

THESIS

ANTECEDENTS AND OUTCOMES OF
TRUST IN THE MENTORING RELATIONSHIP

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ABSTRACT

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The purpose of the present study is to uncover how trust in mentoring relationships is influenced by mentor support and how trust influences positive outcomes for mentees: well-being, higher relationship quality, and job engagement. This study has a cross-sectional, survey design, using a sample of mentees, or protégés, from a Qualtrics study panel. All mentees were full-time employees, representative of the U.S. workforce, and were in the same organization as their mentor. I found that mentor support had a positive direct effect of trust and relationship quality and most interestingly that trust explained the relationship between mentor support and relationship quality and some components of well-being. No significant results were found regarding job engagement. These results have important implications for research and practice; they extend the current literature on Leader-Member Exchange, mentoring, and trust and have important implications for implementing formal mentoring programs.

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INTRODUCTION

In the current corporate environment, employees are stressed and disengaged from their work. Sixty-nine percent of working adults say that work is a major stressor, only 36% of working adults feel they have enough resources to mitigate these stressors, and a large portion of employees are not engaged in their work (Gavett, 2014). As Cartwright and Holmes (2006) argued, this could partly be the result of a lack of trust between employees and their employer as 24% of employees report not trusting their employers (Gavett, 2014). Poor relationships with one's supervisor or the organization itself contribute to feelings of malaise, stress, dissatisfaction, low motivation, as well as work outcomes such as burnout and low productivity (Cartwright & Holmes, 2006). As a result, organizations must seek strategies to improve employee well-being and influence other positive work outcomes through improving trust.

Mentoring is one such tactic to create trust and improve employee outcomes. Research suggests that mentoring programs can facilitate positive organizational outcomes and positive work outcomes for both mentors and mentees (Chao, Walz, & Gardner, 1992; Eby, Allen, Evans, Ng, & DuBois, 2008; Raabe & Beehr, 2003; Underhill, 2006; Wanberg, Kammeyer-Mueller, & Marchese, 2006). However, there are gaps in our understanding of how mentoring works. Consistent with previous theory and research, mentoring can reduce job strain and increase well-being and productivity at work. Specifically, the Job Demand Resource model (JD-R) model extends extant mentoring research beyond performance outcomes and incorporates important employee health outcomes. Additionally, research is lacking in how mentoring as a source of support may lead to positive outcomes for the mentee. Trust is one potential explanation because

it is the basis of meaningful relationships and serves as a potential explanation for improving mentee outcomes.

Considering these issues within the work environment and gaps in the mentoring literature, my study addresses how mentoring improves the working life of mentees in a professional setting. More specifically, I examine how mentor support influences trust in the mentoring relationship, relationship quality, mentee well-being, and mentee engagement grounded in Job Demand Resource model (JD-R) and the Leader-Member Exchange Model (LMX). Based on LMX and the mentoring literature, I explore relationships among mentor support, trust, and relationship quality. I also explore the mediating role of trust between mentoring and positive mentoring outcomes. Based on JD-R, I explore relationships among mentor support, well-being and engagement. Addressing the relationships among mentor support, relationship quality, and trust demonstrates direct benefits of mentor support, as well as illuminates the influence of trust in the mentoring relationship on mentoring outcomes. Finally, my study contributes to the mentoring research by integrating JD-R and LMX to explain relationships between mentor behaviors and health related outcomes. In the next section I address the theoretical underpinnings of the relationships among the aforementioned variables and present my hypotheses.

THEORY AND HYPOTHESES

Mentoring

Mentoring refers to a relationship between a mentor, or a person with expertise, and mentee or protégé, or person with less experience that leads to the professional and psychosocial development of the latter (Kram, 1985). Eby, Rhodes, and Allen (2007) added that mentoring is a unique relationship between two people that changes over time, in which the mentor provides different types of support (most often career and psychosocial support), and both the mentor and protégé can learn from each other and gain benefits, with the main focus on protégé benefits. Mentoring can be one of the most formative relationships in an individual's professional growth at any stage in their career (Eby et al., 2007; Kram & Hall, 1991). A mentor can be anyone – a supervisor, coworker, someone outside of the mentee's chain of command or even someone at another organization (Eby et al., 2007; Eby et al. 2008).

Research suggests that mentored individuals have significant benefits over individuals that are not mentored (Allen, Eby, & Lentz, 2006; Allen et al., 2004; Chao et al., 1992; Kram & Ragins, 2007; Ragins & Cotton, 1999; Ragins, Cotton, & Miller, 2000; Underhill, 2006). More specifically, those that are mentored show higher career satisfaction (Allen et al., 2004) and higher salaries compared to non-mentored individuals (Kram & Ragins, 2007). Mentoring has been shown to have a positive impact on protégé outcomes including job satisfaction, organizational commitment, salary, and work attitudes (Allen & Eby, 2003; Kram & Ragins, 2007; Raabe & Beehr, 2003; Ragins et al., 2000). Organizations increasingly implement mentoring programs because of these benefits (Allen, Poteet, Eby, Lentz, & Lima, 2004; Eby et al., 2008; Forret, Turban, & Dougherty, 1996). Mentoring training can even be useful to develop

employee leadership skills (Forret et al., 1996). However, this begs the question what exactly makes mentoring an effective organizational strategy.

Mentor Support

Mentoring effectiveness is thought to be dependent on the type of mentor support a mentor provides. That is, mentor support in the form of mentor functions (i.e. career or psychosocial support) may be directly related to mentoring outcomes such as protégé satisfaction and performance (Kraiger, Finkelstein, & Varghese, 2019). However, we need to better understand how mentor support influences mentoring outcomes. In my study, I look explicitly at the direct links between mentor support and mentoring outcomes, as well as an indirect link through trust as a potential mediator.

Mentor support involves behaviors on the part of the mentor that help the mentee. Mentor support can include providing feedback, helping the mentee network, providing advice, connecting the mentee to job opportunities, and listening to the mentee's work or interpersonal issues (Kraiger et al., 2019). The more support the mentor provides the mentee, the more the mentee experiences psychological safety within their relationship with the mentor and establishes trust within the mentoring relationship. More specifically, the mentee feels they can rely on the mentor for resources. Additionally, as the mentee completes tasks, demonstrating competence, the mentor is encouraged to continue providing the mentee with resources because the mentor believes and trusts the mentee is utilizing their support and can actually finish tasks.

Mentor functions help explain the types of support mentors provide in the mentoring relationship that lead to positive outcomes. Kram (1985) first delineated several key components of mentoring - identifying career and psychosocial support - as primary mentor functions (Eby et al., 2007). Career or instrumental functions increase a mentee's professional success through

providing feedback, coaching, sponsorship, and assigning challenging tasks. Psychosocial functions build trusting and strong relationships through building a mentee's confidence, role modeling, acceptance, friendship, and counseling. The mentor's relation to the organization, such as status or position within an organization, matters more to career support, while emotional bonding matters more to psychosocial functions. Under Kram's conceptualization, role modeling was a component of psychosocial support and involves viewing the mentor as an example. However, later conceptualizations of mentor functions treated role modeling as a separate dimension (Scandura, 1992). Role modeling is the mentor's influence on the mentee, evident when the mentee admires and tries to emulate their mentor's behaviors.

Research supports that different mentor functions lead to various mentoring outcomes such as satisfaction, relationship quality, salary, and performance (Kram & Ragins, 2007; Noe, 1988; Scandura, 1992). Career support leads to higher task performance while psychosocial support relates more to satisfaction with the mentor, and relationship satisfaction (Allen et al., 2004). It is important to note that both functions relate to job and career satisfaction (Allen et al., 2004).

In addition to mentor functions predicting different types of outcomes, the mentoring relationship varies across functions. Mentors vary in how much career and psychosocial support they provide because protégés have different needs, mentors have different capabilities and needs, every relationship varies in quality, among various organizational constraints (i.e. few resources for development) (Kram & Ragins, 2007; Noe, 1988; Scandura, 1992). Mentor functions also vary depending on whether the mentoring program is formal or informal. Informal mentoring is a spontaneous relationship without organizational management, structure or formalization, while formal mentoring involves organizational regulation, intervention, and

assigning the mentor-mentee pairs (Forret et al., 1996; Raabe & Beehr, 2006; Ragins et al., 2000; Underhill, 2006). Research shows that formal mentoring programs provide fewer mentor functions compared to informal mentoring programs (Chao, Walz, & Gardner, 1992; Ragins & Cotton, 1999). Mentor functions also change over time, meaning a mentor provides more or less career or psychosocial support as the relationship progresses (Kram, 1985). Finally, even managers can provide mentor functions, emphasizing the earlier point that anyone can mentor and allows cross-comparisons between mentor support and leadership (Kram & Ragins, 2007).

Current evidence supports the claim that mentor functions can influence various mentoring outcomes. JD-R supposes that mentor functions serve as a form of support that will help employees achieve a more satisfying career and health benefits. Incorporating JD-R further suggests the mentoring literature should broaden its outcomes to personal and professional benefits such as relationship quality, well-being, and engagement.

Additionally, while research on mentor functions shows promising evidence that mentor support leads to mentoring outcomes, researchers need to better understand the mechanisms linking support and outcomes. According to LMX, trust may help explain why mentors and mentees continue to invest in their relationships and exchange resources, and as shown in Figure 1. In subsequent sections I will further discuss how mentor support relates to the mentoring outcomes and propose that trust mediates the relationship between mentor support and these outcomes.

Determinants of Mentoring Outcomes

Figure 1 shows the proposed relationships among mentor support, trust in the mentor, and three outcome variables - relationship quality, well-being, and job engagement. The figure shows that mentor support should have direct effects on the outcome variables - relationship quality

well-being, and job engagement - each from the perspective of the mentee. Additionally, trust in the mentor will have a positive relationship with each of the outcome variables (relationship quality, well-being, and job engagement). Finally, I predict trust in the mentor partially mediates the relationship between mentor support and mentoring outcomes. Theoretical support for the proposed model comes from the integration of two established theories in the organizational psychology literature: LMX and JD-R. In the following sections, I describe these theories in more depth and build on these theories to support my hypotheses.

Leader-Member Exchange Theory

To build on the conceptual model described above, I draw on theory from the mentoring and leadership literatures. Many researchers have noted the parallels between mentoring and Leader-Member Exchange (e.g. Bozeman & Feeney, 2008; Ensher, Thomas, & Murphy, 2001; Raabe & Beehr, 2003). Both bodies of research describe dyadic relationships and are based in Social Exchange Theory (Ensher et al., 2001). More specifically, these literatures suggest a reciprocal relationship between developing trust and providing resources. In both relationships the supervisory/mentor role has a responsibility for the success of the subordinate/mentee. Additionally, many mentor functions resemble LMX dimensions. For example, mentor psychosocial support resembles the affect dimension in LMX (Raabe & Beehr, 2003). In this example, the mentor is responsible for the mentee's success leading them to provide a resource and thus create trust within the LMX framework.

The Leader-Member Exchange model is based on Graen and colleagues' Vertical Dyad Linkage Theory (Dansereau, Cashman, & Graen, 1973; Graen & Uhl-Bien, 1992). LMX proposes that through Social Exchange Theory, leaders and members form relationships in which either partner's behavior influences the other. As leaders provide support to their subordinates,

this creates trust in their relationship and encourages the subordinate to increase their performance in exchange. In more trusting relationships, called the in-group, leaders provide more resources (i.e. time) compared to less trusting relationships, the out-group. Applied to my model (Figure 1), the LMX literature suggests that as mentors provide support to their protégé, trust is created. In more trusting relationships, mentors provide more resources (which should result in greater mentoring outcomes). Additionally, this is a bi-directional relationship because greater mentee productivity and performance influence the degree of mentor trust and thus the amount of resources mentors provide, such as feedback (Wang & Hsieh, 2013). As LMX suggests, mentor support and trust in the mentor will have a reciprocal relationship. However, I do not explicitly examine the reciprocal nature of this relationship in the present study. Similar to what the mentoring literature refers to as high-quality mentoring relationships, high quality leader-manager exchanges require respect, trust, and obligation (Graen & Uhl-Bien, 1995). So, an integral component of good leader-member exchanges is the trust and quality of the relationship in that dyad.

LMX explains other important outcomes found in Figure 1. In addition to explaining the relationships among mentor support, trust, and relationship quality, LMX explains the direct effects between mentor support and well-being. For instance, high-LMX supervisors serve as resources and reduce stress in their subordinates (Thomas & Lankau, 2009). Additionally, LMX is shown as an important antecedent to employee engagement (Macey & Schneider, 2008). This body of evidence necessitates applying LMX to the context of mentoring, further investigation of relationship quality, well-being, and engagement, and integration with JD-R (a model of the importance of resources).

Job Demands-Resources Model

Job Demands-Resources Model explains other links between mentor contributions and mentee outcomes noted in the proposed model (Figure 1) (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). The JD-R model is a broad model that describes negative (job demands) and positive (job resources) components of a job and how those affect employees (Bakker & Demerouti, 2007). Job demands are physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs. JD-R proposes that chronic job demands such as a high work pressure, emotional demands, and role ambiguity can impair various components of physical and emotional health. While I do not measure job demands in my study, consistent with the opening discussion, I assume that sustained physical, psychological, social, and/or organizational demands are present in most jobs.

Job resources are physical, psychological, social, or organizational aspects of the job that help employees achieve their goals, reduce demands, or stimulate growth. According JD-R, job resources serve a motivational role and may lead to high work engagement, low cynicism, and good performance (Bakker & Demerouti, 2007).

Job demands and resources also interact. Typically, employee exhaustion is highest when demands are high and resources are low (Bakker, Demerouti, & Euwema, 2005). The Buffering Hypothesis proposes a potential solution to exhaustion, as it states that components of the job, such as job resources, can mitigate the effect of stress caused by job demands (Bakker & Demerouti, 2007). Applied to the mentoring model, mentors can mitigate demands within the workplace through providing social support.

Considerable evidence suggests that social support within a JD-R framework leads to positive outcomes including less burnout and greater engagement, trust, and well-being (Bakker & Demerouti, 2007; Bakker et al., 2005; Demerouti et al., 2001; Ganster, Fusilier, & Mayes, 1986; Schaufeli & Bakker, 2004). Social support is a well-known job resource that contributes to motivational processes that in turn lead to important outcomes (Demerouti et al., 2001; Salanova, Agut, & Peiró, 2005). More specifically, social support is the availability of quality, helping relationships such as high-quality relationships with coworkers, supervisors, friends, and family (Bakker et al., 2005; Ganster et al., 1986). While mentoring is not typically discussed in the JD-R literature as a form of social support, mentors do serve as a source of social support because mentors provide resources, such as feedback or networking opportunities, to their protégés to facilitate growth (Allen & Poteet, 2011).

In addition to facilitating mentee growth, mentor support fosters relationship quality. A high-quality relationship with one's supervisor alleviates demands, likely because supervisor support demonstrates appreciation and helps employees cope (Bakker et al., 2005). Additionally, relationship quality is important to the context of this study because high-quality mentoring produces the most effective mentoring relationships (Eby et al., 2013; Ragins, 2010). Therefore, within the framework of JD-R, mentor support is proposed to foster high-quality mentoring relationships, and in turn mitigates the impact of job demands and promotes positive mentee outcomes.

Other research in JD-R demonstrates the influence of leadership behaviors, in parallel to mentoring behaviors, lead to trust, and then leads to engagement (Christian, Garza, & Slaughter, 2011; Hassan & Ahmed, 2011; Macey & Schneider, 2008). JD-R is a common framework used in studies of engagement (Crawford, LePine, & Rich, 2010; Saks & Gruman, 2014) and provides

an empirical basis linking mentoring behaviors indirectly to mentee engagement. Resources, such as mentor support, activate motivational processes that increases engagement, positive attitudes, well-being, lower the potential for burnout, and buffers against demands (Saks & Gruman, 2014). Additional support for the buffering role of resources comes from the leadership literature and shows that managers can foster engagement through providing resources (Crawford et al., 2010; Saks & Gruman, 2014). Leadership is known to alleviate job demands because they provide support such as appreciation, feedback, listening, and helping employees to cope, consistent with the Buffering Hypothesis (Bakker & Demerouti, 2007).

Social support protects employees from the pathological consequences of stressful experiences (Cohen & Wills, 1985). Research shows that high quality relationships characterized by trust (a form of social support) are particularly helpful in reducing stress (Thomas & Lankau, 2009). Further, support from mentors reduces mentee stress/strain - a related construct to overall well-being (Eby et al, 2008; Gill, Roulet, & Kerridge, 2018; Kram & Hall, 1991).

Clearly there are connections among mentor support, trust, relationship quality, engagement, and well-being that JD-R can help explain. However, JD-R does not adequately explain mentoring relationships and the role of trust, distinguish between relationship quality and trust, nor how trust may lead to positive outcomes. In subsequent sections I describe these variables more in depth and explain the role of JD-R among their relationships.

Relationship Quality

In the present study, mentor support is proposed to lead to higher protégé perceptions of relationship quality. Relationship quality refers to the relational depth, satisfaction with the relationship, and mutual benefits in any relationship (Allen & Eby, 2003). As indicated in the

earlier definition of mentoring, the relationship between a mentor and mentee is complex and evolves over time (Allen & Eby, 2003; Eby et al., 2013; Kram, 1985).

High quality relationships are fundamental to more effective mentoring relationships (Allen & Eby, 2003; Ragins, 2016). These relationships are more effective because high-quality relationships particularly involve emotional connection, which allows fulfillment and productivity for mentors and mentees (Eby et al., 2013; Ragins, 2010). Emotional connection requires trust, commitment, vulnerability, and disclosure in the mentoring relationship (Ragins, 2016). Research suggests that high-quality relationships predict positive work attitudes, namely job and career satisfaction (Ragins et al., 2000), growth opportunities for protégés (Ragins, 2016), and buffer employees from workplace stress (Bakker et al., 2005; Ragins, 2016).

Conversely, dissatisfying relationships are just as ineffective as having not been mentored at all (Ragins et al., 2000). Differences in mentoring type, informal versus formal mentoring, contribute to the quality of a mentoring relationship such that informal mentoring results in better outcomes than formal mentoring (Chao et al., 1992; Ragins & Cotton, 1999; Ragins et al., 2000). The benefits of informal relationships likely exceed formal relationships because informal relationships are based on mutual attraction and more easily develop trust and therefore higher relationship quality (Allen & Eby, 2003; Chao et al., 1992; Ensher, Grant-Vallone, & Marelich, 2002; Ensher & Murphy, 1997; Korsgaard, Bower & Lester, 2015; Kram, 1985; McAllister, 1995; Raabe & Beehr, 2003; Ragins & Cotton, 1999; Underhill, 2006). Clearly high-quality mentoring relationships are pivotal to the mentee's success, however, the antecedents to high relationship quality are not well-known.

As indicated above, high relationship quality is related to positive work outcomes and buffers against negative work outcomes, consistent with JD-R. However, LMX best explains

how mentor support cultivates high quality mentoring relationships. LMX is based on norms of reciprocity and social exchange, and typical mentoring relationships function in the same way (Ensher et al., 2001; Ragins, 2016). In the same fashion as LMX, as a mentor provides resources in their relationship, prompting the mentee to reciprocate. Typical mentor resources consist of career-related, psychosocial and role modeling support (Ensher et al., 2001). When most exchanges meet the needs of both mentor and mentee this informs the pair that they can rely on one another. The mentee will respond more often to the mentor and vice versa, increasing trust, disclosure, closeness, and commitment that are fundamental to high quality mentoring relationships (Ragin, 2016). So, through the reciprocation of support and resources, mentor support leads to high relationship quality.

Research shows that mentor support, in the form of mentor functions, predicts higher ratings of relationship quality. In a study building on LMX and Social Exchange Theory, Ensher et al. (2001) found that role modeling and vocational support (but not psychosocial support) predicted satisfaction in the mentoring relationship. Relationship quality has also been shown to create a reciprocal relationship with mentor support (Eby et al., 2013; Ensher et al., 2001). Wang and Hsieh (2013) further suggested that the quality of the mentoring relationship determines the mentor functions that protégés receive, such that the more a mentor trusts a protégé's capability to complete the work the more resources he or she will give. In later sections I will discuss the influence of trust on the relationship between mentor support and relationship quality.

As evidenced above, when a mentor provides more resources this demonstrates investment in the mentoring relationship and improves relationship quality. For example, if a mentor advises their mentee about a personal issue, the mentee will feel like the mentor cares about them and then prompts the mentee to further invest in the relationship. So, increases in

support demonstrate emotional investment and relates to higher relationship quality. Given the research showing mentor support relates to relationship quality I propose:

Hypothesis 1: *Mentor support has a positive relationship with mentee relationship quality.*

Well-Being

Mentor support should not only improve relationship quality, but also mentee well-being. Subjective well-being (SWB) comprises peoples' longer-term levels of pleasant affect, lack of unpleasant affect, and life satisfaction (Diener, Suh, Lucas, & Smith, 1999). People experience SWB when they feel many pleasant and few unpleasant emotions, when they are engaged in interesting activities, and when they experience many pleasures and few pains. Life satisfaction, work satisfaction, positive affect, and low negative affect comprise SWB (Diener, 1984; 1994; 2000; Diener, Lucas, & Oishi, 2002).

Stress and strain are related constructs to well-being because they are higher on negative affect as opposed to positive affect and allow the cross-comparison that mentor support is related to well-being. For example, if a mentor provides a mentee with information about how to complete a project, this will improve the mentee's competence to complete the project, thus reducing the strain of novice in a particular area and increasing the mentee's well-being because they feel confident that they can complete the task. Additionally, the mentor demonstrates increases in well-being as the mentee successfully completes the project. The mentor will feel fulfilled knowing their guidance helped their mentee complete an objective.

According to JD-R, resources are motivational and lead to positive outcomes. Mentor support, as a resource, will increase well-being as a result of positive motivational processes. Many studies use JD-R as a theoretical framework and typically draw a connection between job

demands and stress or burnout or look at job resources and positive work outcomes such as engagement. However, few examine the relationship between job resources and positive emotional consequences (Panaccio & Vandenberghe, 2009). Additionally, mentoring has not often been examined within this context and is not often studied in conjunction with well-being.

Some evidence within a JD-R framework suggests a relationship between mentor support and well-being exists. In a study of job crafting, researchers found that increases in job resources (autonomy, variety, and opportunities for development) were associated with higher levels of well-being (Tims, Bakker, & Dirks, 2013). Additionally, social job resources (social support, feedback, and coaching) fully mediated the relationship between job crafting and well-being. Thus, when employees were capable of creating positive change in their work environment, this change led to increases in social resources and increases in social resources increased well-being. Although that study was not about mentoring, the evidence suggests that job and social resources that mentors often provide can lead to increases in well-being through the lens of JD-R.

Additional research indicates that mentoring may help increase well-being in the workplace (Ragins & Scandura, 1999). A meta-analysis by Eby et al. (2013) revealed antecedents, correlates, and outcomes of protégé perceptions of career support, psychosocial support, and relationship quality among youth, academic and workplace populations. Among the many findings from their research, they demonstrated how instrumental support, psychosocial support, and relationship quality reduce workplace strain in mentees. Longitudinal research by Gill et al. (2018) suggested that mentoring improves mental health in both mentors and protégés within the English police force. In their study, they conducted a field experiment and found that mentoring improves mentor's mental health and reduces anxiety, but not for protégés. Sampling issues could be responsible for insignificant effects for protégés, as participants were mostly

male, and the researchers only obtained 10 dyads by the end of the study. In their second study, they analyzed interview data among nine dyads. Their results show that both mentors and protégés experience anxiety reduction as a result of disclosure, sharing coping strategies, and meaning derived from mentoring. Most importantly, these themes became more prominent as the dyads established trust. Although these studies examined anxiety and strain, they still demonstrate the effects of mentoring on components of well-being. Given prior research showing that receiving mentoring reduces stress, strain, and anxiety, and improves mental health, I propose:

Hypothesis 2: *Mentor support has a positive relationship with mentee well-being.*

Job Engagement

The third outcome of mentor support I investigate is job engagement. High job engagement leads to many organizational benefits, including increased productivity, higher profits, better-quality products (Zak, 2017), better overall performance, positive job attitudes, and lower turnover (Crawford et al., 2010). Kahn's (1990) highly influential work in employee engagement set the stage for the next 30 years of research. He defines engagement as incorporating oneself physically, cognitively, and emotionally into one's work expressed through performance. In order to be engaged, the work must be meaningful, employees must feel safe, and they must be physically, cognitively and emotionally available to engage in the task. Disengagement on the other hand involves withdrawing from work physically, cognitively, and emotionally. Meaningfulness depends on how challenging work tasks are (task characteristics), how influential one's role within the organization is (role characteristics), and whether people feel valued by organizational others (work interactions). Trust and support within interpersonal relationships, group dynamics, supportive management styles, and behaving within the

boundaries of organizational norms produce psychological safety. Finally, physical energy, emotional energy, work security, and one's personal life influence how available people are to engage in their work.

JD-R frames half of the empirical work on engagement (Crawford et al., 2010) and contributes an explanation as to how mentor support relates to employee engagement. Research shows that resources are negatively related to burnout, positively related to engagement, and employees with more resources are better able to meet demands. Mentor support, as a resource, will activate a motivational process, leading to higher levels of engagement, positive attitudes, and both improved well-being and help buffer against demands (Crawford et al., 2010; Demerouti et al., 2001; Saks & Gruman, 2014; Salanova et al., 2005; Schaufeli & Bakker, 2004; Schaufeli & Salanova, 2007). Additionally, employees who believe they are in a supportive work environment, as mentor support can provide, also believe they have sufficient resources to complete their work, and therefore become more engaged (Xanthopoulou, Baker, Heuven, Demerouti, & Schaufeli, 2008).

Leadership is found to have an important relationship with engagement (Macey & Schneider, 2008; Schaufeli & Salanova, 2007). For example, supervisor support has a moderate to strong relationship with job engagement (Albrecht, Breidahl, & Marty, 2018; Salanova et al., 2005). Additionally, when leaders are fair and recognize good performance (through feedback), they have positive effects on employee engagement (Christian et al., 2011; Kahn, 1990; Macey & Schneider, 2008). Outside the leadership literature, resources such as coaching, high quality feedback, and opportunities for professional development motivate employees to be dedicated to and absorbed in their work (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009). Meta-analytic data also suggests that

resources such as opportunities for career development, support, and feedback have positive relationships with engagement ($.27 < r < .38$) (Crawford et al., 2010). These resources are similar to forms of mentor support, further suggesting mentor support should predict engagement. When a mentor's advice provides the mentee with a better understanding how to complete a component of their job, the mentee will then be able to actually do the work and feels satisfied knowing they can competently perform a job task. These components ultimately increase the mentee's engagement and thus performance.

Hypothesis 3: *Mentor support is positively related to mentee job engagement.*

Trust

Trust is essential for the effectiveness of working relationships (van der Werff & Buckley, 2014) and within mentoring relationships. Mentor support can aid in the development of trust. Trust has been defined many different ways (Costa, Roe, Taillieu, & Cristina, 2001; Dietz & Den Hartog, 2006; Fulmer & Gelfand, 2012; Gillespie, 2012; van der Werff & Buckley, 2014), but researchers tend to agree that trust requires positive expectations of trustworthiness and willingness be vulnerable or rely on one another (Costa et al., 2001; Fulmer & Gelfand, 2012). Trust is multidimensional (Costa et al., 2001; DeJong, Dirks, & Gillespie, 2016; van der Werff & Buckley, 2014) and distinguishes among the psychological, expectation and behavior toward others (Costa et al., 2001). Rousseau, Sitkin, Burt, and Camerer (1998) also noted that trust requires a positive expectation of the partner's intentions. Thus, trust requires risk and interdependence. Risk allows vulnerability and therefore an opportunity to trust, while interdependence assumes that the objectives of either party requires the cooperation of the partner (Gillespie, 2012; Mayer, Davis, & Schoorman, 1995; Rousseau et al., 1998).

The context of this study fits best with Mayer, Davis, and Schoorman's (1995) conceptualization of trust because it was among the first to address multiple sources of trust and best applies to dyadic relationships. According to Mayer et al. (1995), trust is 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 part" (p. 712). Applied to the mentoring relationship, this represents the mentee's willingness to be vulnerable based on their expectation that the mentor will do what they say they will do without monitoring their mentor.

Trust comes from a number of sources, including the trustor, trustee, and relationship itself (Dietz & Den Hartog, 2006; Mayer et al., 1995). The trustor brings individual factors such as the propensity to trust others, cultural values, and politics. The trustee's personal traits and past behavior indicates how trustworthy the trustee is. Also, the stability of the relationship indicates how invested one should become in the relationship and how much of an affective bond the pair can form (Dietz & Den Hartog, 2006; Mayer et al., 1995).

Because there are multiple sources of trust it is important to understand who the referent is within the trust relationship (Dirks & Ferrin, 2002) and whether there is shared or asymmetrical trust (Korsgaard et al., 2015). Since a mentoring relationship is dyadic, it is possible either party may have different perceptions of their relationship. In reciprocal trust, both the mentor and mentee are each a trustor and a trustee. In mutual trust, both the mentor and mentee trust each other equally, while in asymmetric trust, the mentor and mentee rate trust differently (little convergence) (Korsgaard et al., 2015). Using the reciprocal trust framework, dyads with consistently good interactions should foster high trust, while the opposite is true of dyads with consistently poor interactions. Asymmetrical trust is an indicator that there is inequity

within the mentoring dyad. While my study does not specifically address mutual trust, this information is pertinent to understanding the nature of trust.

Since I am not addressing the mentor's level of trust, it is important to understand when and why mentees trust their mentors. According to Mayer et al.'s (1995) conceptualization, the mentee determines mentor trustworthiness through evaluating the mentor's ability, benevolence, and integrity. Ability refers to the trustee's (mentor's) skills, competencies, and characteristics related to a specific domain. Benevolence implies the trustee's (mentor's) positive intentions or orientation toward the trustor (mentee). Finally, integrity is the trustor's (mentee's) perception that the trustee (mentor) guides their work by a set of principles or behaves honestly to a degree the trustor finds acceptable. Mayer et al. stated that determining these important attributes reflects the level of trust one would have in an individual. More specifically, higher levels of ability, benevolence, and integrity all lead to higher levels of trust in dyadic relationships (Dirks & Ferrin, 2002; Fulmer & Gelfand, 2012). So, determining what a person does or what actions they take to create trust serves as a proxy of trust. Thus, I will refer to Mayer et al.'s conceptualization as trust in this paper.

Trust forms at different paces, changes over time, and influenced by both the trustor and trustee. As suggested in the mentoring literature, similarities (i.e. same gender) are an initial basis of trust (Eby et al., 2013; Levin, Whitner, & Cross, 2006), while trust in longer relationships is based on information sharing (Levin et al., 2006). Van der Werff and Buckley (2014) suggested that the rate of change in trust decreases after the initial month. After the first month establishing trust in longer-lasting relationships is a more gradual process following repeated personal interactions. Consistent with Levin et al.'s conceptualization, Van der Werff and Buckley suggested that initial trust judgments are often based on cognitive cues from the

environment, perceptions of control, and first impressions of the trustee, allowing them to be formed more quickly than stable knowledge-based beliefs. Mentor support is a potential factor that influences mentee beliefs about their mentor's integrity, ability, and benevolence that comprise overall trust.

Within the framework of LMX, mentor support facilitates trust in the mentoring relationship. In general, trust is important to social exchange because when one person provides a resource, that person must trust the recipient will eventually return a resource (DeConinck, 2010). Through the lens of mentoring, mentors provide resources to the protégé via mentor support. The mentor trusts the protégé will perceive this investment and eventually return the favor. For example, when a mentor coaches a mentee about a specific project, the mentor trusts the mentee will reciprocate with help on a future project. Related to the mentee, when a mentor provides support, the mentee perceives that the mentor is reliable and competent and therefore trusts their mentor.

While there is little research on trust in the mentoring literature, we can draw on related research to understand how mentor support leads to trust in the mentor. The literature on perceived supervisor support (PSS) and POS suggest there is a relationship between support and trust through the lens of LMX (see Chen, Aryee, & Lee, 2005; Chen, Wang, Chang, & Hu, 2008; DeConinck, 2010; Neinaber, Romeike, Searle, & Schewe, 2014). More specifically, PSS leads to perceived trust in the supervisor (DeConinck, 2010; Neinaber et al., 2014) and POS leads to perceived trust in the organization (Chen et al., 2005; DeConinck, 2010). An interesting study of 280 supervisor-subordinate nurse dyads demonstrated that both LMX and supervisor support lead to trust in head nurses (Chen et al., 2008). This study supports my proposition that

supportive relationships lead to trust as both constructs show that supportive behaviors create trust.

Related to PSS, team leadership and transformational leadership parallel mentor support (see Jung & Avolio, 2000; Lee, Gillespie, Mann, & Wearing, 2010). A study of 34 engineering project teams provides support for the relationship between mentor support and trust (Lee et al., 2010). The team leaders were assessed according to a “knowledge builder role,” which assessed how well the team leader advised on technical issues, monitored work quality, and proposed new strategies, among other techniques. These characteristics resemble specific types of mentor career support. The results of this study demonstrated that the “knowledge builder” positively related to trust in the team (both reliance- and disclosure-based trust). Trust in the team also mediated the relationship between “knowledge builder” and increased knowledge sharing within the team, which is known to improve decision-making and performance. Similar processes occur in the mentoring relationship, such that the mentor provides the mentee with support on a specific project, such as guidance with technical writing, and the mentee feels confident in their mentor’s ability, integrity, and benevolence, thus perpetuating trust and improving the mentee’s ability to perform on future projects.

Transformational leadership behaviors also have a strong positive relationship with trust in the leader. This leadership style relates to mentoring because transformational leaders and mentors aim to help their subordinate or mentee grow (Jung & Avolio, 2000; Scandura & Williams, 2004). Additionally, changing leadership style and management practices increases trust in leadership (Dirks & Ferrin, 2002). When supervisors and leaders give their subordinate more autonomy (another form of support) this encourages subordinate trust (Seppälä, Lipponen, Pirttila-Backman, & Lipsanen, 2011). Further research shows that mentors have more of a

responsibility to build trust within the mentoring relationship and do so through showing competence, predictability, fairness, communication, showing interest, and sharing control (Erdem & Aytemur, 2008). These elements resemble the mentor functions discussed earlier, particularly psychosocial support. Psychosocial support allows trust in the mentoring relationship, promoting psychological safety to learn and develop skills (Lankau & Scandura, 2002). This evidence suggests that mentor support is related to trust in the mentor. Accordingly, I propose:

Hypothesis 4: *Mentor support positively relates to mentee trust in the mentor.*

As indicated above, mentor support is expected to have a positive relationship with each of the three outcome variables (relationship quality, well-being, and job engagement). These relationships demonstrate direct effects, however, the relationship between mentor support and mentoring outcomes also is expected to be partially mediated by mentee trust. Specifically, mentor support has a positive relationship with trust and in turn has positive relationships with each of the mentoring outcomes. So, greater mentor support leads to increases in trust, which then leads to increases in relationship quality, mentee well-being, and mentee job engagement. In subsequent paragraphs, I will make the case for the direct relationships between trust and the mentoring outcomes and the mediating relationship of trust with mentor support and mentoring outcomes.

According to Ragins (2016), trust is an essential component to relationship quality, however, current evidence has not effectively distinguished the causal direction between these two constructs (Eby et al., 2013). Despite little evidence investigating the causal direction between the two constructs, I propose that trust predicts relationship quality. The leadership literature suggests that trust in leader has a positive relationship with satisfaction, a component of

relationship quality, with the supervisor ($.73 < r < .85$) (Dirks & Ferrin, 2002). A study on reciprocal trust between sales managers and their subordinates demonstrates the importance of trust to relationship quality in both the supervisory and subordinate roles (Legace, 1991). This study found that higher trust in the sales manager predicted higher satisfaction with the sales manager and higher evaluations of the manager (components of relationship quality). Additionally, when sales managers had higher trust in their subordinates, the same outcome occurred. Eby et al. (2013) also suggested that as emotional connections between mentors and protégés strengthen, this increases trust, which enhances relationship quality. Accordingly, I hypothesize:

Hypothesis 5: *Trust in the mentor has a positive relationship with mentee relationship quality.*

Trust in the mentoring relationship should also have positive effects on well-being. When mentees trust their mentors, mentees will feel psychologically safe in their relationship (Kahn, 1990). Feeling psychologically safe will reduce stress physiologically thus improving well-being (Dollard & Bakker, 2010). The trust literature further suggests trust leads to job satisfaction (Dirks & Ferrin, 2002; Levin et al., 2006; McAllister, 1995). Research on the relationship of trust and facets of well-being come from other literatures, as well. People within more trusting organizations experience 74% less stress and 29% more satisfaction in their lives compared to people at low trust organizations (Zak, 2017). The leadership literature also suggests that trust in the direct leader has a strong effect on job satisfaction. Trust in teams is positively related to team satisfaction and negatively related with stress (Costa et al., 2001). The team literature is comparable to a dyadic relationship, such as mentoring, because teams require two or more

people (Bell, 2007; Byrne, 2015). In sum, evidence at the individual, group, and organizational levels suggest that well-being is related to trust (Dirks & Ferrin, 2002). Accordingly, I propose:

Hypothesis 6: *Trust in the mentor has a positive relationship with mentee well-being.*

At the organizational level, companies with high-trust cultures are more productive, have more energy at work, collaborate better with others, and experience higher organizational commitment compared to companies with low-trust cultures. High-trust organizations experience 76% more engagement and 40% less burnout compared to low-trust organizations (Zak, 2017). Also, research suggests that trust in leadership fosters engagement (Christian et al., 2011; Kahn, 1990; Macey & Schneider, 2008). When employees trust their leaders, this builds psychological safety, which in turn contributes to employee engagement (Christian et al., 2011; Kahn, 1990).

Thus:

Hypothesis 7: *Trust in the mentor has a positive relationship with mentee job engagement.*

Mediating Effects of Trust

Given the evidence that mentor support should lead to trust, and I expect both mentor support and trust to lead to relationship-quality, well-being, and engagement, I propose that trust also mediates the effects of mentor support on the mentoring outcomes. I have established that mentor support leads to relationship quality, mentee well-being, and mentee engagement. I also argue that mentor support leads to trust, which then leads to the aforementioned outcomes. So, when mentors provide support to their protégés, this develops trust in their relationship and leads to positive outcomes not limited to higher relationship quality, higher well-being, and higher job engagement. These outcomes are important because they lead to other organizational outcomes

such as performance and organizational citizenship behaviors. The proposed mediation can be explained through JD-R.

Two primary mechanisms in JD-R help explain the mediating effects of trust between mentor support and mentoring outcomes. First the buffering hypothesis explains the role of resources in reducing demands in the workplace and leads to well-being (Bakker & Demerouti, 2007). According to this hypothesis, mentor support will mitigate the effects of demands and lead to well-being. However, this framework does not explain the mechanism making this relationship possible. The mentoring and LMX literatures suggest that trust with mentors (mentoring literature) or supervisors (LMX) facilitates attaining more positive experiences at work. So, the more trust in a mentoring relationship, the better quality the relationship and the better both mentors and protégés feel individually. Secondly, job resources engage a motivational process that leads to positive outcomes such as performance and engagement (Bakker & Demerouti, 2007). This proposed relationship suggests that mentor support will lead to job engagement because job resources invigorate employees. Again, JD-R does not explain the mechanism between mentor support and job engagement. The job engagement and LMX literatures suggest that trust and psychological safety in the mentor facilitates job engagement (Kahn, 1990). These theoretical frameworks provide the foundation for my mediating hypothesis and research questions.

Much research in engagement suggests trust mediates the relationship between leadership and engagement. Thus, I will draw from the leadership literature to make my case about mentor support. Hassan and Ahmed (2011) demonstrated that subordinate trust partially mediates the relationship between authentic leadership and engagement. Authentic leadership supposes that when a leader behaves consistently with their values, subordinates will trust the leader more

(Byrne, 2015). This is consistent with role modeling within mentoring because role modeling assumes that the mentor is espousing values that the protégé also wants to enact (Allen et al., 2006). Additionally, being an effective mentor requires authenticity through genuinely showing respect for others and owning up to one's own shortcomings because mentors are guides, not teachers (Eby et al., 2013; Godshalk & Sosik, 2000; Ragins, 2010). Showing authenticity demonstrates vulnerability to subordinates, which fosters trust and increases engagement (Zak, 2017). Wang and Hsieh (2013) found similar findings to Hassan and Ahmed (2011), as did Macey and Schneider (2008). Both teams found that leaders create trust in employees and, according to Kahn (1990), facilitates psychological safety, then indirectly effects engagement through trust (Macey & Schneider, 2008; Wang & Hsieh, 2013). For example, when a mentor consoles a mentee about a personal issue, this creates trust because the mentee feels they can rely on the mentor. Also, being able to rely on the mentor creates feelings of psychological safety, which is fundamental to engagement in the workplace. So, as the mentee feels safer, they will be able to concentrate on the work at hand. This leads to my final hypothesis:

Hypothesis 8: *Trust in the mentor partially mediates the relationship between mentor support and mentee job engagement.*

Few studies examine trust as a mediator between mentor support and the other mentoring outcomes (relationship quality and well-being). However, there is evidence that suggests these variables are correlated, so it follows that trust would also partially mediate the relationship between mentor support and relationship quality and well-being. According to the mentoring and relationship quality literature, it is clear that mentor support builds trust, and trust is often cited as fundamental to relationship quality (Ragins, 2016). Within the supervisor support literature, supervisor support influences trust within the supervisor-subordinate relationship (Hansen,

Byrne, & Kiersch, 2014), and trust would then positively relate to relationship quality (Ragins, 2016). For example, a mentee discloses to the mentor that they are interested in a promotion within their organization. If the mentor recommends a mentee for that promotion (mentor support), this builds trust in the relationship because the mentee knows they can disclose their aspirations and rely on the mentor to follow-through. The success of this interaction facilitates protégé satisfaction with the mentor's support, which enhances relationship quality. Since there is no prior empirical support for the mediating role of trust on relationship quality, this evidence leads to my first research question:

Research Question 1: *Does trust in the mentor partially mediate the relationship between mentor support and mentee perceptions of relationship quality?*

In terms of well-being, research suggests that high employee engagement is related to employee health and well-being (Hansen et al., 2014). In the aforementioned qualitative study of the English police force, the researchers found that mentor support facilitated officer well-being as dyads established trust (Gill et al., 2018). Additionally, research by Shuck and Reio (2014) tested whether engagement moderated the relationship between psychological workplace climate and well-being among 216 health care employees. The moderating relationship was significant, and the results show that participants with high engagement had significantly higher scores on well-being compared to those with low engagement. This relationship likely exists because engaged employees feel better about themselves and, are capable of asking for support from colleagues, and create opportunities at work (Xanthopoulou et al., 2009). To help illustrate why trust would partially mediate the relationship between mentor support and engagement, consider the following example. When a mentor tells their mentee “You have improved your attention to detail this past quarter,” they are showing their mentee they are noticing positive changes and

believe in their mentee's competence. This positive feedback allows the mentee to rely and therefore trust their mentor. This trust facilitates mentee well-being because now that the mentee knows they are improving, they will feel better about themselves. Again, absent direct empirical support, this evidence leads to my final research question:

Research Question 2: *Does trust in the mentor partially mediate the relationship between mentor support and mentee well-being?*

Summary

My hypotheses will explore the relationships among Mentor Support, Trust in the Mentor, Well-Being, Relationship Quality, and Engagement. If all of my hypotheses are supported, then Trust in the Mentor will mediate the relationships between Mentor Support and the following outcome variables: Well-Being, Relationship Quality, and Engagement. These findings will extend the current literatures in mentoring, trust, JD-R, and LMX and help support why organizations should implement mentoring programs.

In the present study I will use a cross-sectional, survey design and a sample of working mentees. I formally test my hypotheses using structural equation modeling. After conducting the necessary analyses, I will determine if Mentor Support will increase Trust in the Mentor, and if Trust in the Mentor then increases Relationship Quality, mentee Well-Being, and mentee Job Engagement.

METHODOLOGY

Participants

To investigate the proposed hypotheses, I recruited participants via a Qualtrics study panel (<https://www.qualtrics.com/online-sample/>). Researchers have the option to specify their desired sample, and for the context of this study, I required that participants must be full-time employees, must be the mentee in a mentoring relationship, their mentor must be in the same organization, and that the sample be representative of the U.S. working population based on age and gender.

The sample consisted of 459 participants (49.9% men, $M_{age} = 36.41$, $SD_{age} = 7.97$). Most participants indicated that their mentor was also their supervisor (64.5%) and they met often (45.1%) or very often (39.4%) with their mentor. As many formal mentoring programs require mentors be a supervisor and meet frequently (Raabe & Beehr, 2006), it made sense that the majority of the sample would participate in formal mentoring programs (56.9%).

Outcome Variables

There were five outcome variables in this study: Job Engagement, Well-Being, Job Satisfaction, and Relationship Quality from the mentee's perspective. I also measured mentor liking to establish the construct validity of relationship quality scores and LMX scores to establish the construct validity of mentor functions.

Control Variables

I measure several potential control variables in my study: Mentoring type, gender, race/ethnicity, age, and frequency of meeting to account for potential differences in trust. All of these variables were recorded from the mentees' perspective. However, there is little theoretical

justification for using some control variables and other controls did not have substantive relationships main variables of interest (see Table 1). Mentoring type refers to whether the mentee was in a formal or informal mentoring relationship. The mentoring literature shows that formal and informal mentoring relationships may have differential effects on mentoring outcomes. Protégés with informal mentors reported higher career related support from mentors, satisfaction with the mentor, longer mentoring relationships and increased compensation compared to their formally mentored counterparts (Chao et al., 1992; Ragins & Cotton, 1999; Ragins et al., 2000). These differences necessitated measuring whether mentees participated in formal or informal mentoring programs in their organizations (henceforth referred to as Mentoring Type). However, upon further investigation, this variable did not have strong relationships with other variables; no variables had a correlation greater than .20 and many relationships were not significant. Tabachnik and Fidell (2013) recommend that potential control variables correlate at least .30 with an outcome variable to be used as actual controls in the study. Given the observed correlations in my data, I excluded mentoring type as a control variable in this study.

Older research suggested that match of gender and race between mentor and mentee also could impact relationship quality (Allen & Eby, 2003; 2010; Kram, 2007; Noe, 1988). For example, research in the 1990s showed that same-gender relationships are associated with feelings of higher satisfaction, liking, and relationship quality compared to different-gender relationships (Ensher & Murphy, 1997; Ragins & Cotton, 1999). Additionally, older studies of same-race mentoring pairs show that mentees perceive more instrumental support from mentors of the same race compared to a different race (Ensher & Murphy, 1997). However, a comprehensive overview of the mentoring literature demonstrates that there is no relationship

between race or gender and the protégé's experience (Eby & Robertson, 2020). Similarly, neither race nor gender correlated over .30 with any of my outcome variables, negating their utility as control variables.

Further, I investigated several iterations of structural models using control variables individually or in different combinations and this did not improve model fit compared to a best fitting model and reduced the significance of relationships among my latent variables. Therefore, I proceeded without control variables.

Procedure

After signing an informed consent, mentees were directed to the survey. Participants were asked to confirm their eligibility to participate. Participants needed to confirm whether they were currently in a mentoring relationship by first reading a definition of mentoring. After they confirmed they were in a mentoring relationship, they were asked whether they were the mentor or mentee. Participants who indicated they were a mentee continued to the survey. All qualifying questions can be found in Appendix A. The remaining questions measured their perceptions as mentees.

Measures

Mentoring Functions Questionnaire (MFQ). Mentoring was assessed with Scandura and Ragin's (1993) scale, which contains 15 items consisting of three subdimensions: career support ($\alpha = .89$), psychosocial support ($\alpha = .88$), and role modeling ($\alpha = .85$; overall $\alpha = .92$). Further evidence supports the three-factor structure (Castro, Scandura, & Williams, 2004). A sample item from the career support dimension is "My mentor takes a personal interest in my career"; from the psychosocial support subdimension is "I share my personal problems with my mentor"; and role modeling subdimension is "I admire my mentor's ability to motivate others."

All items were measured on a five-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*). All items are in Appendix B.

Leader-Member Exchange. To assess construct validity of the MFQ, scale scores were compared to the Graen, Novak, and Sommerkamp's (1982) Leader-Member Exchange 7 (LMX-7) scale. This seven-item scale assesses the degree of social exchange between a supervisor and subordinate and demonstrates adequate internal consistency ($\alpha = .86$). A sample item from the scale is "How well does your mentor understand your job problems and needs?" Each item is assessed on a five-point Likert-type response format, but point values do not always ascribe the same meaning (1 = *rarely, not a bit, not at all, none, strongly disagree, extremely ineffective*; 7 = *very often, a great deal, fully, very high, strongly agree, extremely effective*). All items can be found in Appendix B.

Relationship Quality. Relationship quality was measured using Allen and Eby's (2003) five-item relationship quality measure using a five-point Likert-type response format (1=*strongly disagree*; 5= *strongly agree*). Allen and Eby's scale only addressed the mentor's perspective, so item wording was modified to address the mentee's perspective. Also, their term "protégé" was replaced with "mentee" to be consistent with other measures. A sample item from the measure is "My mentor/mentee and I enjoy a high-quality relationship." Scale α is .91 (Allen & Eby, 2003). All items can be found in Appendix C.

Liking. To assess the construct validity of relationship quality, scale scores were compared to Wayne and Ferris' (1990) Mentor Liking Scale. This three-item scale assesses the degree a mentee likes or gets along with their mentor and shows good internal consistency ($\alpha = .83$). A sample item from the scale is "How much do you like your mentor?", which is answered on a five-point Likert-type response format (1 = *I don't like my mentor at all*; 5 = *I like my*

mentor very much). The other items are answered on a different five-point Likert-type response format (1=*strongly disagree*; 5= *strongly agree*). All items are in Appendix C.

Trust. Trust was assessed using Mayer and Davis' (1999) Organizational Trust Instrument. This 21-item measure assesses four dimensions of trust: the mentor's ability ($\alpha = .91$), the mentor's benevolence ($\alpha = .89$), the mentor's integrity ($\alpha = .90$), and general trust toward the mentor ($\alpha = .14$). Most subdimensions show acceptable internal consistency, however general trust did not. A sample item from the ability subscale is "My mentor is very capable of performing their job." A sample item from the benevolence subscale is "My mentor is very concerned about my welfare." A sample item from integrity subscale is "I never have to wonder whether my mentor will stick to their word." A sample item from the general subscale is "I would be willing to let my mentor have complete control over my future in this company." This measure was assessed on a five-point Likert-type response format (1 = *strongly disagree*; 5 = *strongly agree*). All items can be found in Appendix D.

Job Engagement. Job engagement was measured using Rich, LePine, and Crawford's (2010) 18-item, three-dimensional scale using a five-point Likert-type response format (1 = *strongly disagree*, 5 = *strongly agree*). Their measure is comprised of three dimensions - Physical (sample item is "I work with intensity on my job" $\alpha = .90$), Affective (e.g., "I am enthusiastic about my job" $\alpha = .93$), and Cognitive (e.g., "At work, my mind is focused on my job" $\alpha = .92$) engagement. The overall alpha value for the scale is .96 (Rich et al., 2010). All items can be found in Appendix E.

Well-Being. Research suggests measuring well-being using multiple scales to reduce error and bias (Diener, 1994; 2000; Ganster, 2008; Pavot, 2018).¹ So, I measured well-being

¹ SWB includes many facets, including life satisfaction, work satisfaction, positive affect, and low negative affect. This makes measuring well-being difficult, as often we have to include several measures to get a better picture of

according to job affect and life satisfaction. The items to both scales can be found in Appendix F. To account for contextual factors that may influence well-being, I used the Job-Related Affective Well-Being Scale (JAWS) (Van Katwyk, Fox, Spector, & Kelloway, 2000). Additionally, as my global assessment of well-being, I used the Satisfaction with Life Scale (SWLS) (Diener et al., 1985).

SWLS is a five-item scale about life satisfaction and uses a seven-point Likert-type response format (1 = *strongly disagree*, 7 = *strongly agree*). A sample item from this scale is “I am satisfied with my life” and has an α of .91, showing good internal consistency (Diener et al., 1985). JAWS is a 30-item scale and uses a five-point Likert-type response format (1 = *strongly disagree*, 5 = *strongly agree*). This measure assesses how an employee feels toward their job within a certain time period. The measure has four dimensions all showing adequate internal consistency ($.86 < \alpha < .91$): high pleasure-high arousal (HPHA) (“excited”), high pleasure-low arousal (HPLA) (“satisfied”), low pleasure-high arousal (LPHA) (“furious”), and low pleasure-low arousal (LPLA) (“bored”). For the context of this study, we asked participants about their feelings toward their job in the past 30 days. A sample item from this scale is “My job made me feel bored.” The overall α for this scale is .77, showing good internal consistency (Van Katwyk et al., 2000).

Job Satisfaction. Job satisfaction is a global, affective evaluation of one’s job (Thompson & Phua, 2012). The mentoring literature suggests that mentored individuals enjoy more job satisfaction compared to non-mentored individuals (Allen et al., 2004; Koberg, Boss, Chappell, & Ringer, 1994; Noe, 1988; Ragins, 2016; Underhill, 2006). Additionally, mentees in

well-being (Diener, 1994; 1999; 2000; Diener et al., 2002; Pavot, 2018). Diener (2000) recommended using global assessments of well-being, in addition to positive and negative affect assessments encompass the multidimensionality of well-being.

informal relationships enjoy higher job satisfaction compared to mentees in formal relationships (Chao et al., 1992). Related to mentor functions, research shows that job satisfaction may be more highly related to psychosocial mentor support than career-related support. This result may be because psychosocial support fosters closer mentoring relationships and higher quality relationships usually enjoy higher mentee satisfaction with their mentor and better mentoring outcomes (Allen et al. 2004).

Job satisfaction was measured using Thompson and Phua's (2012) Brief Index of Affective Job Satisfaction (BIAJS). The measure includes four-items and three distractor items focused on job enjoyment and show good internal consistency ($\alpha = .89$). A sample item is "I find real enjoyment in my job" and is rated on a five-point Likert-type response format (1 = *strongly disagree*; 5 = *strongly agree*). All items are in Appendix G.

RESULTS

Data Cleaning

Prior to data analysis, I cleaned my dataset. First, all participants who did not meet the criteria discussed earlier were removed from the dataset. These criteria include full-time employee, must be a mentee in a mentoring relationship, their mentor must be in the same organization, etc.). Next, I checked the data for missing responses and inattentive responding using Excel. There were no missing responses and I proceeded to reverse-code reversed items and calculated mean scores of each construct.

As a final step, I evaluated careless responding through the following methods: checking response times (Curran, 2016), calculating Individual Response Variability (IRV) (Dunn, Heggestad, Shannock, & Theilgard, 2018), and calculating Person-Total Correlations (PTC) (Curran, 2016). Short response times usually indicate careless responding. To better evaluate response times, I took the survey as rapidly as possible to see how long the quickest respondent may take to complete the survey. I completed the survey in approximately 8.5 minutes, so any respondent who took less time was flagged for further review.

IRV identifies consistency in participants' answers to scale items and is calculated through assessing the standard deviation of responses to individual scales across respondents. Lower standard deviations indicated low variability in responses, while higher standard deviations indicated more variability in responses. As Dunn et al. (2018) recommended, I flagged scores in the tenth percentile of IRV scores; every IRV score in the tenth percentile received a score of one.

PTC assesses the correlation between the participant's score for each item with the average response to each item. Curran (2016) suggested that negative correlations between the participants' responses and the mean response of all respondents indicates deviation from normal response patterns. So, I flagged every score with a negative correlation, assigning those participants a score of one.

To gain a better understanding of patterns of poor responses, I created a total (summed) score of the flagged response times, flagged IRV scores, and flagged PTC scores. However, other research calls the reliability of these metrics into question. Research demonstrates a wide range of possible proportions of careless responders from 3.5% to a large 73% of individual samples containing careless responders (Meade & Craig, 2012). Kraiger, Sanchez, and McGonagle (2017) conducted a study comparing the data quality of undergraduate students, MTurk responders, and Qualtrics responders. Their evidence suggested that IER was much higher than Meade and Craig predicted with 28%-40% of responders across samples showing IER by one index, however, flagging was inconsistent across indices. Curran (2016) estimated that 8% to 12% of a sample contains IER. Thus, I investigated the consistency of IRV and PTC among the bottom 10% (between 8% and 12%) of inattentive responder in my sample. I discovered that these both measures had little internal consistency among variables (IRV, $\alpha = .57$; PTC, $\alpha = .22$). This indicates that IRV and PTC do not consistently identify inattentive responders. Therefore, these metrics do not reliably represent the actual proportion of inattentive responders in my sample. To avoid discounting potentially useful participants and maintain power, all participants were included in the sample.

Assumption Checks

After cleaning my data, I checked my assumptions, specifically multicollinearity, normality and linearity.

Multicollinearity. Prior to analyzing the data, I conducted a check of multicollinearity. To do so I assessed the correlations among my variables. Any correlation higher than $r = .80$ is considered multicollinear (Grewel, Cote, & Baumgartner, 2004). All of my variables passed this check.

Normality. In this section I discuss my test for normality in the data. However, I did not correct for nonnormality because I am using bootstrapping when analyzing my results from the structural equation modeling; bootstrapping builds a sample distribution from the observed data (Preacher & Hayes, 2008). I evaluated normality through looking at skew (or symmetry) and kurtosis of each variable. The skew and kurtosis of a normal distribution is zero. However, kurtosis values between +3 and -3 and skew values between +2 and -2 are considered an acceptable range and demonstrate normality (Kline, 2011; Yuan & Bentler, 2000). Evidence suggests that the data are leptokurtic. Relationship Quality is slightly leptokurtic (Skew = -1.61, Kurtosis = 3.06), Career Mentor Support is leptokurtic (Skew = -1.81, Kurtosis = 3.91), Cognitive Job Engagement is slightly negatively skewed and leptokurtic (Skew = -1.94, Kurtosis = 4.91), Physical Job Engagement is negatively skewed and leptokurtic (Skew = -2.11, Kurtosis = 6.02), Affective Job Engagement is leptokurtic (Skew = -1.78, Kurtosis = 3.70), Trust in Mentor Benevolence is leptokurtic (Skew = -1.56, Kurtosis = 3.32), Trust in Ability negatively skewed and leptokurtic (Skew = -2.30, Kurtosis = 6.32), and Trust in Integrity is leptokurtic (Skew = -1.55, Kurtosis = 3.07). After examining histograms, many measures appear negatively skewed. Additionally, there are no apparent signs of outliers from these graphs. After examining

boxplots and a QQ-Plot of Mahalonabis Distance, the data demonstrated some outliers.

According to boxplots, a few scales showed outliers, including the following: Career Support, Relationship Quality, all subdimensions of Job Engagement, all subdimensions of Trust, HPHA, HPLA, and Job Satisfaction. According to the QQ-Plot, two respondents were outliers, but I left them in the sample.

Linearity. I did not account for issues with linearity due to issues with linear transformations. To examine the linearity of the data I visualized each measure using Q-Q Plots and checked to see how the data points fit against a regression line. Overall, the plots appeared normal except for clear deviations in the following measures and subdimensions: Relationship Quality, Cognitive Job Engagement, Physical Job Engagement, Affective Job Engagement, Trust in Benevolence, Trust in Integrity, and Trust in Ability. In attempt to account for these issues with linearity I applied several transformations according to recommendations by Tabachnik and Fidell (2013), including first reflecting each variable because the data had a negative skew, taking the square root, squaring, inversing, and taking the 10th logarithm. However, none of these transformations improved the linearity of the aforementioned variables. Therefore, I used the untransformed (original) version of each variable.

Evaluating Discriminant Validity

After checking my assumptions, I assessed the discriminant validity of Mentor Support and Relationship Quality compared the LMX-7 and Liking respectively. I assessed discriminant validity using correlations, Confirmatory Factor Analysis (CFA), and average variance extracted (AVE). From the CFA, I assessed the best fitting factor model according to the Akaike information criterion (AIC), and Bayesian information criterion (BIC) for each model. The lower AIC and BIC values indicate a more parsimonious model. AVE is the average amount of

variance the construct captures from the chosen measure. If AVE is greater than the squared correlation between the similar constructs, then there is evidence for discriminant validity (Falco, Dal Corso, Girardi, De Carlo, Barbieri, Boatto, & Schaufeli, 2017; Fornell & Larker, 1981).

Considering the conceptual similarity among Mentor Support, Relationship Quality, and Trust, I also assessed the discriminant validity among these variables. To assess their discriminant validity, I compared the relative fit of measurement models with each variable as a separate construct and with them as some combination of the variables together. For example, I compared the measurement model of Mentor Support as an independent latent variable to Mentor Support as a facet of Relationship Quality.

Mentor Support. Comparing the MFQ to the LMX-7, I first checked the correlations among the subscales across measures. The correlations among Career and Psychosocial Support with LMX-7 do not exceed $r = .54$. The measures are clearly related, but not so strongly related that they measure identical constructs (Brown, 2006). Additionally, the AVE for the MFQ is .58. To determine discriminant validity, I compared this value to the squared correlation between the MFQ and LMX-7, which is .35. Since .58 is greater than .35, this indicates discriminant validity (Falco et al., 2017; Fornell & Larker, 1981).

Finally, I conducted a series of CFAs. The unidimensional construct that combined all items from MFQ and LMX-7 (Model 1) did not show strong support, ($\chi^2 (209) = 1,900.56, p < .01, CFI = .71, TLI = .68, RMSEA = .13, SRMR = .10$). I then tested a model (Model 2) that separated all three subdimensions of the MFQ from the LMX-7 and I found evidence that a four-factor CFA has better model fit ($\chi^2 (203) = 577.93, p < .01, CFI = .94, TLI = .93, RMSEA = .06, SRMR = .05$). The second model has lower AIC (23178.33) and BIC (23384.79) compared to the single-factor structure (AIC = 24488.96; BIC = 24670.64), consequently indicating that this is

the most parsimonious model. Thus, statistical analyses support that MFQ is conceptually distinct from LMX-7.

Relationship Quality. To establish discriminant validity of Relationship Quality to Mentor Liking, I first checked the correlations among the subscales for both measures. The correlation between Relationship Quality and Liking is strong and significant ($r = .71, p < .01$). The two constructs are similar, but because the correlation is not higher than .80 this likely suggests they represent different constructs (Brown, 2006). To further probe discriminant validity, I again calculated AVE and compared that value to the squared correlation between Relationship Quality and Mentoring Liking Scale. The AVE for Relationship Quality is .67 and the squared correlation between Relationship Quality and Mentoring Liking Scale is .50. Since .67 is greater than .50, this indicates discriminant validity (Falco et al., 2017; Fornell & Larker, 1981).

Finally, to test the factor structure, I conducted a single-factor and two-factor CFA. The single-factor structure (Model 3) combined items from both scales and demonstrates fair model fit ($\chi^2 (20) = 228.31, p < .01, CFI = .91, TLI = .88, RMSEA = .15, SRMR = .06$). The results of the two-factor CFA (Model 4) demonstrated better model fit ($\chi^2 (19) = 57.02, p < .01, CFI = .98, TLI = .98, RMSEA = .07, SRMR = .03$). Model 4 has lower AIC (7126.98) and BIC (7197.17) compared to the single-factor model (AIC = 7296.26; BIC = 7362.33), demonstrating it is the most parsimonious model. Thus, statistical analyses support that Relationship Quality is conceptually distinct from Mentor Liking.

Discriminant Validity among Mentor Support, Trust, and Relationship Quality. To assess discriminant validity, I ran a series of measurement models treating each latent construct as a unique latent construct or not. In the first model (Model 5), I tested the fit of all measures as

independent latent constructs: MFQ, Relationship Quality, Organizational Trust Instrument, JAWS, SWLS, Job Engagement, and BIAJS. This model had adequate model fit ($\chi^2 (3,450) = 7,850.51, p < .01, CFI = .86, TLI = .85, RMSEA = .05, SRMR = .09, AIC = 83857.03, BIC = 85054.45$). In the next model (Model 6), I treated MFQ and Relationship Quality items on the same latent factor. This model had the following information criteria: $AIC = 83902.78; BIC = 85079.56$. These values are larger than Model 5, therefore the model treating MFQ and Relationship Quality as separate constructs is more parsimonious. The $\Delta\chi^2$ test revealed that there is a significant difference between Model 6 and Model 5 ($\Delta\chi^2 (5) = 38.86, p < .01$), indicating that Model 6 fits *worse* than Model 5. Because Model 6 fits worse than Model 5, this suggests that MFQ and RQ are best represented as separate constructs. The following model, I treated MFQ and Trust as the same (Model 7). This model also had higher information criteria ($AIC = 84007.64; BIC = 85180.29$) indicating that Model 5 is more parsimonious and that MFQ and Trust are better represented as distinct constructs. The $\Delta\chi^2$ Test revealed that there is a significant difference between Model 7 and Model 5 ($\Delta\chi^2 (6) = 145.72, p < .01$), indicating that Model 7 fits *worse* than Model 5. Because Model 7 fits worse than Model 5, this means that MFQ and Trust are best represented as separate constructs. In the final model, I treated Relationship Quality and Trust as the same (Model 8). Again, this model is less parsimonious indicating that Relationship Quality and Trust are separate constructs ($AIC = 83927.58; BIC = 85145.65$). The $\Delta\chi^2$ Test revealed that there is a significant difference between Model 8 and Model 5 ($\Delta\chi^2 (5) = 43.65, p < .01$), indicating that Model 8 fits *worse* than Model 5. Because Model 8 fits worse than Model 5, this means that Relationship Quality and Trust are best represented as separate constructs. The above results indicate that MFQ,

Relationship Quality, and Trust are indeed different constructs, and I treat them as such in my subsequent analyses.

Measurement of Latent Constructs

To check the dimensionality of my other constructs, I ran CFAs in R Studio. To assess model fit, I reviewed chi-square (χ^2), Comparative Fit Index (CFI), Tucker Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR) for each model. Hu and Bentler (1999) suggested the following cutoffs for the aforementioned fit indices: χ^2 should not be significant, CFI and TLI should both be above .90 (.95 is preferred), RMSEA should be less than .10 (less than .06 is preferred), SRMR lower than .08. However, chi-square is susceptible to sample size, so for larger sample sizes chi-square is not an adequate indicator of model fit, which is why I assess the aforementioned fit indices.

Mentor Support. The Mentoring Functions Questionnaire demonstrates adequate model fit for a three-factor structure ($\chi^2 (87) = 319.07, p < .01, CFI = .95, TLI = .93, RMSEA = .08, SRMR = .05$). All standardized factor loadings range from 0.61 to 1.08. Additionally, the measure appears internally consistent with Cronbach's α equal to .89, .88, and .85 for Career, Psychosocial, and Role Modeling Support respectively, and .92 overall.

Relationship Quality. Allen and Eby's (2003) Relationship Quality measure demonstrates good model fit for a single-factor structure ($\chi^2 (5) = 15.24, p < .01, CFI = .99, TLI = .99, RMSEA = .07, SRMR = .02$). All standardized factor loadings range from 0.84 to 1.10. Additionally, the measure appears internally consistent with Cronbach's α equal to .92.

Trust. Mayer and Davis' (1999) Organizational Trust Instrument shows adequate model fit for a four-factor model ($\chi^2 (183) = 583.28, p < .01, CFI = .93, TLI = .92, RMSEA = .07, SRMR = .09$). Standardized factor loadings range from -1.15 to 0.78, which indicates that some

items may be inversely related to the construct. After examining how the items load onto each factor, I discovered that the fourth factor, General Trust, was the only factor with negative factor loadings and demonstrated poor internal consistency ($\alpha = .14$). General Trust was the only subdimension with reverse-scored items, which could influence the internal consistency (Caught, Shadur, & Rodwell, 2000), even though I was careful to reverse score original responses before my analyses. I re-ran the model separating General Trust into two factors; one factor had only reverse scored items and the other did not. I discovered that this improved model fit ($\chi^2 (179) = 403.14, p < .01, CFI = .96, TLI = .96, RMSEA = .05, SRMR = .05$). Next, I decided to remove the General Trust from the measure and re-analyzed model fit. Removing General Trust improved model fit ($\chi^2 (116) = 279.12, p < .01, CFI = .97, TLI = .97, RMSEA = .06, SRMR = .04$). The factor loadings now range from 0.55 to 0.79. The overall measure of Trust indicates good internal consistency ($\alpha = .95$), as did the Ability ($\alpha = .91$), Benevolence ($\alpha = .89$), and Integrity ($\alpha = .90$) subdimensions.

Well-Being. As indicated in the methods section, I assessed Satisfaction with Life and Job-Related Affective Well-Being to assess broad and specific domains of well-being respectively. A CFA revealed that Satisfaction with Life adequately fits as a single-factor model ($\chi^2 (5) = 52.93, p < .01, CFI = .97, TLI = .94, RMSEA = .15, SRMR = .03$), despite issues with RMSEA. Additionally, this measure has factor loadings ranging from 0.85 to 1.03 and shows adequate internal consistency ($\alpha = .91$). Job-Related Affective Well-Being fits as a four-factor model ($\chi^2 (164) = 681.50, p < .01, CFI = .92, TLI = .91, RMSEA = .08, SRMR = .06$). Factor loadings range from 0.57 to 1.16 for all four factors and shows adequate internal consistency overall ($\alpha = .77$), for HPHA ($\alpha = .91$), HPLA ($\alpha = .86$), LPHA ($\alpha = .87$), and LPLA ($\alpha = .87$).

Job Engagement. Rich et al.'s (2010) three-dimensional scale demonstrates model fit for a three-factor structure ($\chi^2 (132) = 431.92, p < .01, CFI = .96, TLI = .95, RMSEA = .07, SRMR = .04$). Factor loadings range from 0.55 to 0.78 on each of the three dimensions. This measure shows adequate overall ($\alpha = .96$) and for the three subdimensions: Physical ($\alpha = .90$), Cognitive ($\alpha = .92$), and Affective ($\alpha = .93$) Job Engagement.

Job Satisfaction. Thompson and Phua's (2012) Brief Index of Affective Job Satisfaction demonstrates evidence for a single-factor structure ($\chi^2 (2) = .27, p = .87, CFI = 1.00, TLI = 1.01, RMSEA = .00, SRMR = .003$). Factor loadings range from 0.86 to 1.00. The measure has adequate internal consistency ($\alpha = .89$).

Preliminary Analyses

To better understand the relationships among my variables, I assessed descriptive statistics for each variable and intercorrelations among variables. All variables are significantly related to each other. Table 1 displays the descriptive statistics of my continuous variables and Table 2 displays the correlations among my predictors and mediators. All subdimensions of Mentor Support and Trust are strongly and significantly correlated. Table 3 represents the correlations for my mediators and outcomes. Subdimensions of trust have moderate to strong relationships with subdimensions of Job Engagement, weak to moderate correlations with Satisfaction with Life, moderate correlations with subdimensions of JAWS, and moderate to strong relationships with Job Satisfaction. Finally, Table 4 represents the correlations for my predictors and outcomes. Career Mentor Support has moderate to strong relationships with mentoring outcomes, while Psychosocial Mentor Support is only weakly to moderately correlated with mentoring outcomes. These relationships suggest that there are direct effects among my variables of interest and do not rule out the possibility of mediation.

Test of Hypotheses

To test my hypotheses, I conducted Structural Equation Modeling (SEM) and used bootstrap analysis (5,000 iterations) in MPlus Version 7.2 (Muthen & Muthen, 1998-2011). I evaluated the fit of the measurement and structural model using the same indices I indicated when assessing measurement of my latent constructs. Figure 2 shows the overall model.

Measurement Model Fit. To assess the measurement model, I tested five different models of my measured variables (see Table 8). In the first model, I tested the fit of a model with the full versions of the following measures: MFQ, Relationship Quality, Organizational Trust Instrument, JAWS, SWLS, Job Engagement, and BIAJS. This model had fair model fit ($\chi^2(3450) = 7,833.62, p < .01, CFI = .86, TLI = .85, RMSEA = .05, SRMR = .09$). The final version of the measurement model included the following revisions to the above measures: MFQ without role modeling and items 8 and 10, Relationship Quality, Organizational Trust without the General Trust subdimension, HPHA and HPLA as independent constructs, SWLS, Job Engagement, and I eliminated BIAJS. The final model showed adequate fit ($\chi^2(1923) = 3883.47, p < .01, CFI = .92, TLI = .91, RMSEA = .05, SRMR = .07$). The final model has lower AIC and BIC (AIC = 59090.14, BIC = 60002.66) compared to the first model (AIC = 83857.03, BIC = 85054.45), demonstrating that the final model is more parsimonious. In addition to better statistical fit, this model most closely resembles my hypotheses, so I used this model as my structural model.

In next reviewed how items and subdimensions loaded on their respective measured variable (Table 9). Items loaded on their intended MFQ subdimension. Item loadings for Career Mentor Support range from 0.67 to 0.84; for Psychosocial Mentor Support range from 0.60 to 0.87. Factor loadings on the overall Mentor Support construct are also high; Career Mentor

Support has a loading of 0.92 and Psychosocial Support has a loading of 0.66. Item factor loadings for Relationship Quality range from 0.73 to 0.87. Items under Trust loaded on their intended subdimension. Items from Trust in Ability range from 0.72 to 0.86; items from Trust in Benevolence range from 0.75 to 0.85; Trust in Integrity items range from 0.72 to 0.87. Trust in Ability (0.79), Trust in Benevolence (0.94), and Trust in Integrity (0.96) highly load on the overall Trust construct. Job Engagement items loaded on their intended subdimension. Items from Physical Job Engagement range from 0.74 to 0.80; Affective Job Engagement range from 0.74 to 0.87; Cognitive Job Engagement range from 0.73 to 0.88. Factor loadings on Job Engagement overall are high. Physical Job Engagement is 0.94; Affective Job Engagement is 0.86; Cognitive Job Engagement is 0.92. Item loadings from Satisfaction with Life are high and range from 0.72 to 0.90. Item loadings from HPHA are high and range from 0.78 to 0.91. Item loadings from HPLA are high and range from 0.51 to 0.81.

Structural Model Fit. In analyzing the structural model, the latent factors of Well-Being, Job Engagement, and Relationship Quality were simultaneously regressed on the latent factors Mentor Support and Trust, the mediator. In my first iteration I included mentoring type, gender and race as control variables and found poor model fit ($\chi^2 (2518) = 7614.44, p < .01, CFI = .81, TLI = .79, RMSEA = .07, SRMR = .06$). After eliminating the control variables, I found adequate model fit ($\chi^2 (1923) = 3883.47, p < .01, CFI = .92, TLI = .91, RMSEA = .05, SRMR = .07$), and found significant relationships (Tables 5 through 7). Table 5 shows the direct effects of Mentor Support on the various mentoring outcomes. Table 6 shows the direct effects of Mentee Trust on the various mentoring outcomes, and Table 7 shows the indirect effect of Mentor Support on the various mentoring outcomes through Mentee Trust.

Before examining my tests of hypotheses, I examined two alternative models. It is important to note that with cross-sectional data, it is difficult to know whether modeled differences in the direction of effects supports actual causal relationships. The first alternative model posits that Trust mediates the relationship between Mentor Support and Engagement, which then predicts Well-Being (Figure 3). This model had adequate model fit ($\chi^2 (1632) = 3388.83, p < .01, CFI = .92, TLI = .91, RMSEA = .05, SRMR = .07$). The alternative model has lower AIC and BIC (AIC = 55001.41, BIC = 55814.84) compared to my final model (AIC = 59090.14, BIC = 60002.66), demonstrating that the alternative model is more parsimonious. The results from the first alternative model are interesting and I will address the implications of this model in the discussion section. The second alternative model posits that Trust mediates the relationship between Mentor Support and Relationship Quality, which then predicts Well-Being and Engagement (Figure 4). This model had adequate model fit ($\chi^2 (1923) = 3883.47, p < .01, CFI = .92, TLI = .91, RMSEA = .05, SRMR = .07$). The final model has the same AIC and BIC compared to the second alternative model (AIC = 59090.14, BIC = 60002.66). Although these models are statistically the same, considering the theoretical support for my model over the second alternative, I will continue my discussion of the results based on my proposed model in the next section.

Hypothesis Tests

Mentor Support. Hypotheses 1 through 4 proposed that Mentor Support has direct relationships with Relationship Quality, Well-being, Job Engagement, and Trust. The results of these direct relationships are presented in Table 5 and are partially supported. Hypothesis 1 was supported because there was a significant direct relationship between Mentor Support and Relationship Quality ($b = 0.62, SE = 0.19, p < .01$). Hypothesis 2 was not supported, as none of the

direct paths between Mentor Support and Satisfaction with Life nor HPHA nor HPLA are significant. The direct effect between Mentor Support and Mentee Job Engagement is not significant, so Hypothesis 3 is not supported. Finally, the direct effect of Mentor Support on Trust was significant ($b = 0.81$, $SE = 0.05$, $p < .01$), and therefore Hypothesis 4 was supported. These findings indicate that Mentor Support predicts Relationship Quality and Trust in the mentoring relationship.

Trust. Hypotheses 5 through 7 proposed that Trust has a direct positive relationship with Relationship Quality, Well-being, and Job Engagement. The results of these direct relationships are presented in Table 6 and are partially supported. The direct effect of Trust on Relationship Quality was significant ($b = 0.36$, $SE = 0.18$, $p < .05$) and therefore Hypothesis 5 was supported. The direct effect of Trust on Satisfaction with Life is not significant, and neither is the direct effect of Trust on HPHA. However, the direct effect of Trust on HPLA was significant ($b = 0.38$, $SE = 0.14$, $p < .01$). Thus, Hypothesis 6 was partially supported. Finally, the direct effect of Trust on Mentee Job Engagement was not significant; therefore, Hypothesis 7 was not supported. These findings indicate that Trust predicts Relationship Quality and some components of Well-being in mentees.

Mediation. Hypothesis 9 and Research Questions 1 and 2 investigated the partial mediating relationship of Trust for Mentor Support and the following mentoring outcomes: Job Engagement, Relationship Quality, and Well-being. The results of these indirect relationships are presented in Table 7 and are partially supported. The indirect effect of Trust on the relationship between Mentor Support and Job Engagement was not significant, therefore Hypothesis 9 was not supported. Results from Research Question 1 showed that Trust mediated the relationship between Mentor Support and Relationship Quality because the indirect effect is significant ($b =$

0.29, $SE=0.15$, $p < .05$). Finally, Research Question 2 found the indirect effect of Mentor Support on Satisfaction with Life through Trust was not significant, and neither was the indirect effect of Mentor Support on HPHA through Trust. However, the indirect effect on HPLA is significant ($b = 0.31$, $SE=0.12$, $p < .01$). Thus, Research Question 2 was partially supported, and Trust may explain the relationship between Mentor Support and High-Pleasure and Low-Arousal affective well-being at work.

DISCUSSION

The purpose of the present study was to investigate how mentoring can facilitate positive outcomes for protégés. The results indicate that Mentor Support is related to higher Trust in the Mentor, Relationship Quality, and Well-Being. Further, Mentor Support has indirect effects on Relationship Quality and components of Well-Being through Trust in the Mentor. These results have important implications for research and practice. While the mentoring literature examines performance-related outcomes such as turnover, job satisfaction, and higher salary, studies generally do not focus on protégé well-being (Allen et al., 2004). Additionally, few studies consider the influence of mentor support on relationship quality (e.g. Eby et al., 2013). Trust is also understudied in the mentoring literature. The present results extend this literature through formally demonstrating the role of trust in mentoring relationships. More specifically, the results suggest that trust facilitates higher quality relationships and well-being. Uncovering this relationship is crucial to improving working relationships and employee well-being at work.

Tests of the Effects of Mentor Support

Presently, researchers believe mentor support is related to relationship quality (Allen et al., 2004), however, empirical support is sparse in this area. My study makes an interesting contribution to the literature because I provide insight as to how mentoring improves relationship quality. My first hypothesis stated that there would be a direct, positive relationship between Mentor Support and Relationship Quality. Hypothesis 1 was supported as the path from Mentor Support to Relationship Quality was significant. This is consistent with previous empirical studies that explore how career and psychosocial mentor support incrementally increase relationship quality. For example, Ensher et al. (2001) found that vocational support predicted

protégé satisfaction with their mentors, a variable conceptually similar to relationship quality. My study also found that mentor support contributes to relationship quality. Additionally, this finding is one of the few that explicitly observes how mentor support functions influence relationship quality. Other evidence from Allen and Eby (2008) demonstrates that when protégés in formal mentoring programs judge that their mentor is committed to the mentoring relationship, protégés perceive higher relationship quality. Their findings are consistent with my research because both demonstrate that mentor commitment, which mentors can show through supportive behaviors, leads to higher relationship quality from the mentees' perspective. Although not from the protégés perspective, Young and Perrewé (2000) found that when protégés are receptive to support, mentors perceive higher relationship effectiveness. Similarly, my study finds that more mentor support for mentees leads to higher relationship quality.

The mentoring literature also neglects studying trust empirically (Wang, Tomilson, & Noe, 2010; Young & Perrewé, 2000) despite how often the literature cites the importance of trust for mentoring relationships. Additionally, few studies investigate trust in the context of mentor functions (Erdem & Aytumur, 2008; Young & Perrewé, 2000). My fourth hypothesis stated that there would be a significant main effect for Mentor Support on Trust. My results supported this as the path from Mentor Support to Trust was significant. Prior research also supports this finding. Wang et al. found that affective-based trust is related to protégé reports of mentor career, psychosocial, and role modeling behaviors. They also found that when protégés report low internal locus of control (the protégé does not attribute success to their own efforts), cognitive-based trust was related to career, psychosocial, and role modeling support. Both findings demonstrate that mentor support is related to trust. Additionally, a meta-analysis by Fulmer and Gelfand (2012) reported a positive influence of support on trust in both the

leadership and mentoring literatures. Finally, Young and Perrewé (2000) found that when protégés perceive higher social support from mentors, they report higher trust and relationship effectiveness. Given the limited literature on the relationship between trust and mentor support, my findings further suggest that mentor support predicts trust.

My fifth hypothesis stated that Trust would be positively related to Relationship Quality. Because the path between Trust and Relationship Quality was significant, this hypothesis was supported. To my knowledge, this is the first empirical study in the mentoring research which demonstrates this relationship. However, prior qualitative research suggests that relationship quality largely depends on protégé trust in their mentor (Erdem & Aytemur, 2008). The covariance of trust and relationship quality is evident in other research domains as well. For example, LMX posits that high-quality relationships require trust (Graen & Uhl-Bien, 1998). Additionally, SET posits that mentors and mentees exert more effort and care in their relationships when they both perceive the other party will reciprocate (Blau, 1964). Relationships between trust and relationship quality are also found outside organizational science. For example, in the context of retail management shows that customer trust in the retailer predicts relationship quality with the store (Wong & Sohal, 2002).

Finally, my first research question investigated whether Trust mediates the relationship between Mentor Support and Relationship Quality. My data suggest Trust does, as the indirect path from Mentor Support to Relationship Quality through Trust was significant. Recall that while no prior mentoring studies have examined trust as a mediator, other research has found that mentor support relates to trust (e.g. Cropanzano & Mitchell, 2005; Fulmer & Gelfand, 2012; Wang et al., 2010; Young & Perrewé, 2000) and that trust predicts relationship quality (Erdem & Aytemur, 2008; Graen & Uhl-Bien, 1998; Wong & Sohal, 2002), as discussed above. For

example, Wang et al. found that trust (assessed using McAllister's 1995 scale) and mentor support (measured using the 15-item version of MFQ including role modeling) are related. However, this evidence it is not in the direction I hypothesize and uses a different conceptualization of trust. Additionally, Erden and Aytemur used a similar conceptualization of trust to demonstrate that trust relates to relationship quality in academic mentoring relationships. More specifically, they state that trust requires the trustee to be competent (similar to ability), consistent (similar to integrity), fair (similar to integrity), interested (similar to benevolence), open to communication (similar to benevolence), and willing to share in decision making (similar to benevolence). Additionally, relationship quality with the mentor is shown through positive perceptions of the mentor and experiences. These qualitative findings show that trust predicts relationship quality in mentoring relationships. While prior research has established direct effects between support and trust and between trust and relationship quality, my study is the first to demonstrate that trust mediates the relationship between mentor support and relationship quality. Therefore, this result is unique, considering the dearth of information supporting this research question.

Effects of Mentoring on Well-Being

Much of the mentoring research discusses protégé outcomes related to performance metrics. However, my study makes an interesting contribution in that I also examine how mentoring improves mentee well-being. My second hypothesis stated that mentor support has a direct relationship with mentee well-being. However, this hypothesis was not supported as the paths between Mentor Support and Satisfaction with Life, HPHA, and HPLA were not significant. This is inconsistent with previous research. For example, Qian, Lin, Han, Chen, and Hays (2014) found that mentoring had a negative relationship with job stress, a measure related

to well-being measure. Other research in the leadership literature suggests that high LMX supervisors, reduce subordinate stress (Thomas & Lankau, 2009), and I expected similar relationships for mentor-protégé pairs. Further, Panaccio and Vandenberghe (2009) also found a significant relationship between Perceived Organizational Support and well-being through Affective Organizational Commitment. In other words, employees with high POS have more resources to cope with organizational stress and strain. Additionally, correlations from my study revealed that both career and psychosocial support had significant, moderate, positive relationships with HPHA ($r = .34, p < .01$; $r = .34, p < .01$; respectively), HPLA ($r = .34, p < .01$; $r = .36, p < .01$; respectively), and SWLS ($r = .26, p < .01$; $r = .30, p < .01$; respectively). This adds to the opacity as to why Mentor Support did not predict any components of Well-Being.

Fortunately, there is some support that Trust predicts Well-Being. Hypothesis 7 stated that Trust would directly predict Well-Being. Well-Being was measured using SWLS (a general well-being measure), HPHA, and HPLA (two job-specific well-being measures), but significant relationships were only found with HPLA. Therefore, my hypothesis was only partially supported because there is only a positive, direct relationship between Trust and High-Pleasure, Low-Arousal Affective Well-Being at work. According to Dollard and Bakker (2010), we should expect trust to improve well-being because supportive behaviors physiologically reduce stress and would thus improve well-being. Potential reasons this effect did not work are examined later.

Research Question 2 stated that Trust would mediate the relationship between Mentor Support and Well-Being. Significant indirect effects were only found with HPLA. Therefore, my hypothesis was only partially supported. While previous mentoring research has not examined a mediating role for trust, these null results are inconsistent with extent leadership research. Specifically, Liu, Sui, and Shi (2010) found that trust mediated the relationship between

transformational leadership and work stress. In a cross-sectional study, Kelloway, Turner, Barling, and Loughlin (2012) also found that trust in one's leader mediated the relationship between transformational leadership and well-being. While it is tempting to say that the mediating role of trust in leadership research does not generalize to mentoring, as previously noted, prior research has found that mentor support is related to trust (e.g. Wang et al., 2010; Young & Perrewé, 2000), and trust is related to well-being (e.g. Poulin & Haase, 2015). For example, Young and Perrewé found that protégé perceptions of support predicted relationship effectiveness and trust.

Even though I found that Trust predicted some components of Well-Being and Trust mediated relationships with other components, one may ask why mediation with other dimensions of well-being was not found. Issues with how I assessed Mentor Support may explain why I did not see effects with Satisfaction with Life and HPHA. Research demonstrates that trust in relationships may explain differences in well-being (e.g. Poulin & Haase, 2015). In some mentoring relationships, trust may be lower compared to other mentoring relationships. Critical incidents or negative mentoring experiences may break trust, potentially forming dysfunctional mentoring relationships. In the instance that trust is broken, relationship quality deficits would form and impede well-being outcomes (Mitchell, Cropanzano, & Quisenberry, 2012). My study did not assess dysfunctional mentoring relationships and only assessed facets of positive mentoring (career and psychosocial support), not negative mentoring (i.e. mismatch in pairing mentors/mentees, manipulative relationships, etc.), which are conceptually distinct (Eby, Butts, Lockwood, & Simon, 2004). Negative mentoring relationships have been found to increase intentions to leave the mentoring relationship, depressed mood, and psychological job withdrawal; variables all related to well-being (Eby et al., 2004). Mentees from my sample

could have experienced broken trust or negative mentoring experiences, which I did not account for, and would contribute suppressing well-being outcomes.

Another likely explanation for these results pertains to mismatch between levels of analysis. Workplace mentoring may be more related to work-specific outcomes, such as work-related well-being, and less related to broad outcomes, such as satisfaction with life. Poulin and Haase (2015) found that trust in social relationships leads to general well-being, perhaps because both are broader (and not work-specific) measures. Qian et al. (2014) found that mentoring decreases *job-related stress*, which further suggests that general dimensions of well-being may not be appropriate. In future studies, researchers should focus on more work-related measures of well-being when studying work-related variables.

A different explanation may apply to null findings for HPHA, which is a measure of High-Pleasure and High-Arousal Affective well-being. I did find an effect for HPLA (High-Pleasure, Low-Arousal). Perhaps it was not reasonable to expect a given employee to feel “ecstatic” about their job and more reasonable to expect an employee to be “content” in their job (measured via HPLA). Other potential explanations as to why there is mixed support for well-being are discussed below.

Effects of Mentoring on Engagement

The final goal of my study was to evaluate the direct effect between Mentor Support and Job Engagement (Hypothesis 3), the direct effect of Trust on Job Engagement (Hypothesis 6), and the indirect effect of Mentor Support on Job Engagement through Trust (Hypothesis 8). None of these hypotheses were supported as there were no significant direct or indirect effects. These results are inconsistent with much previous research derived from JD-R, suggesting that resources (in my study, mentor support) activate a motivational process that leads to engagement

(Crawford et al., 2010; Demerouti et al., 2001; Saks & Gruman, 2014; Salanova et al., 2005; Schaufeli & Bakker, 2004; Schaufeli & Salanova, 2007). For example, Schaufeli and Bakker found that job resources lead to employee engagement.

There are conceptual and analysis-based explanations for my null results. Conceptually, job engagement may have more to do with the job itself rather than factors the mentor can influence. This is similar to the literature on job performance and job satisfaction. A meta-analysis of job satisfaction and job performance revealed that these constructs are indeed conceptually related and are even more related when there is a match between levels of specificity in the measures (Iaffaldano & Muchinsky, 1985). Thus, higher correlations between job performance and job satisfaction are obtained when the measures match according to either global or specific levels. Within the context of mentoring, if a mentee/protégé has a boring job, the mentor may be instrumentally and psychosocially supportive, but that does not change the mentee's engagement in job tasks. Additionally, if the mentor is not supporting their mentee/protégé, that does not influence whether job tasks are inherently interesting to the mentee/protégé. Further, this conclusion applies to how mentor support relates to well-being. If a mentor supports their mentee, but cannot change how interesting the job tasks are, the mentee may still feel dissatisfied with their job, which could bleed into overall assessments of well-being. The opposite could also be true. Mentor support could have some influence over the level of well-being at work, but not influence general well-being because of the different levels of abstraction. More broadly, factors such as organizational culture may influence how mentees perceive the support mentors give (Erdem & Aytemur, 2008) and the type of trust mentors are able to develop with their mentees (Fulmer & Gelfand, 2012). For example, in a competitive academic environment, mentors may be more focused on building their mentee's skill set and

less concerned about enacting socially supportive behaviors that are crucial to developing trust. In this instance, even though mentors are acting within the norms of their environment, mentee engagement and well-being would be suppressed in this environment.

In terms of my analysis, it is also possible my proposed structural model is incorrect. When originally specifying my structural model, I tested alternative models. Alternative model 1 tested that Mentor Support leads to Trust, Trust leads to Engagement, and Engagement leads to Well-Being. This model actually fit better than my model and demonstrated significant effects with engagement. Some literature suggests that engagement leads to well-being (e.g. Hansen et al., 2014), so this model is possible and could explain the null results related to engagement from my model. Additionally, Fountain (2018) suggested that the different types of mentor support may have differential effects on the dimensions of engagement. Thus, while there may not be overall effects of mentor support on engagement, the subdimensions of mentor support (career and psychosocial support) may have distinct relationships with the subdimensions of engagement (physical, affective, and cognitive job engagement), which was not captured in my final version of my model.

To evaluate this possibility, I conducted post-hoc analyses that treated subdimensions of mentor support and subdimensions of engagement as independent latent constructs. From this analysis, I found adequate model fit ($\chi^2 (1904) = 3681.74, p < .01, CFI = .92, TLI = .92, RMSEA = .05, SRMR = .05$), which fits significantly better than my originally proposed model ($\Delta\chi^2 (20) = 201.73, p < .01$). Additionally, many relationships between Mentor Support and Engagement became significant (see Tables 10, 11, and 12 for the results of this model). In other words, there are differential effects of Mentor Support on Job Engagement, depending on the subdimension. These results provide an explanation why my hypotheses related to engagement

were not originally supported. Further explanation as to why my hypotheses related to Engagement were not supported are discussed in the following sections.

Theoretical Implications

The present study has important theoretical implications for the mentoring and trust literatures. Results related to Mentor Support, Relationship Quality, Trust, and High-Pleasure, Low-Arousal (i.e. calmness) well-being at work inform current theory and related research. The significant results inform practices in LMX and JD-R.

As indicated earlier, the mentoring literature does not adequately address the interrelationships among mentor support, trust, and relationship quality. Although most mentoring studies consider relationship quality within the nomological net of mentoring, they do not typically examine the direct relationship between mentor support and forming high quality relationships. Related to relationship quality, trust is often cited as integral to developing high quality relationships but is infrequently studied in the mentoring context. My study formally investigates this relationship, improving our understanding of mentoring relationships.

LMX frames our understanding of these contributions. According to LMX, mentors and mentees exchange resources in their relationships, thus leading to more trust and higher relationship quality. Although my present findings do not directly demonstrate a reciprocal relationship between mentoring and trust, it provides an important foundation for future mentoring research. Through the lens of LMX, I establish a fundamental connection among mentor support, trust, and relationship quality that has yet to be studied.

In addition to my study's contributions regarding the formation of high-quality mentoring relationships, this study also contributes to our understanding of how mentoring contributes to well-being. Trust fully mediated the relationship between mentor support and pleasant well-

being at work. My study is the first to test this relationship within the context of mentoring. Pleasant well-being at work extends the current literature on mentoring by focusing on well-being outcomes outside of job satisfaction. Job satisfaction is a commonly studied outcome in the mentoring literature but is insufficient by itself to capture well-being as a holistic construct. Thus, the present findings extends the benefits of social exchange to well-being outcomes.

My results did not show significant findings for job engagement, which has important implications for the application of JD-R. Job engagement is typically studied in the context of JD-R. However, considering that I did not find that a resource (mentor support) improved well-being, it is possible that other causal mechanisms are left unexplored within JD-R. Alternatively, because I do not specifically examine demands, which is integral to testing JD-R I may not be capturing the full story in this study. Instead, I extend the JD-R literature through showing that mentor support, as a resource, improves some well-being through trust.

Considering the pattern of results and that I did not fully test JD-R, this model may not be appropriate for my study. Overall, the pattern of findings suggests that LMX is more relevant as the theoretical background for my study. SET is foundational to LMX and frames more research outside of the leadership context, so it may be an even better and more parsimonious explanation for the relationships found in the present study. For example, social support applies to SET and does not have to come from a JD-R context (e.g. Buunk, Doosje, Jans, & Hopstaken, 1993; Panaccio & Vandenberghe, 2009). Additionally, other research supports the perspective that mentoring should be studied within the context of SET (e.g. Fountain, 2018; Rutti, Helms, & Rose, 2012; Whitley, Dougherty, & Dreher, 1991). For example, research by Fountain (2018) also frames their study of mentoring and engagement within the context of SET, further supporting changing the theoretical context. While I partially relied on SET as background

information for LMX, I did not formally test SET in my hypotheses. Retrospectively, I would use the SET perspective because it best describes the development of mentoring relationships from the mentees' perspective. Future research should test SET through further exploration of the reciprocal or bi-directional nature of mentor support and trust.

Practical Implications

In addition to theoretical implications, the results of this study have practical implications for forming mentoring relationships at work. One of the biggest contributions is the generalizability of these results. My study generalizes to organizations because it was based on a large sample of working adults. Additionally, Qualtrics study panels are generally highly generalizable (Kraiger et. al, 2017; Michel, O'Neill, Hartman, & Lorys, 2018), leading to more confidence in the applicability of my findings. As a result, more organizations can utilize mentoring programs as an effective tactic to create better working relationships between mentors and mentees and improve mentee well-being.

Well-being is increasingly important at work as employees evaluate their jobs as stressful (Cartwright & Holmes, 2006). Additionally, having mentally healthy employees is associated with a number of positive organizational outcomes, including performance (Nielson, Nielson, Ogbonnaya, Käsälä, Saari, & Isaksson, 2017). Therefore, mentoring is a tactic to support employees professionally and emotionally in the workplace. Mentoring can serve as a primary intervention to stress, which are shown to be the most effective methods to preventing stress and strain. An important finding that helps improve stressful work environments is that trust in mentors contributes to well-being at work. Specifically, trust is an essential component to mentoring relationships because this leads to higher-quality relationships and positive mental

health outcomes. High-quality relationships allow positive benefits for both mentors and protégés, promote positive work attitudes, and buffer workplace stress (Ragins, 2016).

Together, these findings imply that more organizations should implement mentoring programs and that steps be taken during implementation to maximize mutual trust in mentoring relationships. Current evidence from the mentoring literature is rich with strategies to implement mentoring programs, such as utilizing training programs and mentoring contracts. Allen, Finkelstein, and Poteet's (2009) formal mentoring program book is one such source that provides evidence and resources to build mentoring programs. Poulsen (2006) also provides helpful tactics, including the following: the mentoring program must fit the industry and organizational culture, have the endorsement of key stakeholders, have the endorsement of leadership, and match mentors and mentees according to best fit. Training programs and seminars ensure that all employees understand the purpose of the mentoring program and that both mentors and mentees know how to fulfill their respective roles. Additionally, the majority of my participants were in formal mentoring programs, holding positive implications for implementing formal programs. Even though formal mentoring programs are typically considered less effective compared to informal programs, my results still showed that mentor functions can support trusting relationships and High-Pleasure, Low-Arousal (i.e. calmness) well-being at work.

Other researchers have created evidence-based tools to foster trust in mentoring relationships. Trust building is particularly important in formal relationships because mentoring pairs created by the organization may have little rapport or interactions before being paired (Wang et al., 2010). Erdem and Aytemur (2008) and Kraiger et al. (2019) provide specific strategies that could guide organizations. Erdem and Aytemur discuss how social supportive behaviors increase trust in mentoring relationships, such as improving lines of communication

between mentors and mentees. In the same vein, Kraiger et al. provide a matrix of mentor actions and goals that orient mentors as to how they can help their protege, given a certain objective. One such objective related to trust building is Build a Personal Relationship. A mentor can build a relationship with their mentee through listening to their mentee, learning more about their mentee, or interacting with their mentee outside their place of work. Other tactics can be found at the following online link: <http://mentormatrix.colostate.edu/>.

In the trust literature, Fulmer and Gelfand (2012) and Meier, Lütkevitte, Mellewig, and Decker (2016) describe tactics that increase interpersonal trust. For example, according to Fulmer and Gelfand, if the mentor sympathizes or cooperates with their mentee, this will increase the mentee's trust in their mentor. Additionally, Meier et al. add that communication and expecting to continue the relationship influence trust building. The leadership literature also poses useful suggestions for trust building. For example, Wang and Hsieh (2013) found that when leaders are consistent with their words and actions, employees trusted leaders more. Applied to mentoring, if mentors are consistent with what they say and do, mentees will trust them more. Additionally, because mentoring dyads are considered small teams, suggestions from the teams literature may also be helpful to organizations. Specifically, Lee et al. (2010) provides useful context as to how specific knowledge-building behaviors can improve team trust and performance that can apply to the mentoring context.

My findings also have implications for trust repair. In the case that protégés and mentors break trust with each other, mechanisms to repair trust are important to gain organizational benefits. Fulmer and Gelfand (2012) added that trust repair is possible if the offended feels that the offender has repented. This is not an exhaustive list of strategies to build trust in mentoring

relationships, however, they provide organizations with a starting point to strategize trust building.

Limitations and Future Research

Although my study offers theoretical and practical contributions, there are limitations. First, issues with violations of my statistical assumptions may limit the validity of the results. Restriction of range may have influenced the assumption of normality, which would result in a higher likelihood that some results were a false negative or Type II error, e.g., the results related to engagement. Restriction of range is a statistical phenomenon when the data points tend to cluster around one area of a distribution, possibly because most participants may genuinely feel more or less positively about a certain subject. Related to my project, it is possible that participants mostly trusted their mentors, felt relatively engaged, and felt like their mentors gave them career support. Restriction of range would explain why career support, trust, and job engagement tended to be negatively skewed and altered the normality of the data. Additionally, the lack of variance may have attenuated the relationships among my variables of interest (Raykov & Marcoulides, 2011). by implication, restriction of range would also help explain why all hypotheses related to job engagement were not significant. Related to the assumption of normality, my data demonstrated issues with linearity which I could not correct with linear transformations. This may have also increased the probability of Type II error. It is also possible, although less likely, that curvilinear relationships exist among my hypothesized relationships. Future research should test the possibility that some of these relationships are curvilinear.

Second among these limitations is the potential for common method bias (CMB). Common method bias exists when covariance is due to measurement issues rather than true relationships among constructs (Podsakoff, Mackenzie, Podsakoff, & Lee, 2003). CMB can

occur when researchers use a single source, a single time point, or a survey design. Relationships could be inflated for a number of reasons, including participants trying to be consistent in their responses, acting on beliefs about whether items are related, giving socially desirable answers, as well as participants overall positive or negative affect producing consistently positive or negative responses (Podsakoff et al., 2003). While I establish that my variables are related, the magnitude of these effects could be inflated from CMB.

In my study I used only a single one source of information. This not only increases CMB but means that I lose the mentor's perspective and thus may lose useful information about the state of the mentoring relationship. Without both perspectives, I can't know whether there is asymmetric or mutual trust in relationships, which has important implications for mentoring outcomes. Additionally, I lose information about how much support a mentor or mentee thinks is provided. If the mentor perceives that they provide more support than what the mentee perceives, this could indicate developing frustrations in the mentoring relationships. Similarly, Allen and Eby (2008) found that differences in mentors' and mentees' evaluations of the mentor's commitment to the relationship predicted relationship quality. Without both perspectives, Allen and Eby would likely have found inaccurate information. For example, if Allen and Eby only studied the mentor's commitment, they may have found lower relationship quality, which contradicts their actual results. Future research still needs to evaluate dyadic relationships from both the mentor and mentee perspective to account for issues with CMB and control for mutual or asymmetrical relationships.

Using a single time point can also increase CMB, e.g., by increasing the likelihood that responses could be influenced by participants' mood state or their implicit beliefs about how items on the survey relate to each other (Podsakoff et al., 2003; Spector, 2019). Without multiple

time points, participant responses are salient in their short-term memory which influences biased responses (Podsakoff et al., 2003). Additionally, multiple time points are necessary to establish causality in my model, assuming the time points are not chosen arbitrarily (Spector, 2019). Since I only used one time point, I cannot definitively prove that my proposed predictors precede my outcomes.

Future research needs to conduct longitudinal and quasi-experimental research to effectively evaluate causality. This is particularly important for establishing the directionality of relationship quality and trust. Research tends to overly cite using longitudinal research as a potential solution, but this method still presents issues with establishing causality (Spector, 2019). Using quasi-experimental research will help better establish the causal relationships among my variables and is particularly important. For example, a future study within an organization could train mentors based on different trust building strategies. Following that manipulation, researchers could survey mentors' and mentees' perceptions of relationship quality post-training. To establish transfer of training, researchers should continue to survey participants over immediate to longer-term increments (perhaps ranging from one month to one year after training). This type of study would show if trust predicts relationship quality.

Another component that limits my ability to draw causal connections are potential alternative explanations. It is possible that I did not account for other important variables. While there is support for my overall model, it is also possible that alternative models might also explain the relationships I observed in the data. Some of these models might include variables I did not measure. For example, Lawrence and Kacmar (2012) found that that job involvement and role conflict mediated the relationship between LMX and stress. In other words, high levels of LMX can lead to role overload and high job involvement, which leads to stress (Lawrence &

Kacmar, 2012). So, it is possible that my model didn't capture important variables that would help explain why Mentor Support would lead to Well-Being. Both my study and Lawrence and Kacmar's found mediating relationships between supportive mentoring or leadership and outcomes related to well-being. However, in my study Trust was the mediator and role overload and job involvement were mediators in Lawrence and Kacmar's study. Consistent with this research, Panaccio and Vandenberghe (2009) found that POS improves well-being. In their research they accounted for job stressors (role ambiguity, role conflict, and role overload) and used organizational commitment as a mediating pathway. While I predict that mentor support effects well-being, Panaccio and Vandenberghe actually found that organizational support improves well-being. However, I did not account for job stressors or demands. This key difference between our studies could have influenced why I did not observe a significant effect between Mentor Support and Well-Being. Excluding job demands or stressors could also explain null results with job engagement. Additionally, including job stressors or demands would have supported the theoretical connections I drew to JD-R. Future research on relationships between mentor support and engagement, or well-being, need to incorporate information about broader organizational feelings, such as organizational commitment and job demands.

Using the LMX lens, mentoring is a dyadic relationship that relies on reciprocal exchange. According to LMX, employees seek balance in exchange relationships (Wayne, Shore, & Liden, 1997). Mutual exchanges strengthen the relationship, but imbalanced exchanges negatively influence employee well-being (Mitchell et al., 2012). For instance, if there is an unbalanced exchange in the mentoring relationship this may lead to negative affect (Buunk et al., 1995). Additionally, negative experiences with mentors are associated with negative psychological mood and job withdrawal (Eby et al., 2004). Analyzing perceptions about equity

and critical incidents in the mentoring relationship would reveal why lower trust and poor relationship quality exists in some relationships and why that does not lead to well-being. Future research in mentoring needs to incorporate information about critical incidents and relationship stage to most accurately represent mentoring relationship quality and trust.

Conclusion

The present research assessed the influence of mentor support and trust on relationship quality, well-being, and engagement. I found that mentor support predicted trust and relationship quality, and that trust explained why mentor support increased relationship quality. I also found that trust increases pleasant well-being at work and that trust explains why mentor support improves pleasant well-being at work. My study provides important implications for understanding the nature of trust in addition to how that influences relationship quality and well-being. Additionally, organizations may use these results to inform implementing mentoring programs. Future research needs to focus on further understanding the reciprocal relationship between trust and mentor support using different samples and methodology.

TABLES AND FIGURES

Table 1
Means, standard deviations, and correlations

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Career Support	4.21	0.81																			
2. Psychosocial Support	3.55	1.03	.51**																		
3. Relationship Quality	4.27	0.78	.75**	.54**																	
4. Benevolent Trust	4.21	0.77	.63**	.51**	.74**																
5. Ability Trust	4.57	0.61	.58**	.31**	.64**	.64**															
6. Integrity Trust	4.31	0.71	.61**	.44**	.73**	.81**	.71**														
7. Satisfaction with Life	4.97	1.35	.26**	.30**	.31**	.34**	.17**	.32**													

Table 1 Continued

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
8. High Pleasure, High Arousal	3.68	0.88	.34 **	.34 **	.39 **	.37 **	.29 **	.38 **	.56 **												
9. High Pleasure, Low Arousal	3.71	0.87	.34 **	.36 **	.43 **	.42 **	.28 **	.42 **	.58 **	.82 **											
10. Low Pleasure, High Arousal	2.31	1.06	- .25 **	- .03	- .28 **	- .29 **	- .25 **	- .33 **	- .25 **	- .29 **	- .38 **										
11. Low Pleasure, Low Arousal	2.37	1.08	- .31 **	- .12 *	- .38 **	- .37 **	- .29 **	- .39 **	- .34 **	- .40 **	- .46 **	.86 **									
12. Cognitiv e Job Engage ment	4.44	0.69	.43 **	.19 **	.45 **	.34 **	.48 **	.41 **	.22 **	.37 **	.33 **	- .24 **	- .32 **								
13. Physical Job Engage ment	4.53	0.61	.48 **	.18 **	.51 **	.37 **	.55 **	.43 **	.16 **	.30 **	.23 **	- .22 **	- .27 **	.81 **							

Table 1 Continued

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
14. Affective Job Engagement	4.37	0.75	.49 **	.30 **	.56 **	.45 **	.51 **	.51 **	.37 **	.60 **	.54 **	-.39 **	-.48 **	.73 **	.72 **						
15. Mentoring Type	1.43	0.5	-.07	0	-.04	.03	.08	.01	-.18 **	-.19 **	-.18 **	.04	.08	-.02	-.02	-.06					
16. Gender	1.52	0.57	-.06	-.25 **	-.06	-.05	.04	-.04	-.22 **	-.19 **	-.20 **	.09 *	.15 **	-.08	.02	-.10 *	.15 **				
17. Race	1.45	1.26	.16 *	.07	.11	.11	.12	.09	.07	.13	.14	.06	.11	.12	.13	.11	.11	.07			
18. Age	36.4 1	7.97	-.01	-.14 **	-.02	-.02	.03	.01	.05	.06	.10 *	.10 *	.10 *	.10 *	.06	.09	.03	.08	-.02		
19. Hispanic	1.88	0.33	-.05	-.06	-.03	-.09	0	-.05	-.09 *	-.03	-.03	.02	.04	.03	.02	.04	.08	.21 **	-.12 **	.09 *	
20. Meeting Frequency	1.79	0.78	-.14 **	-.20 **	-.18 **	-.10 *	-.10 *	-.12 **	-.12 **	-.15 **	-.12 **	.05	.05	.17 **	.17 **	.17 **	.10 *	.16 *	.07	-0	.09

Note. Race was correlated with the other variables through first dummy coding each factor of race, then regressing race on each variable. * indicates $p < .05$. ** indicates $p < .01$

Table 2

Correlations with Confidence Intervals for Predictors and Mediators

Variable	1	2	3	4	5
1. Career Mentor Support					
2. Psychosocial Mentor Support	.51** [.44, .57]				
3. Relationship Quality	.75** [.71, .79]	.54** [.47, .60]			
4. Trust, Benevolence	.63** [.57, .68]	.51** [.44, .57]	.74** [.69, .77]		
5. Trust, Ability	.58** [.51, .64]	.31** [.22, .39]	.64** [.58, .69]	.64** [.58, .69]	
6. Trust, Integrity	.61** [.55, .66]	.44** [.36, .51]	.73** [.69, .77]	.81** [.78, .84]	.71** [.66, .75]

Table 3

Correlations with Confidence Intervals for Mediators and Outcomes

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Trust, Benevolence											
2. Trust, Ability	.64** [.58, .69]										
3. Trust, Integrity	.81** [.78, .84]	.71** [.66, .75]									
4. Job Engage., Affect	.45** [.38, .52]	.51** [.44, .57]	.51** [.44, .57]								
5. Job Engage., Cog.	.34** [.26, .42]	.48** [.41, .55]	.41** [.33, .49]	.73** [.68, .77]							
6. Job Engage., Physical	.37** [.29, .45]	.55** [.49, .61]	.43** [.36, .50]	.72** [.68, .76]	.81** [.77, .84]						

Table 3 Continued

Variable	1	2	3	4	5	6	7	8	9	10	11
7. Sat. with Life	.34** [.26, .42]	.17** [.08, .26]	.32** [.23, .40]	.37** [.29, .44]	.22** [.13, .30]	.16** [.07, .25]					
8. HPHA	.37** [.28, .44]	.29** [.20, .37]	.38** [.30, .46]	.61** [.55, .67]	.39** [.31, .47]	.32** [.23, .40]	.57** [.51, .63]				
9. HPLA	.42** [.34, .49]	.28** [.20, .37]	.42** [.34, .49]	.54** [.47, .60]	.33** [.24, .41]	.23** [.14, .31]	.58** [.52, .64]	.83** [.80, .85]			
10. LPHA	-.29** [-.37, -.21]	-.25** [-.33, -.16]	-.33** [-.41, -.24]	-.39** [-.46, -.30]	-.24** [-.32, -.15]	-.22** [-.31, -.13]	-.25** [-.33, -.16]	-.32** [-.40, -.23]	-.38** [-.45, -.30]		
11. LPLA	-.37** [-.45, -.29]	-.29** [-.37, -.20]	-.39** [-.47, -.31]	-.48** [-.54, -.40]	-.32** [-.40, -.23]	-.27** [-.36, -.19]	-.34** [-.41, -.25]	-.43** [-.50, -.35]	-.46** [-.53, -.39]	.86** [.84, .88]	
12. Job Satisfact- ion	.40** [.32, .47]	.36** [.28, .44]	.42** [.34, .49]	.72** [.68, .76]	.46** [.38, .53]	.43** [.35, .50]	.55** [.48, .61]	.79** [.76, .83]	.76** [.72, .79]	-.41** [-.48, -.33]	-.51** [-.57, -.44]

Table 4

Correlations with confidence intervals of Predictors and Outcomes

Variable	1	2	3	4	5	6	7	8	9	10
1. Career Mentor Support										
2. Psychosocial Mentor Support	.51**									
	[.44, .57]									
3. Job Engage., Affect	.49**	.30**								
	[.42, .56]	[.22, .38]								
4. Job Engage., Cognitive	.43**	.19**	.73**							
	[.35, .50]	[.10, .28]	[.68, .77]							
5. Job Engage., Physical	.48**	.18**	.72**	.81**						
	[.41, .55]	[.09, .27]	[.68, .76]	[.77, .84]						

Table 4 Continued

Variable	1	2	3	4	5	6	7	8	9	10
6. Sat. with Life	.26** [.17, .34]	.30** [.22, .38]	.37** [.29, .44]	.22** [.13, .30]	.16** [.07, .25]					
7. HPHA	.34** [.26, .42]	.34** [.26, .42]	.61** [.55, .67]	.39** [.31, .47]	.32** [.23, .40]	.57** [.51, .63]				
8. HPLA	.34** [.26, .42]	.36** [.28, .44]	.54** [.47, .60]	.33** [.24, .41]	.23** [.14, .31]	.58** [.52, .64]	.83** [.80, .85]			
9. LPHA	-.25** [-.33, -.16]	-.03 [-.12, .06]	-.39** [-.46, -.30]	-.24** [-.32, -.15]	-.22** [-.31, -.13]	-.25** [-.33, -.16]	-.32** [-.40, -.23]	-.38** [-.45, -.30]		
10. LPLA	-.31** [-.39, -.22]	-.12* [-.21, -.03]	-.48** [-.54, -.40]	-.32** [-.40, -.23]	-.27** [-.36, -.19]	-.34** [-.41, -.25]	-.43** [-.50, -.35]	-.46** [-.53, -.39]	.86** [.84, .88]	
11. Job Satisfaction	.38** [.30, .45]	.31** [.22, .39]	.72** [.68, .76]	.46** [.38, .53]	.43** [.35, .50]	.55** [.48, .61]	.79** [.76, .83]	.76** [.72, .79]	-.41** [-.48, -.33]	-.51** [-.57, -.44]

Table 5

Direct Effects of Mentor Support on Mentoring Outcomes

Variable	Beta	S.E.	P-value
Relationship			
Quality	0.62	0.19	0.00
SWLS	0.11	0.15	0.48
HPHA	0.24	0.15	0.12
HPLA	0.15	0.14	0.29
Job Engagement	0.37	0.20	0.07
Trust	0.81	0.05	0.00

Note: SWLS indicates the Satisfaction with Life Scale, HPHA indicates High-Pleasure, High-Arousal and HPLA indicates High-Pleasure, Low-Arousal

Table 6

Direct Effects of Mentee Trust on Mentoring Outcomes

Variable	Beta	S.E.	P-value
Relationship Quality	0.36	0.18	0.05
SWLS	0.28	0.16	0.09
HPHA	0.23	0.16	0.16
HPLA	0.38	0.14	0.01
Job Engagement	0.25	0.21	0.22

Note: SWLS indicates the Satisfaction with Life Scale, HPHA indicates High-Pleasure, High-Arousal and HPLA indicates High-Pleasure, Low-Arousal

Table 7

Indirect Effects of Mentor Support on Mentoring Outcomes through Mentee Trust

Variable	Beta	S.E.	P-value
Relationship Quality	0.29	0.15	0.05
SWLS	0.23	0.13	0.07
HPHA	0.18	0.13	0.17
HPLA	0.31	0.12	0.01
Job Engagement	0.21	0.17	0.23

Note: SWLS indicates the Satisfaction with Life Scale, HPHA indicates High-Pleasure, High-Arousal and HPLA indicates High-Pleasure, Low-Arousal

Table 8

Measurement Models

Model #	Variables Used	Chi-Square	CFI	TLI	RMSEA	SRMR
1	Career Support Role Support Psych Support RQ Trust (with General) JAWS SWLS JES Job Sat	(3450) = 7833.62, p <.01	0.86	0.85	0.05	0.09
2	Career Support Role Support Psych Support RQ Trust (with General) HPHA HPLA LPHA LPLA SWLS JES Job Sat	(3686) = 7911.85, p <.01	0.87	0.86	0.05	0.10
3	Career Support Role Support Psych Support (minus items 8 and 10) RQ Trust (with General) HPHA HPLA LPHA LPLA SWLS JES Job Sat	(3430) = 7180.30, p <.01	0.88	0.87	0.05	0.08

Table 8 Continued

4	Career Support	(2872) = 5810.47, p <.01	0.90	0.89	0.05	0.06
	Psych Support					
	RQ					
	Trust (without General)					
	HPHA					
	HPLA					
	LPHA					
	LPLA					
	SWLS					
	JES					
	Job Sat					
5	Career Support	(1923) = 3883.47, p <.01	0.92	0.91	0.05	0.07
	Psych Support					
	RQ					
	Trust (without General)					
	HPHA					
	HPLA					
	SWLS					
	JES					

Table 9

Factor Loadings of Variables

Variable and/or Subdimension		Items	Estimate	S.E.	Est./S.E.	
Mentor Support	Career Support		0.92	0.03	35.76	
		MFQ_1	0.75	0.04	17.85	
		MFQ_2	0.67	0.05	14.98	
		MFQ_3	0.74	0.04	20.14	
		MFQ_4	0.79	0.03	28.72	
		MFQ_5	0.80	0.03	28.36	
		MFQ_6	0.84	0.02	39.13	
		Psychosocial Support		0.66	0.04	17.94
		MFQ_7	0.74	0.03	21.61	
		MFQ_9	0.87	0.02	35.71	
		MFQ_11	0.60	0.04	15.12	
Trust	Trust in Ability		0.79	0.02	35.42	
		TRUST_1	0.81	0.03	24.68	
		TRUST_2	0.82	0.03	29.32	
		TRUST_3	0.78	0.03	23.04	
		TRUST_4	0.86	0.02	41.69	
		TRUST_5	0.72	0.04	19.94	
		TRUST_6	0.83	0.02	34.20	
		Trust in Benevolence		0.94	0.01	71.51
		TRUST_7	0.79	0.03	30.23	
		TRUST_8	0.82	0.03	31.57	
		TRUST_9	0.75	0.03	22.55	
		TRUST_10	0.85	0.02	36.48	
		TRUST_11	0.77	0.03	22.91	
		Trust in Integrity		0.96	0.01	80.81
		TRUST_12	0.76	0.03	22.39	
		TRUST_13	0.74	0.04	19.86	
		TRUST_14	0.74	0.04	20.49	
	TRUST_15	0.72	0.04	16.60		
	TRUST_16	0.87	0.02	44.74		
	TRUST_17	0.81	0.03	27.17		
	Relationship Quality					
	RQ_1	0.84	0.03	30.68		
	RQ_2	0.87	0.02	46.67		
	RQ_3	0.73	0.03	21.25		
	RQ_4	0.82	0.02	37.47		

Table 9 Continued.

		RQ_5	0.81	0.03	29.60
Job	Physical Job		0.94	0.01	67.79
Engagement	Engagement	JES_1	0.74	0.04	19.41
		JES_2	0.80	0.03	27.29
		JES_3	0.80	0.03	27.35
		JES_4	0.80	0.03	26.24
		JES_5	0.75	0.04	21.01
		JES_6	0.76	0.04	21.49
	Affective Job		0.86	0.02	46.15
	Engagement	JES_7	0.87	0.02	41.45
		JES_8	0.84	0.03	33.34
		JES_9	0.85	0.03	34.01
		JES_10	0.74	0.04	19.47
		JES_11	0.84	0.02	36.08
		JES_12	0.81	0.03	24.15
	Cognitive Job		0.92	0.01	66.28
	Engagement	JES_13	0.79	0.03	29.70
		JES_14	0.85	0.03	25.54
		JES_15	0.88	0.02	42.66
		JES_16	0.84	0.04	22.31
		JES_17	0.73	0.04	19.41
		JES_18	0.87	0.03	32.41
	Satisfaction with Life	SWLS_1	0.86	0.02	44.19
		SWLS_2	0.90	0.01	69.29
		SWLS_3	0.89	0.02	46.97
		SWLS_4	0.76	0.03	28.07
		SWLS_5	0.72	0.03	26.26
	HPHA	JAWS_13	0.52	0.04	10.70
		JAWS_14	0.82	0.02	32.21
		JAWS_15	0.91	0.01	65.84
		JAWS_16	0.78	0.02	29.53
		JAWS_17	0.88	0.01	54.65
	HPLA	JAWS_1	0.77	0.02	24.64
		JAWS_7	0.74	0.02	24.09
		JAWS_9	0.72	0.03	19.07
		JAWS_29	0.81	0.02	34.33
		JAWS_30	0.76	0.02	26.67

Table 10

Factor Loadings Treating MFQ and Engagement Subdimensions as Independent

Construct	Item	Estimate	S.E.	Est./S.E.
Career Support	MFQ_1	0.75	0.04	17.90
	MFQ_2	0.67	0.04	15.17
	MFQ_3	0.74	0.04	20.17
	MFQ_4	0.78	0.03	28.54
	MFQ_5	0.80	0.03	28.08
	MFQ_6	0.84	0.02	38.91
Psychosocial Support	MFQ_7	0.73	0.04	20.85
	MFQ_9	0.87	0.03	35.27
	MFQ_11	0.62	0.04	15.12
Trust		0.79	0.04	21.22
Trust in Ability	TRUST_1	0.81	0.03	24.67
	TRUST_2	0.82	0.03	29.28
	TRUST_3	0.78	0.03	23.04
	TRUST_4	0.86	0.02	41.73
	TRUST_5	0.72	0.04	19.94
	TRUST_6	0.83	0.02	34.22
Trust in Benevolence		0.94	0.02	53.43
	TRUST_7	0.79	0.03	30.17
	TRUST_8	0.82	0.03	31.50
	TRUST_9	0.75	0.03	22.49
	TRUST_10	0.85	0.02	36.56
Trust in Integrity	TRUST_11	0.77	0.03	22.88
		0.96	0.02	44.97
	TRUST_12	0.76	0.03	22.40
	TRUST_13	0.74	0.04	19.81
	TRUST_14	0.74	0.04	20.47
	TRUST_15	0.72	0.04	16.58
Relationship Quality	TRUST_16	0.87	0.02	44.76
	TRUST_17	0.81	0.03	27.21
	RQ_1	0.84	0.03	30.32
	RQ_2	0.87	0.02	46.05
	RQ_3	0.73	0.03	21.32
Physical Job Engagement	RQ_4	0.82	0.02	38.01
	RQ_5	0.81	0.03	29.68
	JES_1	0.74	0.04	19.19
	JES_2	0.80	0.03	26.87
	JES_3	0.80	0.03	26.83
	JES_4	0.81	0.03	27.53
	JES_5	0.75	0.04	21.35

Table 10 Continued.

	JES_6	0.76	0.03	22.12
Affective Job Engagement	JES_7	0.87	0.02	41.11
	JES_8	0.84	0.03	34.20
	JES_9	0.85	0.02	34.48
	JES_10	0.73	0.04	19.49
	JES_11	0.84	0.02	37.79
	JES_12	0.82	0.03	25.93
Cognitive Job Engagement	JES_13	0.79	0.03	29.26
	JES_14	0.85	0.03	25.47
	JES_15	0.88	0.02	42.15
	JES_16	0.84	0.04	22.58
	JES_17	0.73	0.04	19.34
	JES_18	0.87	0.03	33.44
Satisfaction with Life	SWLS_1	0.86	0.02	44.33
	SWLS_2	0.90	0.01	69.04
	SWLS_3	0.89	0.02	46.94
	SWLS_4	0.76	0.03	28.02
	SWLS_5	0.72	0.03	26.28
HPHA	JAWS_13	0.53	0.05	11.41
	JAWS_14	0.82	0.03	32.39
	JAWS_15	0.91	0.01	66.84
	JAWS_16	0.78	0.03	30.26
	JAWS_17	0.88	0.02	55.80
HPLA	JAWS_1	0.77	0.03	25.37
	JAWS_7	0.74	0.03	24.05
	JAWS_9	0.72	0.04	18.28
	JAWS_29	0.81	0.02	33.10
	JAWS_30	0.77	0.03	27.54

Note: HPHA indicates High-Pleasure, High-Arousal. HPLA indicates High-Pleasure, Low Arousal.

Table 11

Direct Effects of the Structural Model Treating MFQ and Engagement Subdimensions as Independent

Outcome Variable	Predictor Variables	Estimate	S.E.	Est./S.E.	P-Value
Relationship Quality	Trust	0.52	0.11	4.67	0.00
	Career Support	0.40	0.12	3.44	0.00
	Psychosocial Support	0.09	0.04	2.04	0.04
Physical Job Engagement	Trust	0.30	0.15	2.03	0.04
	Career Support	0.42	0.13	3.24	0.00
	Psychosocial Support	-0.19	0.06	-3.15	0.00
Affective Job Engagement	Trust	0.39	0.13	3.03	0.00
	Career Support	0.28	0.13	2.12	0.03
	Psychosocial Support	-0.06	0.06	-0.86	0.39
Cognitive Job Engagement	Trust	0.28	0.14	1.97	0.05
	Career Support	0.35	0.14	2.56	0.01
	Psychosocial Support	-0.15	0.07	-2.17	0.03
Satisfaction with Life	Trust	0.31	0.10	3.22	0.00
	Career Support	-0.02	0.10	-0.24	0.81
	Psychosocial Support	0.14	0.07	1.83	0.07
HPHA	Trust	0.29	0.10	2.92	0.00
	Career Support	0.06	0.10	0.55	0.58
	Psychosocial Support	0.16	0.08	1.96	0.05
HPLA	Trust	0.42	0.10	4.36	0.00
	Career Support	0.01	0.10	0.07	0.94
	Psychosocial Support	0.13	0.08	1.74	0.08
Trust	Career Support	0.67	0.07	9.70	0.00
	Psychosocial Support	0.13	0.06	2.41	0.02

Note: HPHA indicates High-Pleasure, High-Arousal. HPLA indicates High-Pleasure, Low Arousal. Bold indicates a significant relationship.

Table 12.

Indirect Effects of the Structural Model Treating Subdimensions of MFQ and Engagement as Independent Variable through Trust

Predictor	Outcome	Estimate	S.E.	Est./S.E.	P-Value	
Psychosocial Support	Relationship Quality	0.07	0.03	2.13	0.03	
	Physical Job Engagement	0.04	0.03	1.51	0.13	
	Affective Job Engagement	0.05	0.03	1.92	0.06	
	Cognitive Job Engagement	0.04	0.02	1.52	0.13	
	Satisfaction with Life	0.04	0.02	2.05	0.04	
	HPHA	0.04	0.02	1.94	0.05	
	HPLA	0.06	0.03	2.15	0.03	
	Career Support	Relationship Quality	0.34	0.09	4.00	0.00
		Physical Job Engagement	0.20	0.10	1.92	0.05
		Affective Job Engagement	0.26	0.09	2.78	0.01
Cognitive Job Engagement		0.18	0.10	1.87	0.06	
Satisfaction with Life		0.21	0.07	3.12	0.00	
HPHA		0.19	0.07	2.75	0.01	
HPLA		0.28	0.07	3.90	0.00	

Note: HPHA indicates High-Pleasure, High-Arousal. HPLA indicates High-Pleasure, Low Arousal. Bold indicates a significant relationship.

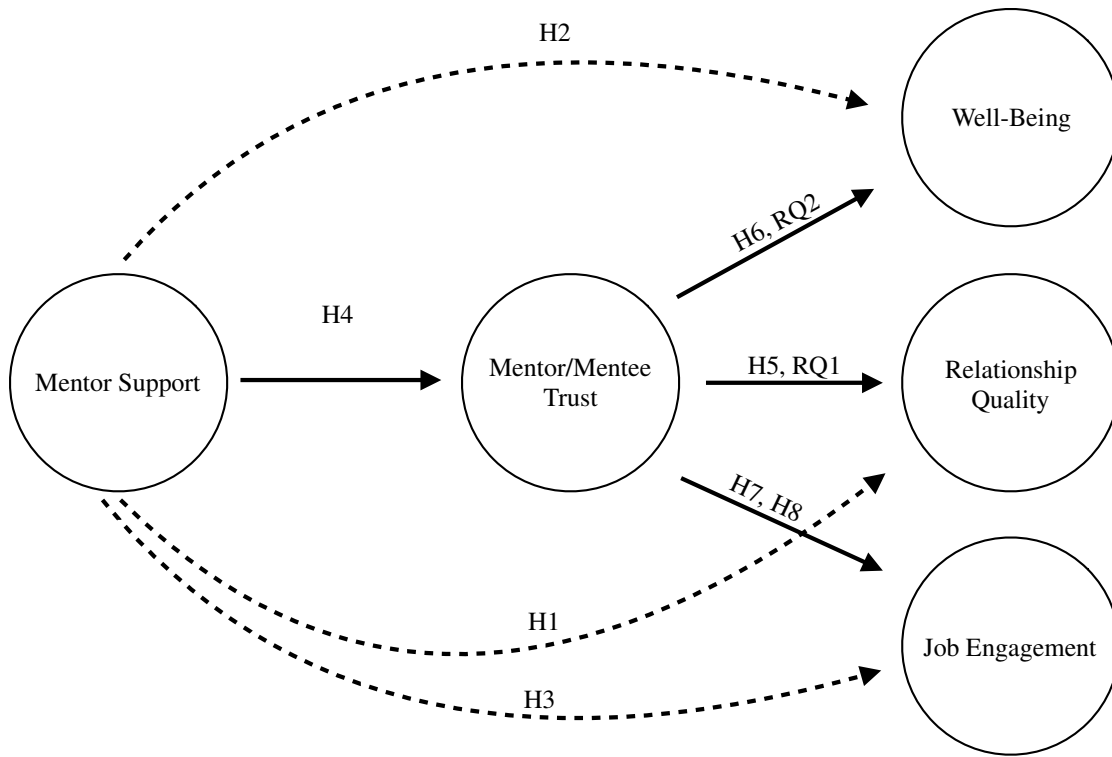


Figure 1. The proposed model linking mentor support, mentor/mentee trust, and mentoring outcomes.

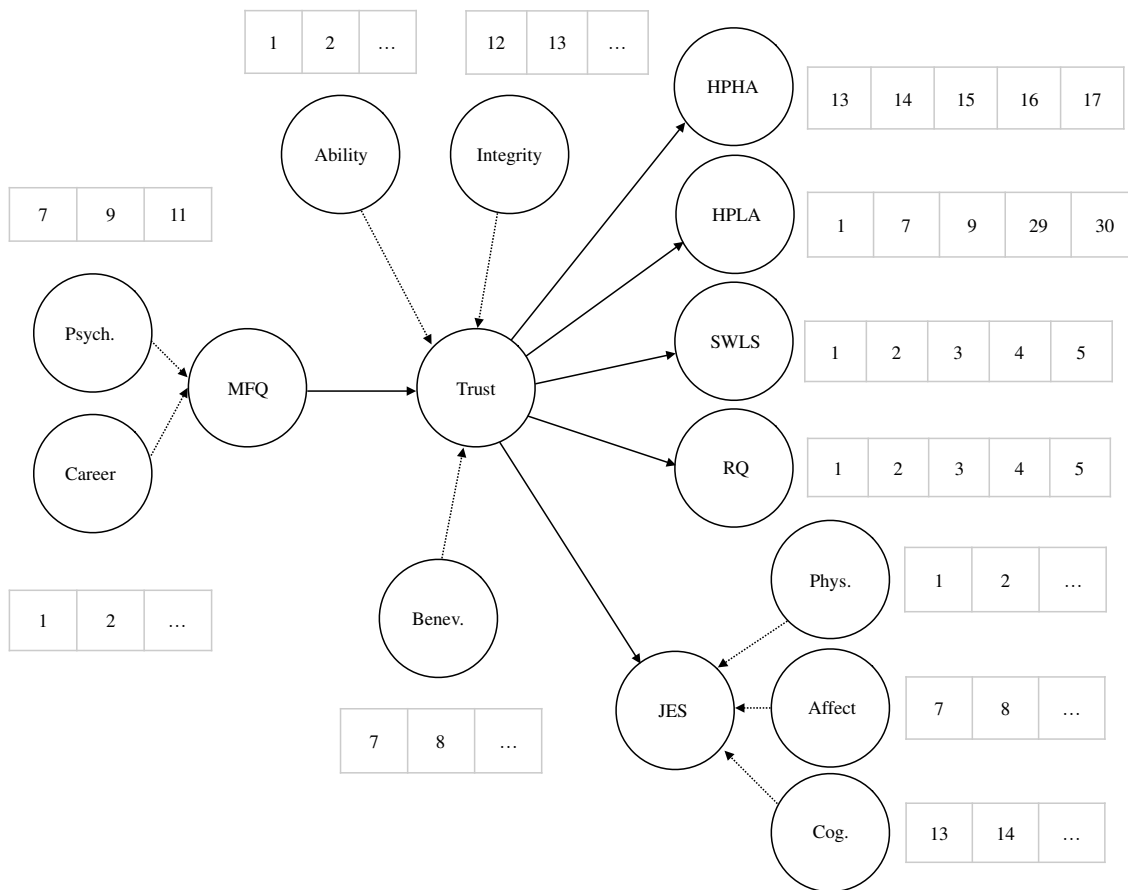


Figure 2. Tested Model.

Note: The variables and subdimensions are abbreviated in the following ways: “Psych.” indicates Psychosocial Support, “Career” indicates Career Support, “MFQ” indicated Mentoring Functions Questionnaire, “Benev.” indicates Benevolence, “HPHA” indicates High-Pleasure, High-Arousal, “HPLA” indicates High-Pleasure, Low-Arousal, “SWLS” indicates Satisfaction with Life Scale, “RQ” indicates Relationship Quality, “JES” indicates Job Engagement Scale, “Phys.” indicates Physical, and Cog. Indicates Cognitive.

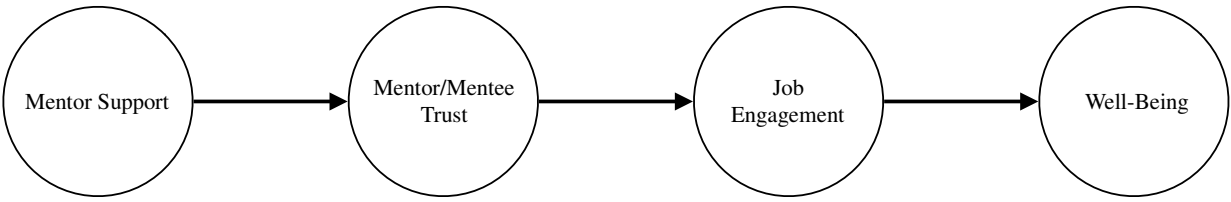


Figure 3. The first alternative model. The first alternative model predicts mentor/mentee trust mediates the relationship between mentor support and job engagement, which predicts well-being.

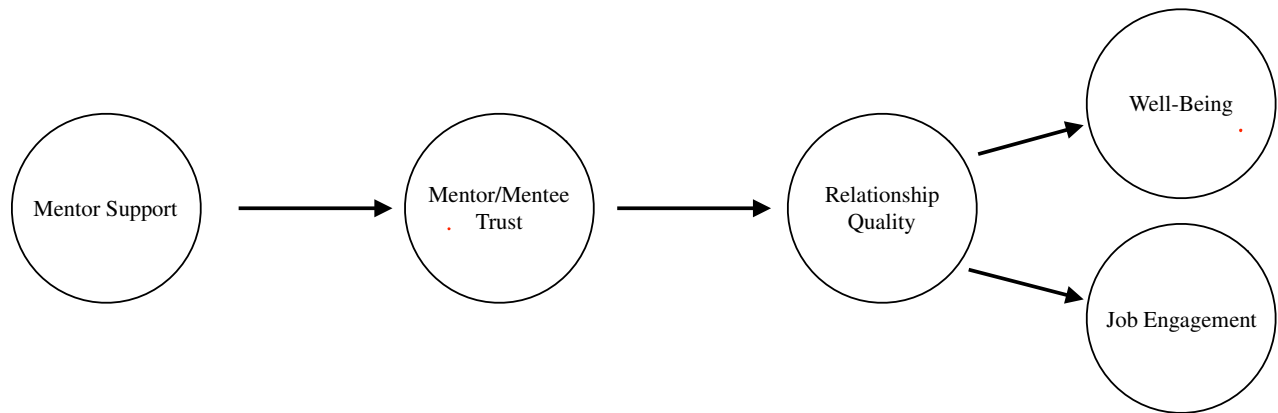


Figure 4. The second alternative model. The first alternative model predicts mentor/mentee trust mediates the relationship between mentor support and relationship quality, which predicts well-being and job engagement.

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APPENDIX A: SPECIFICATION QUESTIONS

1. Are you in a mentoring relationship? Mentoring refers to a relationship between a mentor, or a person with expertise, and mentee or protégé, or person with less experience that leads to the professional and psychosocial development of the latter (Kram, 1985).

Yes

No

2. Please check whether you are a mentor or a mentee:

Mentor

Mentee

3. Does your mentor also work in the same organization as you?

Yes

No

APPENDIX B: MENTOR SUPPORT

Scandura & Ragins (1993)

Mentoring Functions Questionnaire (MFQ-15)

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 professional opportunities
5. My mentor helps me coordinate professional goals.
6. My mentor has devoted special time and consideration to my career.

Psychosocial Support

7. I share personal problems with my mentor.
8. I socialize with my mentor after work.
9. I exchange confidences with my mentor.
10. I consider my mentor to be a friend.
11. I often go to lunch with my mentor.

Role Modeling

12. I try to model my behavior after my mentor.
 13. I admire my mentor's ability to motivate others.
 14. I respect my mentor's knowledge of the profession.
 15. I respect my mentor's ability to teach others.
-

LMX-7 ($\alpha = .88$)

1. Do you know where you stand with your mentor - do you usually know how satisfied your mentor is with what you do?
 1. Rarely
 2. Occasionally
 3. Sometimes
 4. Fairly Often
 5. Very Often
 2. How well does your mentor understand your job problems and needs?
 1. Not a Bit
 2. A Little
 3. A Fair Amount
 4. Quite a Bit
 5. A Great Deal
 3. How well does your mentor recognize your potential?
 1. Not at All
 2. A Little
 3. Moderately
 4. Mostly
 5. Fully
 4. Regardless of how much formal authority your mentor has built into his/her position, what are the chances that your mentor would use his/her power to help you solve problems in your work?
 1. None
 2. Small
 3. Moderate
 4. High
 5. Very High
 5. Again, regardless of the amount of formal authority your mentor has, what are the chances that he/she would "bail you out," at his/her expense?
 1. None
 2. Small
 3. Moderate
 4. High
 5. Very High
 6. I have enough confidence in my mentor that I would defend and justify his/her decision if he/she were not present to do so.
 1. Strongly Disagree
 2. Disagree
 3. Neutral
 4. Agree
 5. Strongly Agree
 7. How would you characterize your working relationship with your mentor?
 1. Extremely Ineffective
 2. Worse Than Average
 3. Average
 4. Better Than Average
 5. Extremely Effective
-

APPENDIX C: RELATIONSHIP QUALITY

Allen & Eby (2003)

Relationship Quality Scale

1. The mentoring relationship between my mentor and I was very effective.
 2. I am very satisfied with the mentoring relationship my mentor and I developed.
 3. I was effectively utilized as a mentee by my mentor.
 4. My mentor and I enjoyed a high-quality relationship.
 5. Both my mentor and I benefited from the mentoring relationship.
-

Wayne & Ferris (1990)

Mentor Liking Scale ($\alpha = .94$)

1. How much do you like your mentor?
 1. I don't like my mentor at all
 2. I don't like my mentor
 3. I feel neutral about my mentor
 4. I like my mentor
 5. I like my mentor very much
2. I get along well with my mentor
 1. Strongly Disagree
 2. Disagree
 3. Neither Agree nor Disagree
 4. Agree
 5. Strongly Agree
3. I enjoy being my mentor's mentee
 1. Strongly Disagree
 2. Disagree
 3. Neither Agree nor Disagree
 4. Agree
 5. Strongly Agree

Note: One item related to being a mentor's friend was eliminated.

APPENDIX D: TRUST

Mayer & Davis (1999)

Organizational Trust Instrument

Instructions: Think about your mentor. For each statement, write the number that best describes how much you agree or disagree with each statement.

Trustworthiness (Ability) ($\alpha = .85$)

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

Trustworthiness (Benevolence) ($\alpha = .87$)

7. My mentor is very concerned about my welfare.
8. My needs and desires are very important to my mentor.
9. My mentor would not knowingly do anything to hurt me.
10. My mentor really looks out for what is important to me.
11. My mentor will go out of its way to help me.

Trustworthiness (Integrity) ($\alpha = .82$)

12. My mentor has a strong sense of justice.
13. I never have to wonder whether my mentor will stick to their word.
14. My mentor tries hard to be fair in dealings with others.
15. My mentor's actions and behaviors are very consistent.
16. I like my mentor's values.
17. Sound principles seem to guide my mentor's behavior.

Trust ($\alpha = .59$)

18. If I had my way, I wouldn't let my mentor have any influence over issues that are important to me.*
19. I would be willing to let my mentor have complete control over my future in this company.
20. I really wish I had a good way to keep an eye on my mentor.*
21. I would be comfortable giving my mentor a task or problem which was critical to me, even if I could not monitor their actions.

Note: * = reverse coded; 5-point Likert scale (1 = *disagree strongly*; 5 = *agree strongly*);

Adapted from "top management" to "my mentor"

APPENDIX E: JOB ENGAGEMENT

Rich, LePine, & Crawford (2010)

Job Engagement Scale

Physical

1. I work with intensity on my job.
2. I exert my full effort to my job.
3. I devote a lot of energy to my job.
4. I try my hardest to perform well on my job.
5. I strive as hard as I can to complete my job.
6. I exert a lot of energy on my job.

Affective

7. I am enthusiastic about my job.
8. I feel energetic about my job.
9. I am interested in my job.
10. I am proud of my job.
11. I feel positive about my job.
12. I am excited about my job.

Cognitive

13. At work, my mind is focused on my job.
 14. At work, I pay a lot of attention to my job.
 15. At work, I concentrate on my job.
 16. At work, I focus a great deal of attention on my job.
 17. At work, I am absorbed in my job.
 18. At work, I devote a lot of attention to my job.
-

APPENDIX F: WELL-BEING

Diener, Emmons, Larsen, & Sharon (1985)

Satisfaction with Life Scale (SWLS)

Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item.

1. In most ways my life is close to my ideal.
 2. The conditions of my life are excellent.
 3. I am satisfied with my life
 4. So far, I have gotten the important things I want in life.
 5. If I could live my life over, I would change almost nothing.
-

Van Katwyk, Fox, Spector & Kelloway (2000)

Job-Related Affective Well-Being Scale (JAWS)

Below are a number of statements that describe different emotions that a job can make a person feel. Please indicate the amount to which *any part of your job (e.g. the work, coworkers, supervisor, clients, pay)* has made you feel that emotion in **the past 30 days**.

- | | |
|-------------------------------------|--------------------------------------|
| 1. My job made me feel at ease | 16. My job made me feel ecstatic |
| 2. My job made me feel angry | 17. My job made me feel enthusiastic |
| 3. My job made me feel anxious | 18. My job made me feel frightened |
| 4. My job made me feel annoyed | 19. My job made me feel frustrated |
| 5. My job made me feel bored | 20. My job made me feel furious |
| 6. My job made me feel cheerful | 21. My job made me feel gloomy |
| 7. My job made me feel calm | 22. My job made me feel fatigued |
| 8. My job made me feel confused | 23. My job made me feel happy |
| 9. My job made me feel content | 24. My job made me feel intimidated |
| 10. My job made me feel depressed | 25. My job made me feel inspired |
| 11. My job made me feel disgusted | 26. My job made me feel miserable |
| 12. My job made me feel discouraged | 27. My job made me feel pleased |
| 13. My job made me feel elated. | 28. My job made me feel proud |
| 14. My job made me feel energetic | 29. My job made me feel satisfied |
| 15. My job made me feel excited | 30. My job made me feel relaxed |
-

APPENDIX G: JOB SATISFACTION

Thompson & Phua (2012)

The Brief Index of Affective Job Satisfaction (BIAJS)

Thinking specifically about your current job, do you agree with the following?

1. I find real enjoyment in my job
2. My job is unusual ^a
3. I like my job better than the average person
4. My job needs me to be fit ^a
5. Most days I am enthusiastic about my job
6. My job is time consuming ^a

7. I feel fairly well satisfied with my job

Note: 5-point Likert scale; ^a indicates a distractor item that will be removed during analysis

APPENDIX H: MENTEE DEMOGRAPHICS

1. What is your gender?
 - a. Male
 - b. Female
 - c. Other (please specify): _____
 - d. Prefer not to say

2. What is your age? ____ years

3. Are you Hispanic and/or Latino?
 - Yes

 - No

4. What is your race/ethnicity? Check all that apply.
 - a. African American or Black
 - b. Caucasian or White (non-Hispanic)
 - c. Hispanic or Latinx
 - d. Asian American/Asian/Asian Pacific Islander
 - e. Native American/American Indian/Alaska Native
 - f. Multiracial or Multiethnic
 - g. Other (please specify): _____

5. Is your mentor also your supervisor?
 - Yes

 - No

6. Are you in a formal or informal mentoring relationship?
 - Formal

 - Informal

7. How long have you been in your mentoring relationship? Please indicate in years and if less than a year please use decimals.

____ Year(s)

8. How often do you meet with your mentor?

- 1 Very Often (every day)
- 2 Often (every week)
- 3 Sometimes (every month)
- 4 Rarely (every other month)
- 5 Never