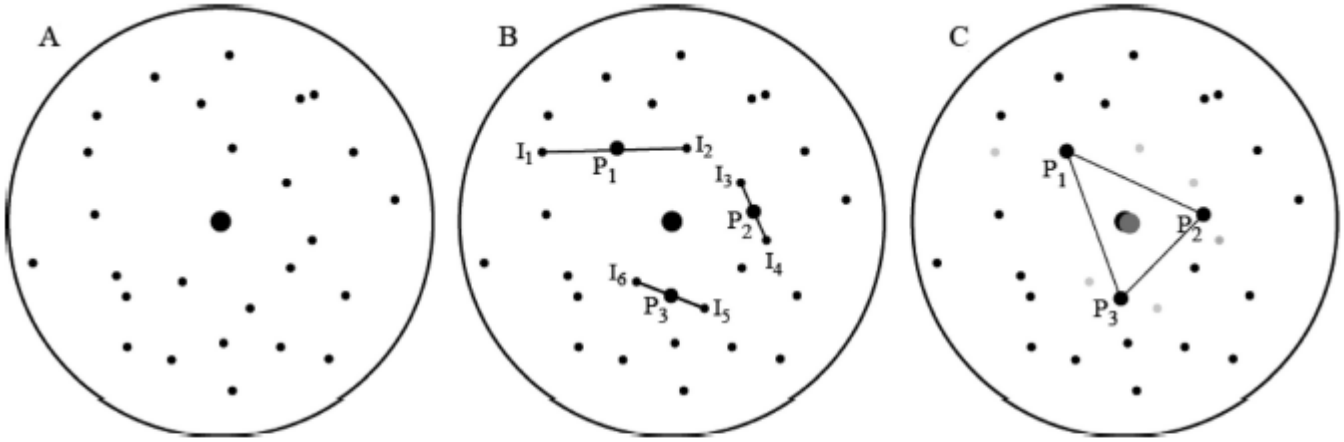


Figure 1. A geometric representation of how parceling works. Each circle represents the domain of possible indicators of a construct. The construct's "true" centroid is the larger dot in the center of each circle. The average of any two variables is the midpoint of a straight line, as depicted in B (the average of three or more indicators would be the geometric center of the area that they encompass). The latent construct that is indicated by the parcels is the center dot in gray that nearly overlaps the true centroid, as in C. From *Longitudinal Structural Equation Modeling* (p. 23), by T. D. Little, New York, NY: Guilford Press. Copyright 2013 by Todd D. Little. Reprinted with permission.

Note: This is copied from "Why the items versus parcels controversy needn't be one" (Little, Rhemtulla, Gibson, and Schoemann, 2013)

Figure 15. Measurement Model for *SEM*

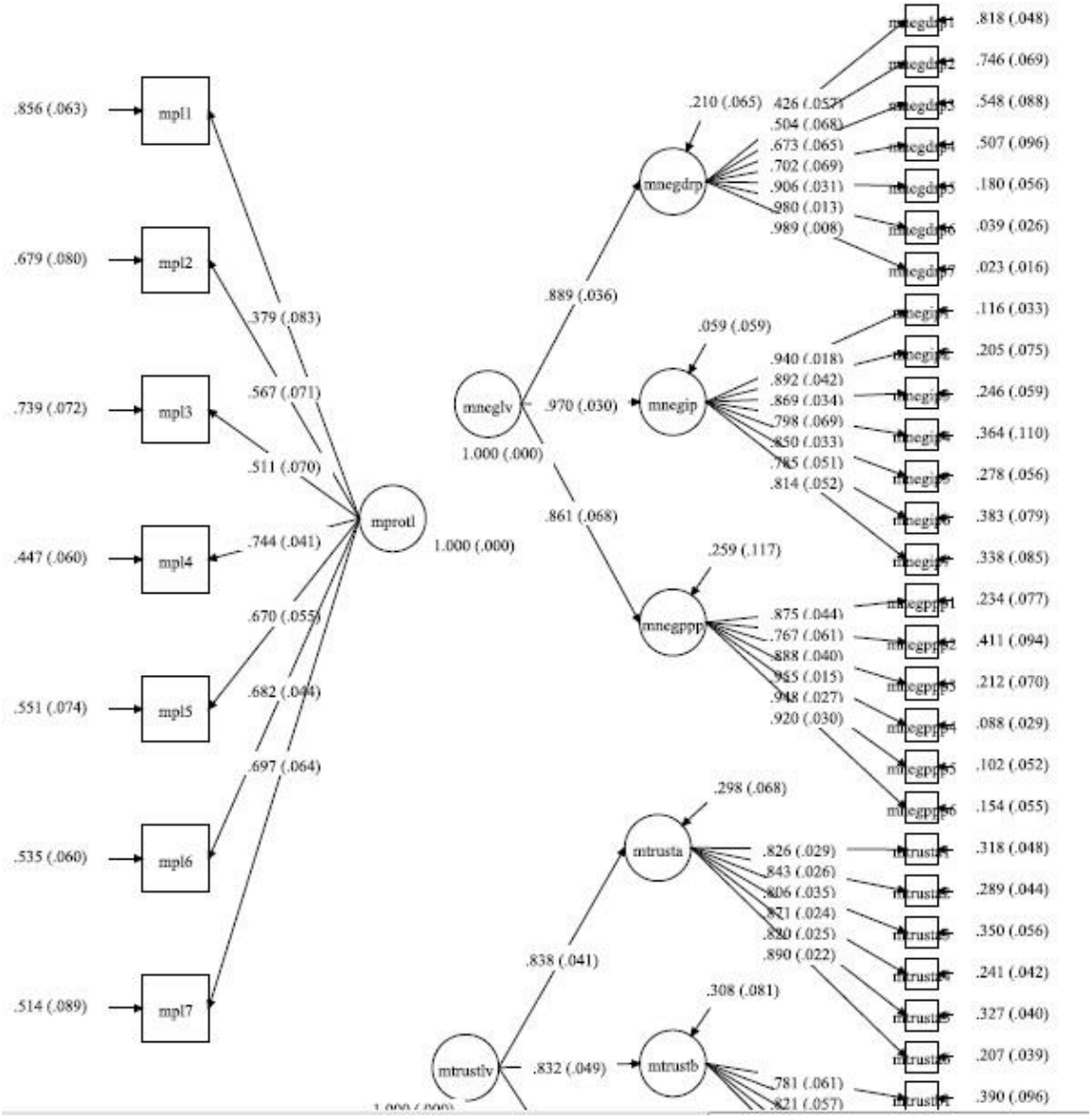


Figure 14. Measurement Model (Continued)

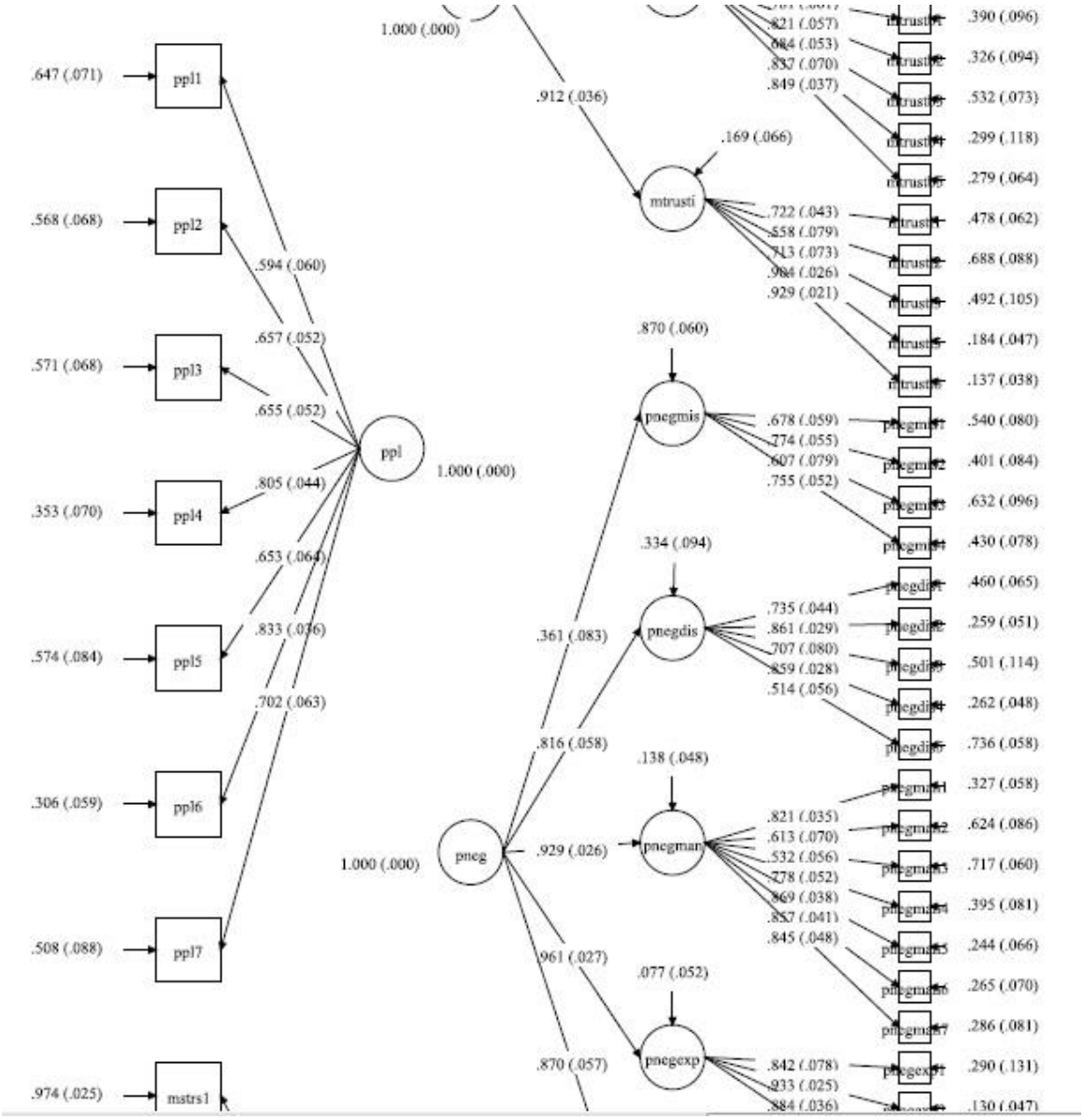


Figure 14. Measurement Model (Continued)

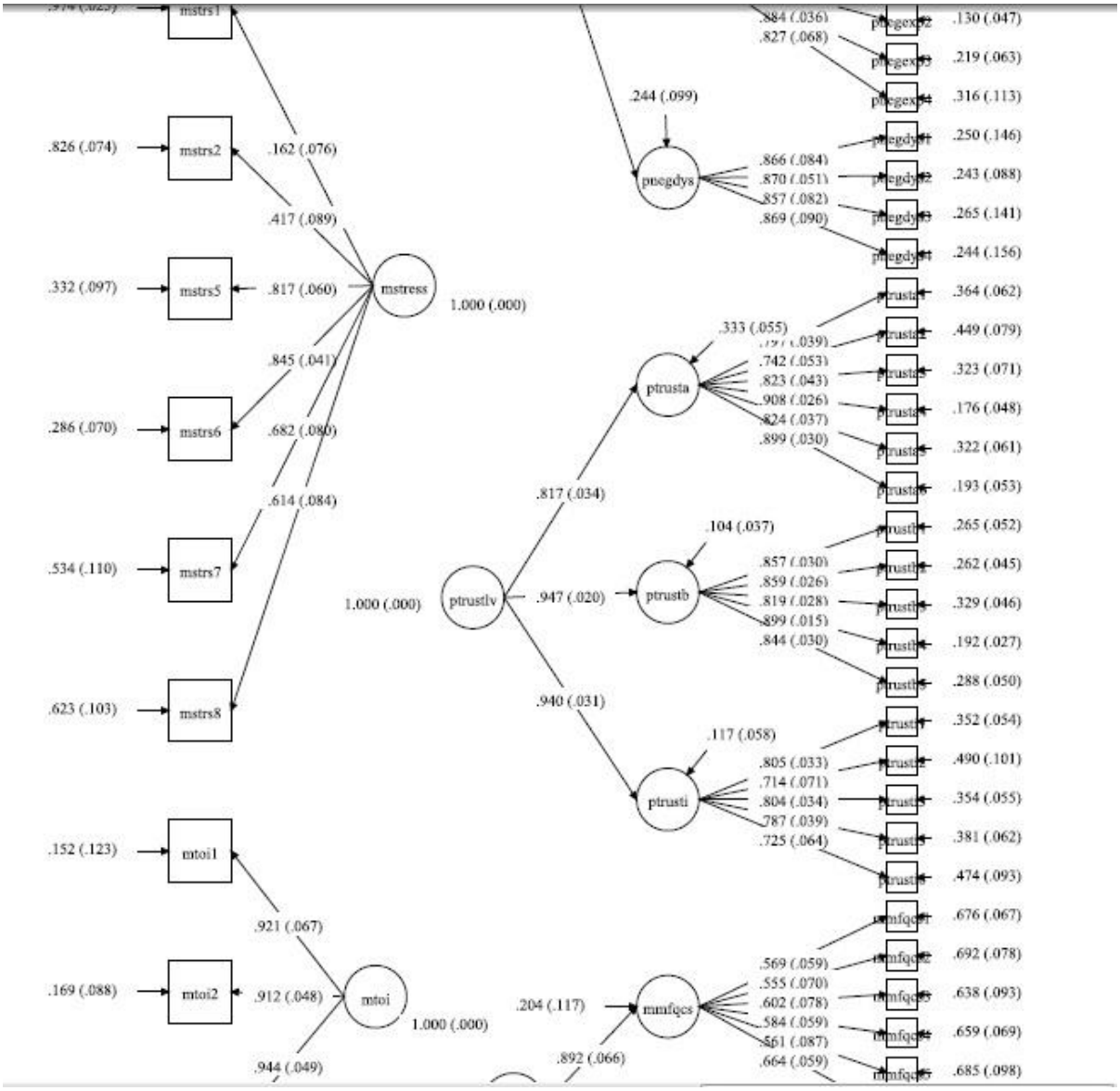


Figure 14. Measurement Model (Continued)

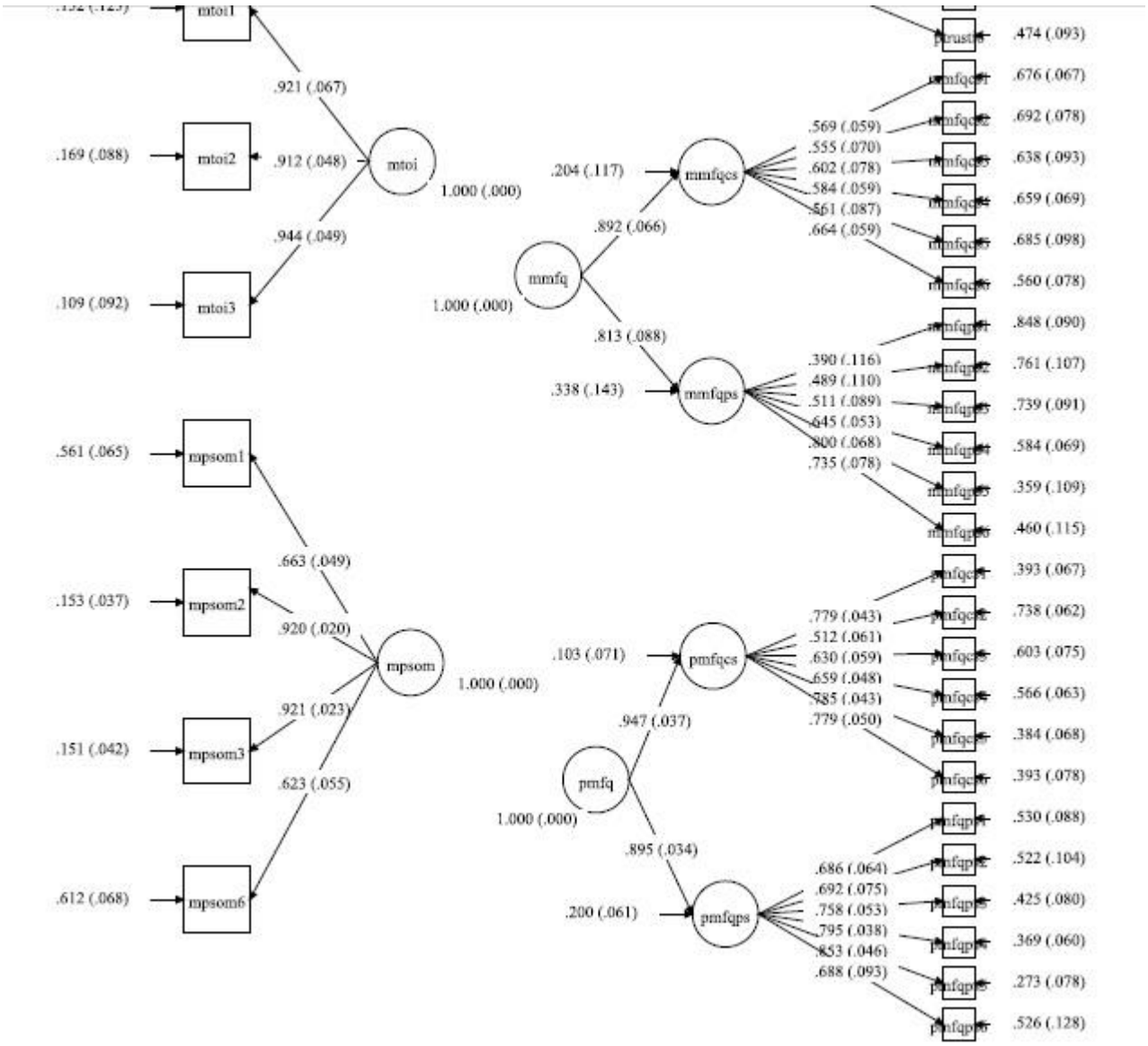


Figure 16. Full Structural Model with Perceived Support for Mentoring Moderator

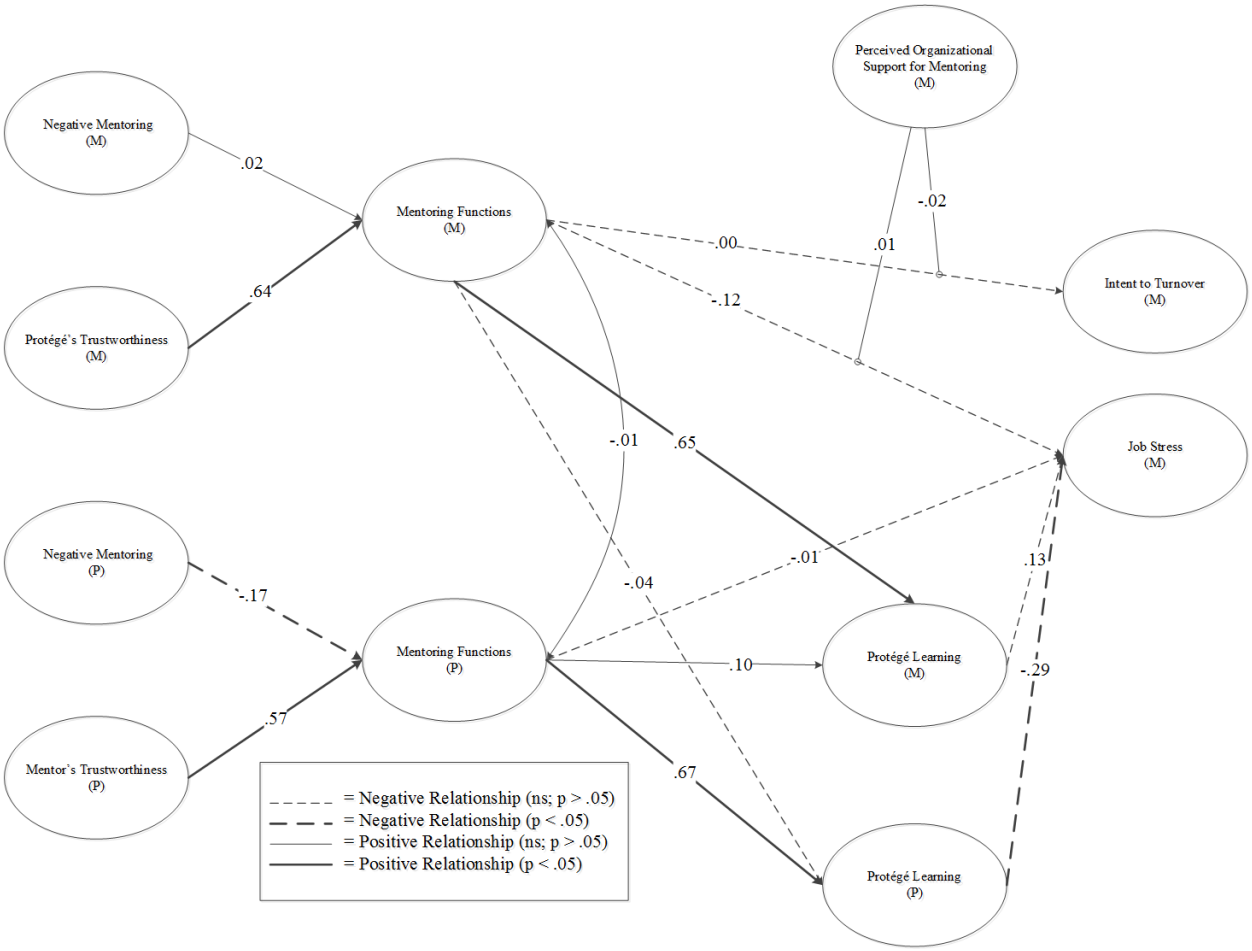


Figure 17. Final Structural Model without Perceived Support for Mentoring Moderator

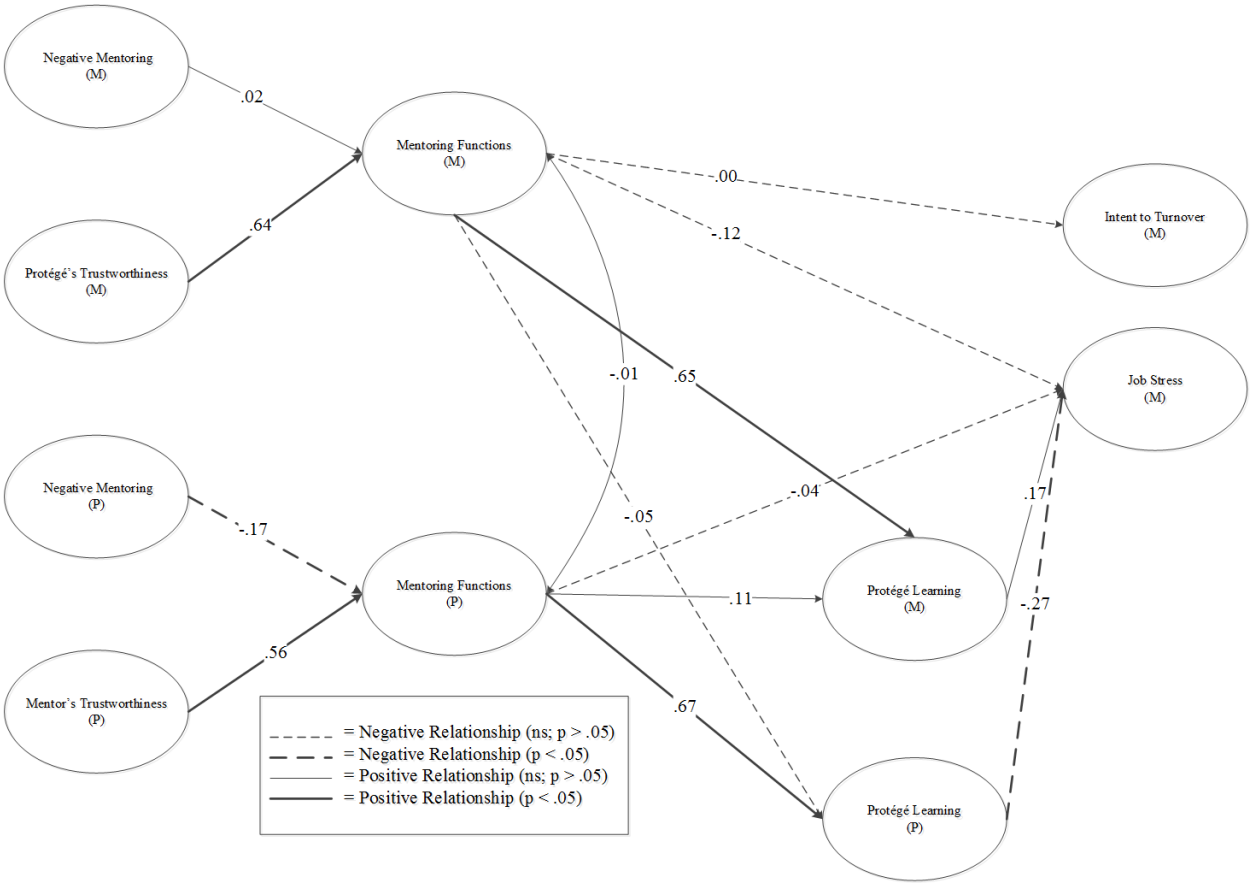


Figure 18. Final Structural Model without Perceived Support for Mentoring Moderator (Including Parcel Path Estimates)

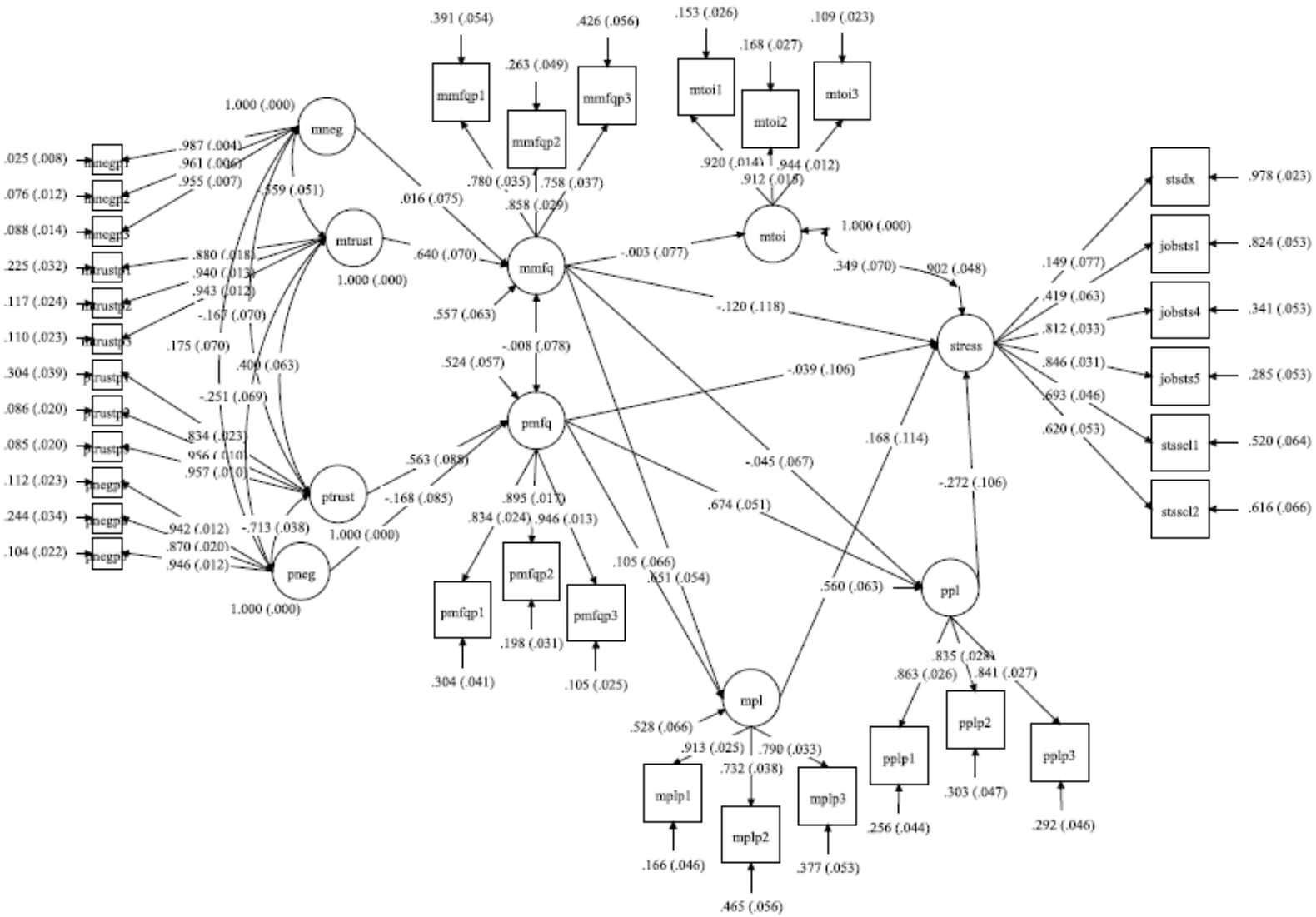


Figure 19. Alternate Model with a Dyadic Measure of Mentoring Functions

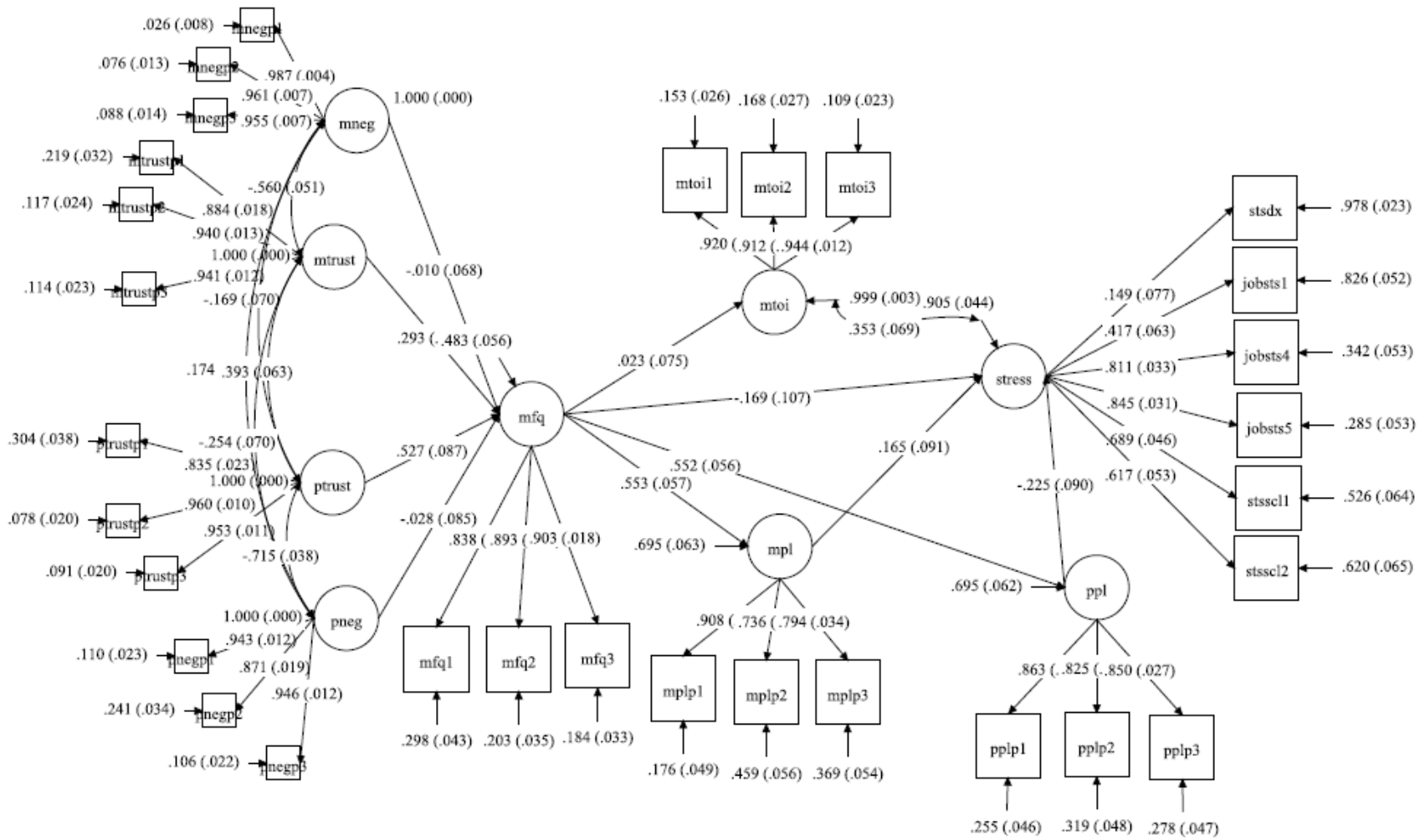


Figure 20. Alternate Model with Mentoring Stress Modeled Using *SMQ*

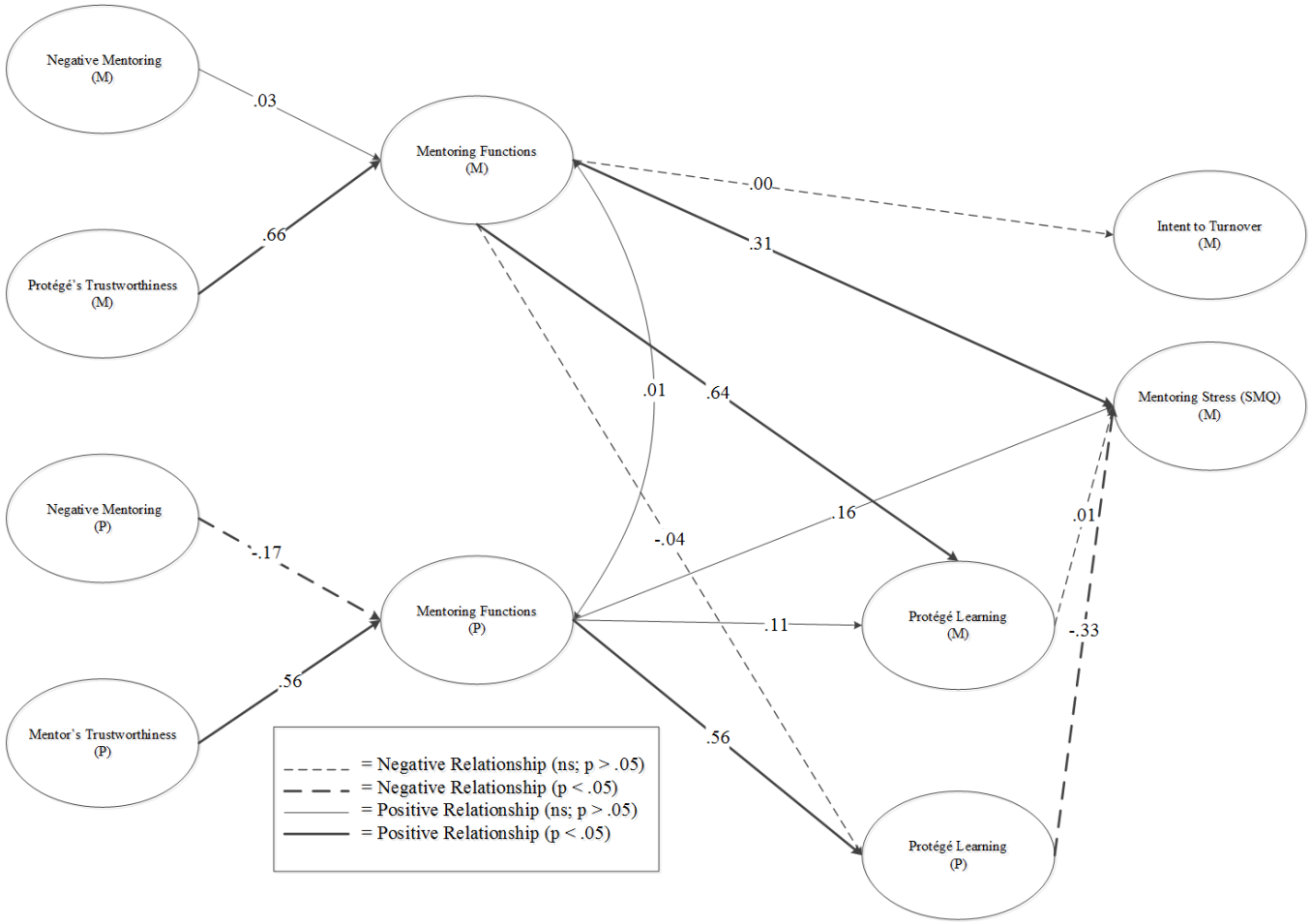


Figure 21. Curvilinear Relationship of Mentor-Reported Negative Mentoring and Mentor Functions

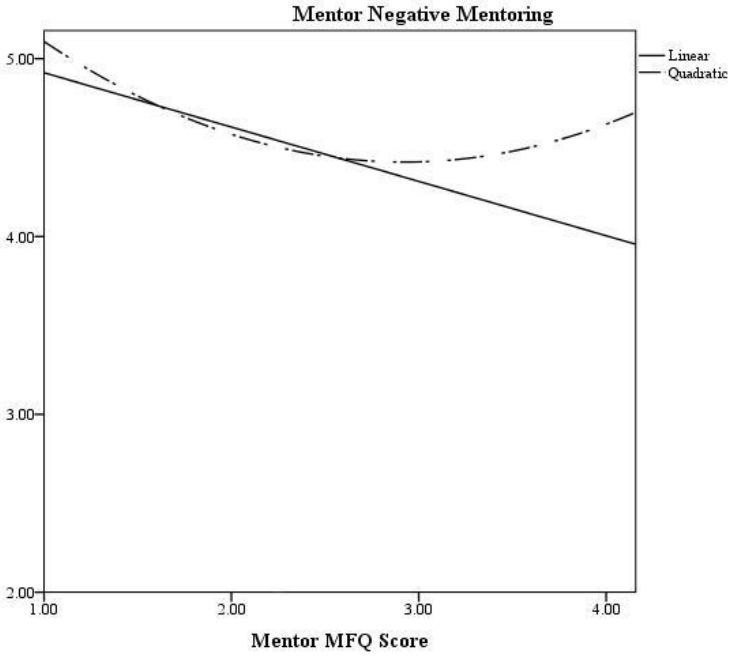
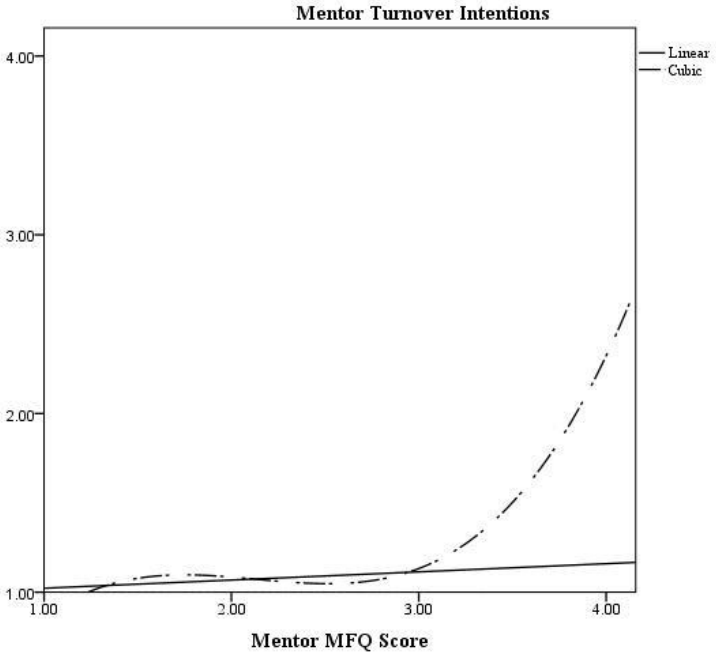


Figure 22. Curvilinear Relationship of Mentor Functions and Mentor Turnover Intentions



APPENDICES

Appendix A: Pilot Interview Protocol (Mentor Stress)

Participant's Name:

Date:

Step 1. General Mentoring Experience – Read the following definition of mentoring to the participant, *"A more experienced worker from your organization who takes an interest in your professional (and sometimes personal) development through interaction and two-way communication. Additionally, it is possible for a mentor to be a supervisor, but not specifically required."* Explain that for the purposes of this interview, he or she should keep this definition in mind.

1) *First, does this definition seem to be an accurate description of the mentoring experience to you? If not, how would you improve/change it?*

2) *How many individuals do you currently mentor?*

3) *How many individuals have you mentored at any one given time in the past?*

Step 2. Stressful Mentoring Experience – This set of questions deals with what parts of the mentoring experience cause stress to mentors. Each question has an open-ended answer, and participant answers should be recorded as completely as possible for qualitative analysis. Also, encourage the participant to be as detailed as possible in his or her answers.

1) *From your experience, what has caused you the most stress in your past or present mentoring relationships? What are the 5-6 things that have caused you the most stress? Why those?*

2) *Specific to your relationship with protégés (mentees), what parts of those relationships have caused you stress?*

3) *Specific to the involvement of your organization in your mentoring relationships, what has the organization done to either alleviate your stress or make it worse?*

4) *Is there anything regarding stress that you've felt as a mentor that isn't addressed by either the relationship with your protégé or the organization?*

Step 3: Closing the Interview – Thank the participant for his/her participation and provide an email address so that he/she can contact the interviewer if there are other things he/she thinks of later that would be of use regarding the topic.

Appendix B: Negative Mentoring – Mentor Perspective

Destructive Relational Patterns (5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

1. My protégé lets his/her personal goals take priority over the interests of others.
2. My protégé has a self-serving attitude.
3. My protégé acts like he/she is better than others.
4. My protégé sometimes distorts the truth.
5. My protégé attempts to "get back" at me.
6. My protégé is jealous of my work accomplishments.
7. My protégé seems to resent my success at work.

Source. Eby, Durley, Evans, & Ragins (2008)

Interpersonal Problems (5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

1. My protégé and I have difficulty interacting.
2. My protégé and I have conflicting personalities.
3. Our relationship suffers because of interpersonal conflicts.
4. I feel that our relationship is not as satisfying as it used to be.
5. Our mentoring relationship is going downhill.
6. My protégé is too reliant on me for work-related advice.
7. My protégé is too dependent on our mentoring relationship.

Source. Eby, Durley, Evans, & Ragins (2008)

Protégé Performance Problems (5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

1. My protégé does not do high quality work.
2. My protégé has performance problems on the job.
3. My protégé performance does not meet my expectations.
4. My protégé does not seem willing to learn.
5. My protégé does not seem interested in learning better ways of doing things.
6. My protégé is reluctant to change his/her behavior in response to feedback.

Source. Eby, Durley, Evans, & Ragins (2008)

Appendix C: Negative Mentoring – Protégé Perspective

Mismatch Within the Dyad (5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

1. My mentor and I have different life priorities.
2. My mentor and I have different work habits.
3. My mentor and I have a different understanding of effective work performance.
4. My mentor and I have different personal dispositions.

Source. Eby, Butts, Lockwood & Simon (2004)

Distancing Behavior (5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

1. My mentor is reluctant to talk about things that are important to me.
2. My mentor seems to have "more important things to do" than to meet with me.
3. When I interact with my mentor he/she does not give me his/her full attention.
4. My mentor is more concerned about his/her own career than helping me develop in mine.
5. My mentor does not include me in important meetings.

Source. Eby, Butts, Lockwood & Simon (2004)

Manipulative Behavior (5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

1. My mentor "pulls rank" on me.
2. I am intimidated by my mentor.
3. My mentor is unwilling to delegate responsibility to protégés.
4. My mentor asks me to do his/her "busy work."
5. My mentor has intentionally hindered my professional development.
6. My mentor has undermined my performance on tasks or assignments.
7. When I am successful, my mentor takes more credit than he/she deserves.

Source. Eby, Butts, Lockwood & Simon (2004)

Lack of Mentor Expertise (5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

1. My mentor lacks expertise in areas that are important for the type of work he/she does.
2. I have my doubts about my mentor's job-related skills.
3. My mentor can't teach me anything I don't already know.
4. My mentor does not communicate well.

Source. Eby, Butts, Lockwood & Simon (2004)

General Dysfuctionality (5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

1. My mentor has a bad attitude.
2. My mentor tends to bring his/her personal problems to work.
3. My mentor approaches tasks with a negative attitude.
4. My mentor complains a lot about the organization.

Source. Eby, Butts, Lockwood & Simon (2004)

Appendix D: Job Stress Measure (Mentor Perspective)

Job Stress Scale (5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

1. My relationship with my protégé rarely tends to directly affect my health.
2. I have felt fidgety or nervous as a result of my relationship with my protégé. (R)
3. If I had a different protégé, my health would probably improve. (R)
4. Problems associated with my protégé have never kept me awake at night.
5. I have never felt nervous before attending meetings with my protégé.

Source. Harris & Bladen (1994)

Stress Scale (5-point Likert; 1 = strongly agree – 5 = strongly disagree)

1. The stress of my relationship with my protégé rarely causes me to feel dissatisfied with mentoring.
2. The stress of my relationship with my protégé rarely makes me want to end the relationship.

Source: Viswesvaren, Sanchez, & Fisher (1999)

Stress Diagnostic Scale

Instructions: Answer the following question using the associated answer choices that describe how frequently your mentoring relationship is a source of stress.

"My mentoring relationship is _____ a source of stress."

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

Source. Ivancevich & Matteson (1980)

Appendix E: Turnover Intentions (Mentor Perspective and Mentoring-Related)

Turnover Intentions (7-point Likert scale; 1 = Almost never – 7 = Almost always)
Over the past year, because of your role as a mentor, how frequently have you (1 = almost never; 7 = almost always):

1. …had thoughts of quitting.
2. …considered searching for another job.
3. …intended to quit.

Source: Luchak & Gellalty (2007)

Appendix F: Trust Scales (Mentor Perspective)

Measures of Trust and Trustworthiness (5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

Ability

1. My protégé is very capable of performing his or her job.
2. My protégé is known to be successful at the things she or he tries to do.
3. My protégé has much knowledge about the work that needs done.
4. I feel very confident about my protégé's skills.
5. My protégé has specialized capabilities that can increase our performance.
6. My protégé is well qualified.

Benevolence

1. My protégé is very concerned about my welfare.
2. My needs and desires are very important to my protégé.
3. My protégé would not knowingly do anything to hurt me.
4. My protégé really looks out for what is important to me.
5. My protégé will go out of his or her way to help me.

Integrity

1. My protégé has a strong sense of justice.
2. I never have to wonder whether my protégé will stick to his or her word.
3. My protégé tries hard to be fair in dealings with others.
4. My protégé's actions and behaviors are not very consistent. (R)
5. I like my protégé's values.
6. Sound principles seem to guide my protégé's behavior.

Propensity to Trust

1. One should be very cautious with strangers.
2. Most experts tell the truth about the limits of their knowledge.
3. Most people can be counted on to do what they say they will do.
4. These days, you must be alert or someone is likely to take advantage of you.
5. Most salespeople are honest in describing their products.
6. Most repair people will not overcharge people who are ignorant of their specialty.
7. Most people answer public opinion polls honestly.
8. Most adults are competent at their jobs.

Source. Schoorman, Mayer, and Davis (1996)

Trust Scales (Protégé Perspective)

Measures of Trust and Trustworthiness (5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

Ability

1. My mentor is very capable of performing his or her job.
2. My mentor is known to be successful at the things she or he tries to do.
3. My mentor has much knowledge about the work that needs done.
4. I feel very confident about my mentor's skills.
5. My mentor has specialized capabilities that can increase our performance.
6. My mentor is well qualified.

Benevolence

1. My mentor is very concerned about my welfare.
2. My needs and desires are very important to my mentor.
3. My mentor would not knowingly do anything to hurt me.
4. My mentor really looks out for what is important to me.
5. My mentor will go out of his or her way to help me.

Integrity

1. My mentor has a strong sense of justice.
2. I never have to wonder whether my mentor will stick to his or her word.
3. My mentor tries hard to be fair in dealings with others.
4. My mentor's actions and behaviors are not very consistent. (R)
5. I like my mentor's values.
6. Sound principles seem to guide my mentor's behavior.

Propensity to Trust

1. One should be very cautious with strangers.
2. Most experts tell the truth about the limits of their knowledge.
3. Most people can be counted on to do what they say they will do.
4. These days, you must be alert or someone is likely to take advantage of you.
5. Most salespeople are honest in describing their products.
6. Most repair people will not overcharge people who are ignorant of their specialty.
7. Most people answer public opinion polls honestly.
8. Most adults are competent at their jobs.

Source. Schoorman, Mayer, and Davis (1996)

Appendix G: Mentoring Functions Measure

Mentoring Functions Questionnaire (Revised MFQ-15; 5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

Career Support

1. My mentor takes a personal interest in my career.
2. My mentor has placed me in important assignments.
3. My mentor gives me special coaching on the job.
4. My mentor advised me of promotional opportunities.
5. My mentor helps me coordinate professional goals.
6. My mentor has devoted special time and consideration to my career.

Psychosocial Support

1. I share personal problems with my mentor.
2. I exchange confidences with my mentor.
3. I consider my mentor to be a friend.
4. I try to model my behavior after my mentor.
5. I admire my mentor‘s ability to motivate others.
6. I respect my mentor‘s ability to teach others.

Source. Scandura and Ragins (1993)

Mentoring Functions Measure (Mentor Version)

Mentoring Functions Questionnaire (Revised MFQ-15; 5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

Career Support

1. I take an interest in my protégé's career.
2. I place my protégé in important assignments.
3. I give my protégé special coaching on the job.
4. I advise my protégé of promotional opportunities.
5. I help my protégé coordinate professional goals.
6. I have devoted special time and consideration to my protégé's career.

Psychosocial Support

1. My protégé shares personal problems with me.
2. My protégé exchanges confidences with me.
3. I consider my protégé to be a friend.
4. My protégé tries to model my behavior.
5. My protégé admires my ability to motivate others.
6. My protégé respects my ability to teach others.

Source. Scandura and Ragins, 1993

Appendix H: Perceived Support for Mentoring Scale

Perceived Support for Mentoring Scale (5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

1. Top management in this organization serves as a role model for mentors.
2. The organization encourages employees to be mentors.
3. This organization promotes mentoring opportunities.
4. There are few rewards available in this organization for mentoring others (R).
5. Mentors in this organization receive little recognition for their efforts (R).
6. Mentoring relationships are not reinforced by the leaders in this organization (R).

Source. Eby, Lockwood, & Butts (2006)

Appendix I: Personal Learning Measure

Perceived Learning Measure (5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

1. My protégé has gained insight into how another department functions.
2. My protégé has increased his/her knowledge about the organization as a whole.
3. My protégé has a better sense of organizational politics.
4. My protégé has learned how to communicate effectively with others.
5. My protégé has developed new ideas about how to perform his/her job.
6. My protégé has become more sensitive to others' feelings and attitudes.
7. My protégé has gained new skills.

Source. Lankau & Scandura (2002)

Personal Learning Measure (Protégé Perspective)

Perceived Learning Measure (5-point Likert scale; 1 = strongly agree – 5 = strongly disagree)

1. I have gained insight into how another department functions. .
2. I have increased my knowledge about the organization as a whole.
3. I have a better sense of organizational politics.
4. I have learned how to communicate effectively with others.
5. I have developed new ideas about how to perform my job.
6. I have become more sensitive to others' feelings and attitudes.
7. I have gained new skills.

Source. Lankau & Scandura (2002)

Appendix J: Demographics and Control Variables Measure (Mentor)

Participant Information

1. The length of this mentoring relationship is _____ months.
2. Was your mentoring relationship initiated by:
    a. Self
    b. Protégé
    c. Both
    d. Formal Organizational Program
3. What is your protégé's position in relation to you:
    a. Immediate subordinate
    b. Subordinate outside my chain of command
    c. Member of another organization
    d. Peer
    e. Subordinate within my chain of command
    f. Other; Please specify _____
4. What is your gender?
    a. Male
    b. Female
5. What is your race?
    a. Hispanic or Latino
    b. Black or African American
    c. White
    d. Asian
    e. American Indian or Alaska Native
    f. Native Hawaiian or Other Pacific Islander
    g. Some other race; Please specify _____
6. What is your age?
    a. 18 - 24 years
    b. 25 - 29 years
    c. 30 - 34 years
    d. 35 - 39 years
    e. 40 - 44 years
    f. 45 - 49 years
    g. 50 - 54 years
    h. 55 - 59 years
    i. 60 - 64 years
    j. 65 - 69 years
    k. 70 - 74 years
    l. 75 - 79 years
    m. More than 80 years
7. What is your highest level of education?
    a. High School
    b. Some College (non-degreed)
    c. Associates Degree
    d. Bachelor's Degree

e. Some Graduate School (non-degreed)
f. Master's Degree
g. Doctorate

8. What is your current salary?
    a. Less than $30,000 per year
    b. $30,001 to $50,000 per year
    c. $50,001 to $80,000 per year
    d. $80,001 to $100,000 per year
    e. $110,001 to $130,000 per year
    f. $130,001 to $150,000 per year
    g. More than $150,001 per year
9. How long have you been at your current employer? _____years _____ months
10. How long have you been in your current position? _____years _____ months
11. How long, in total, during your career, have you acted as a mentor? _____years _____ months
12. How many protégés do you currently mentor? _____

Appendix K: Demographics and Control Variables Measure (Protégé)

Participant Information

1. Do you currently have a mentor? Yes or No
2. The length of this mentoring relationship is _____ months.
3. Was your mentoring relationship initiated by:
    a. Self
    b. Mentor
    c. Both
    d. Formal Organizational Program
4. What is your mentor's position in relation to yours:
    a. Immediate supervisor
    b. Superior outside my chain of command
    c. Member of another organization
    d. Peer
    e. Superior within my chain of command
    f. Other; Please specify _____
5. What is your gender?
    a. Male
    b. Female
6. What is your race?
    a. Hispanic or Latino
    b. Black or African American
    c. White
    d. Asian
    e. American Indian or Alaska Native
    f. Native Hawaiian or Other Pacific Islander
    g. Some other race _____
7. What is your age?
    a. 18 - 24 years
    b. 25 - 29 years
    c. 30 - 34 years
    d. 35 - 39 years
    e. 40 - 44 years
    f. 45 - 49 years
    g. 50 - 54 years
    h. 55 - 59 years
    i. 60 - 64 years
    j. 65 - 69 years
    k. 70 - 74 years
    l. 75 - 79 years
    m. More than 80 years
8. What is your highest level of education?
    a. High School
    b. Some College (non-degreed)
    c. Associates Degree

d. Bachelor's Degree
e. Some Graduate School (non-degreed)
f. Master's Degree
g. Doctorate

9. What is your current salary?
    a. Less than $30,000 per year
    b. $30,001 to $50,000 per year
    c. $50,001 to $80,000 per year
    d. $80,001 to $100,000 per year
    e. $110,001 to $130,000 per year
    f. $130,001 to $150,000 per year
    g. More than $150,001 per year

10. How long have you been at your current employer? _____years _____ months

11. How long have you been in your current position? _____years _____ months