RELATIONSHIP DIFFERENTIATION AND SUPERVISORY MENTORING: A SOCIAL COMPARISON PERSPECTIVE OF COUNTERPRODUCTIVE BEHAVIOR

by

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(Under the Direction of Gary J. Lautenschlager)

ABSTRACT

The present study investigated how supervisory mentors’ perceived organizational support (POS) and role overload influenced a moderated mediation framework of group mentor relationship quality differentiation, individual relationship quality and CWB using framework previously prescribed in subordinate-dyad research. Combing leadership and mentoring literatures a survey was conducted among 490 substance abuse counselors and 101 supervisors. Linear regression supported that role overload predicted greater relationship quality differentiation. The proposed multilevel hypotheses which stated that increased role overload and POS would lead to an increase in subordinate CWB by way of the moderated mediation interaction of relationship quality differentiation and relationship quality was not supported by a series of mixed effect regression analyses. Implications for practical and theatrical contributions are discussed, along with future research directions.

INDEX WORDS: Counterproductive Workplace Behavior; Job Demand Resources; Social Comparison; Mentoring; Role Overload; Mixed Effects Regression
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CHAPTER 1

INTRODUCTION

Not all workplace relationships are created equal. When employees find that they are the recipient of a comparatively low-quality relationship and denied access to tangible career outcomes, they may engage in deleterious behavior designed to “even the playing field” or retaliate against the entity that influences career outcomes. Research has shown that when supervisors are tasked with managing groups of individuals, differences in treatment among supervisor-subordinate dyads emerge (Allen & Eby, 2003; Green & Bauer, 1995; Liden, Erdogan, Wayne, & Sparrowe, 2006; Ma & Qu, 2010). Differentiation has largely been ignored in the mentoring literature, but the benefits of a mentor correspond with those of having a high-quality leader-member exchange (LMX) relationship. Not only are group mentoring relationships similar to those of LMX, but the long-term developmental aspects of mentoring may exacerbate individuals responses to continued differences in relationship quality among peer group members. This research seeks to address the gap in mentoring research concerning relationship quality differentiation and the organizational consequences which arise in light of it.

Differentiation has become an accepted feature in LMX research (Henderson, Liden, Glibkowski, & Chaudhry, 2009). LMX differentiation suggests that managers focus on a number of organizational and social cues when developing high-quality relationships with their direct reporting subordinates, and that high quality relationships provide a host of career opportunities (Graen & Cashman, 1975; Graen, Dansereau, & Minami, 1972). The differences derived from group mentoring relationships may mimic the effects of LMX differentiation (Eby,
Mentoring literature states that a variety of task-based and interpersonal behaviors help identify subordinates who are afforded a relationship more synonymous with one of a protégé (Allen, 2004; Ensher & Murphy, 1997; Ragins, 1999; Ragins & Cotton, 1993; Singh, Ragins, & Tharenou, 2009). Furthermore, mentors who have frequent contact with their protégés, such as by working in the same department, have stronger mentoring relationships than those with less frequent interaction (Allen, Eby, & Lentz, 2006), and some research suggests that the proximity of a mentor to a protégé is indicative of a higher quality mentoring relationship (Burke, McKenna, & McKeen, 1991; Raabe & Beehr, 2003). In some professions, such as substance abuse counseling, supervisors are thought to fulfill a mentoring role in addition to their managerial duties.

Powell and Brodsky (2004) characterize substance abuse counselor-supervisor relationships as a supervisory relationship consisting of developmental aspects. This unique form of leadership has been regarded as supervisory career mentoring (SCM). SCM is defined as a “transformational activity involving a mutual commitment by mentor and protégé to the latter’s long-term development, as a personal, extra organizational investment in the protégé by the mentor, and as the changing of the protégé by the mentor, accomplished by the sharing of values, knowledge, experience, and so forth” (Scandura & Schriesheim, 1994, p.1589). This type of leadership is a formal, long-term developmental process, consisting of performance-oriented facets of transformational leadership as well as developmental-oriented components of mentoring (Scandura & Williams, 2004). Supervisors routinely work very closely with a
number of employees who report directly to them, thus creating a group phenomenon similar to LMX differentiation.

Differentiation research concerning LMX has shown that differences in the relationships individuals share with their supervisor, within a work group, have been predictive of a variety of interpersonal and organizational consequences such as: a decrease in team performance, organizational commitment (Erdogan & Enders, 2007; Le Blanc & González-Romá, 2012; Liden et al., 2006), job satisfaction, well-being (Hooper & Martin, 2008), work group cohesiveness (Sherony & Green, 2002), perceptions of fairness (Sias & Jablin, 1995), team climate agreement (Ford & Seers, 2006), and increased team conflict (Boies & Howell, 2006). Although research has identified a number of consequences concerning group climate and cooperation, differentiation research has largely ignored the actions purposefully enacted by individuals to impede the organization’s interests or retaliate against its agents, namely counterproductive work behavior (CWB).

Henderson et al. (2009) suggested that the appropriate direction differentiation research should adhere to is a meso-framework, which identifies multi-level antecedents of individual behavior. The impact leaders have on their workgroup is undeniable (Gerstner & Day, 1997), and research would benefit from expanding differentiation research to address how mentor and protégé relationships are influenced by relationship quality dispersion. The primary purpose of this research is threefold. First, this research will adapt framework developed in LMX literature to study the effects that SCM differentiation has on subordinates. Dispersion of relationship quality amongst workgroups has not been measured in regards to SCM or mentoring, and the structure of this type of supervisory-mentoring relationship is inherently suitable for this type of measurement. Second, this research will identify how employees with low-quality SCM
relationships may engage in CWB as a way to retaliate or protest relationship differentiation. Employees who share a low-quality relationship with their supervisor may find themselves comparatively disadvantaged to peers within their work group. Specifically, employees may find themselves disadvantaged when it comes to availability of resources, opportunity for challenging assignments and promotion, and improved interpersonal relationship between an employee and supervisor. The detrimental effects of a low-quality relationship may influence individuals to engage in behavior to impede the organization’s and their supervisor’s best interests. Finally, this research will expand on the meso-framework that Henderson et al. (2009) ventured would prove an advantageous route of study by using the job demands-resources (JD-R) model and identifying how variables such as role overload and perceived organizational support (POS) influence the relationships supervisors develop with members of their work group and the resulting response of subordinates as CWB.
CHAPTER 2

LITERATURE REVIEW, HYPOTHESES, & RESEARCH QUESTIONS

Supervisory Mentoring

Supervisors are in the best position to have frequent interactions with protégés (Ragins & McFarlin, 1990). Scandura and Schriesheim (1994) postulated that mentoring relationships may have more career-related outcomes when one’s mentor is also one’s supervisor. Research has shown that SCM significantly added to the short-term career outcomes of transformational leadership behavior (Godshalk & Sosik, 2000) by providing subordinates with long-term outcomes typically associated with mentoring, such as salary and promotion growth, increased organizational commitment (Scandura & Williams, 2004), lower rates of turnover (Raabe & Beehr, 2003), decreased work-to-nonwork conflict (Laschober et al., 2013), and task-based support. Supervisor-mentors work closely with their subordinates as an authority of direct report. In lieu of their close proximity, supervisor-mentors are most often charged with the evaluation of subordinate performance and have access to specific job-related information which includes the protégé’s strengths and weaknesses (Eby, 1997). This places supervisor-mentors in a unique circumstance: they have the ability to offer the long-term benefits of a mentoring relationship along with the constructive task-based feedback and tangible career benefits associated with a supervisory role.

Counselors, in the field of substance abuse typically turn to their supervisor for advice, career guidance, task and emotional support, while supervisors act as a role model and provide the counselor with an open and trusting relationship (Powell & Brodsky, 2004). This type of
relationship with one’s supervisor provides both career-related and psychosocial support identified by Kram (1985) as the two broad types of support one may expect from a high-quality mentoring relationship.

Although routinely positive (Allen, Eby, Poteet, Lentz, & Lima, 2004), mentoring relationships do have a cost. Supervisors are more likely to provide mentoring support when the proportion of perceived outcomes outweighs the inputs into the relationship (Ragins & Scandura, 1999; Sabatelli & Shehan, 1993), which, according to the rising star hypothesis, may be identified as a high-performing subordinate (Ragins, 1999; Ragins & Cotton, 1993; Singh et al., 2009). In SCM, there is rarely a case of a one-on-one dyadic relationship. The nature of hierarchically-designed business structures is such that a supervisor typically has a number of subordinate direct reports. The effects of mentoring a group create differences in the quality of relationship each subordinate has with his or her supervisor, resulting in differentiation in relationship quality.

**Relationship Quality Differentiation**

The majority of mentoring research has been dedicated to the individual mentor-protégé dyad. Subordinate groups rarely share a uniform relationship with their supervisor (Burke et al., 1991; Henderson et al., 2009; Liden & Graen, 1980; Thibodeaux & Lowe, 1996) some employees are afforded the previously described benefits, which are emblematic of high-quality relationships, while others do not receive the same level of investment from their supervisor. SCM, as a group mentoring structure, may create differentiation in the relationship quality each employee shares with his or her supervisor. Mentor-protégé relationship quality includes satisfaction with the relationship, benefits afforded to individuals, and depth of the relationship.
It is considered an indication of relationship effectiveness, and relational quality is thought of as the basis for an effective mentoring relationship (Allen & Eby, 2003; Kram, 1985).

Although maintaining a positive relationship with all employees may be beneficial for supervisors, research has shown this is not practically feasible. Factors such as time (Scandura & Graen, 1984), finances (Sparrowe & Liden, 2005), organizational resources (Erdogan & Enders, 2007), personality similarity (Duchon, Green, & Taber, 1986), willingness to learn (Allen, 2004), liking and tenure (Liden, Wayne, & Stilwell, 1993), and ability (Liden et al., 1993; Singh et al., 2009) help identify which subordinates develop high-quality relationships with their leader. The benefits associated with a mentoring relationship provide employees with tangible career benefits, such as sponsorship, exposure, visibility, coaching and protection (Allen, 2004), and challenging assignments and promotion opportunities (Allen et al., 2004; Gerstner & Day, 1997). While advantageous, these benefits are not equally shared with all employees. The supervisor may implicitly or explicitly invest in a top-performing employee or an employee who more closely resembles the supervisor. The focus of effort into relationship with a select group of employees will undoubtedly leave other employees without the same benefits and looking into the relationships of their coworkers (Liden et al., 2006; Sherony & Green, 2002; Singh et al., 2009).

Consistent with social comparison (Wood, 1989), differentiation research has indicated that LMX relationships affect employees outside of the focal dyad (Liden et al., 2006; Sherony & Green, 2002; Sias & Jablin, 1995; Tse, Dasborough, & Ashkanasy, 2008) and that group members are aware of the differing treatment of others by their leader (Duchon et al., 1986; Graen & Cashman, 1975; Sias & Jablin, 1995). Although considered a fundamental aspect of LMX, differentiation has shown negative implications for members’ job satisfaction, well-being
(Hooper & Martin, 2008) and organizational commitment (Van Breukelen, Konst, & Van Der Vlist, 2002), while promoting competition and disharmony amongst group members (Boies & Howell, 2006; Sherony & Green, 2002).

Some research has highlighted the social comparison process involved with differentiation. Sias and Jablin (1995) demonstrated that differentiation was related to perceptions of fairness within workgroups, influenced communication between coworkers and led individuals to talk about differentiation itself. Sherony and Green (2002) added that coworkers who share similar relationships to their supervisor as other employees find themselves having closer relationships with these employees, creating in-and out-groups of employees that are defined by the shared relationship with their supervisor. Henderson, Wayne, Shore, Bommer, and Tetrick (2008) supported a social comparison approach in LMX research. The researchers found that the social comparison processes may simultaneously operate at the individual level, individual-within-group level, and at the group level by demonstrating that individual-within-group perceptions of psychological contracts were influenced by the social group the employee was a part of. Research conducted by Vidyarthi, Liden, Anand, Erdogan, and Ghosh (2010) suggests that employees valued their relative status within their work group more highly than actual standing. This is to say that regardless of the quality of their relationship with their supervisor, employees more highly valued how their relationship with their supervisor compared to that of their coworkers’ relationships with their supervisor.

This research supports Wood’s (1989) conceptualization of social comparison theory. Individuals strive to identify standing relative to comparison others, especially when individuals are perceived as more similar, such as peers within a workgroup. Furthermore, the social comparison process is a bi-directional relationship, suggesting that self-concept may determine
one’s social comparisons and that one’s social group influences their self-concept. Research shows that self-ratings of performance routinely overrate supervisor ratings (Conway & Huffcutt, 1997; Heidemeier & Moser, 2009), suggesting that individuals’ self-concept may be an inflated perception. When the returns of a poor-quality relationship do not coincide with one’s perceived ability, individuals may pursue other methods to “even the score,” retaliate, or protest by engaging in behavior detrimental to the organization and its constituents (Jones, 2009; Kelloway, Francis, Prosser, & Cameron, 2010; Skarlicki & Folger, 1997; Skarlicki, Folger, & Tesluk, 1999).

Before addressing the potential consequences of differentiation, it would be wise to focus on potential causes of relationship differentiation in a work group. Henderson et al. (2009) discussed the utility of adopting a meso-approach in identifying supervisor variables that influence subordinates and subordinate work groups. Using the JD-R model (Bakker, Demerouti, de Boer, & Schaufeli, 2003; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) I identify two leader variables, RO and POS, which may influence both the variability and the median relationship quality differentiation within a work group.

**Job-Demand Resources and Differentiation**

Research has shown how resources provided to a leader by his or her supervisor are then shared in exchange relationships with the subordinate workgroup (Erdogan & Enders, 2007; Molm, Peterson, & Takahashi, 2001; Wayne, Shore, & Liden, 1997). The JD-R model is comprised of two competing factors: job resources and job demands. These two forces interact to create the possibility for job strain, which is said to result from stress created when job demands outweigh resources available to handle the situation (Bakker & Demerouti, 2007; Bakker et al., 2003). Demands are characterized by physical, psychological, social or
organizational aspects of the job that require sustained effort or skills, which are associated with physiological and psychological costs. Resources refers to aspects which help achieve work goals, reduce job demands and the associated costs, and stimulate personal growth, learning and development (Bakker & Demerouti, 2007). When demands exceed the resources available to manage demands, an individual may engage in performance protection strategies, which requires greater effort and physiological costs, resulting in job strain. The stress created from job strain is thought to deplete physical resources (Demerouti et al., 2001), resulting in waning job performance (Hockey, 1993).

Supervisors are asked to balance conceptual, interpersonal and technical/administrative tasks (Dierdorff, Rubin, & Morgeson, 2009). These three broad categories capture the breadth of the expansive roles managers are asked to fill. A manager must balance his or her time between tasks to effectively perform his or her job. The JD-R model of job strain has been related to specific outcomes, such as, detrimental effects on employee well-being, task performance, organizational citizenship behavior (Cropanzano, Rupp, & Byrne, 2003), engagement (Bakker, Demerouti, & Verbeke, 2004), increased turnover intentions, absenteeism (Schaufeli, Bakker, & Van Rhenen, 2009), and decreases in organizational commitment (Q. Hu, Schaufeli, & Taris, 2011). When supervisors experience high job demands such as role overload, the ability to balance conceptual, interpersonal and technical/administrative tasks may suffer, thus decreasing the managers’ ability to effectively perform (Brown, Jones, & Leigh, 2005).

Role Overload. Role overload is created when the perceptions of resources to deal with role demands are determined insufficient, resulting in distraction, stress, and the inability to perform all task duties (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964; Rizzo, House, & Lirtzman, 1970). Role overload is associated with many negative consequences in the workplace,
including reduced performance, physical ailments, and stress (Hauck, Snyder, & Cox-Fuenzalida, 2008; Searle, Bright, & Bochner, 2001; P. Tyler & Cushway, 1995). According to McGrath (1976), “there is a potential for stress when an environmental situation is perceived as presenting a demand which threatens to exceed the person’s capabilities and resources for meeting it, under conditions where he expects a substantial differential in the rewards and costs from meeting the demand versus not meeting it” (p.1352). Role overload describes a context wherein multiple demands of the various aspects of an employee’s job outweigh the resources available to that employee. Leaders who experience role overload may not only unintentionally divert their attention from their job tasks, but are also forced to make conscious decisions about which tasks and interpersonal relationships are the most advantageous investment of energy.

Higher levels of stress and the requirements of various role expectations from the organization force a leader to more stringently manage his or her time, relationships, and tasks. This diversion of attention may force a leader to identify high-potential employees, or employees who may have the highest trade-off between effort exerted into the relationship and returns, in the form of high performers or those who engage in pro-social organizational behaviors. This selection of high-potential employees has been shown to manifest in mentoring literature as the fast-tracking phenomenon (Ragins, 1999; Ragins & Cotton, 1993; Singh et al., 2009). Leaders subject to higher levels of stress in the form of work overload may not be able to exert the necessary effort into dyads to create multiple high-level relationships. This phenomenon may elicit higher relationship differentiation amongst their subordinate employees due to finite attentional and emotional resources.

_Hypothesis 1: Leader role overload is positively related to relationship quality differentiation_
Organizational Support. Perceived organizational support (POS) has received considerable attention in differentiation research (Erdogan & Enders, 2007; Hofmann & Morgeson, 1999; Tangirala, Green, & Ramanujam, 2007; Wayne, Shore, Bommer, & Tetrick, 2002; Wayne et al., 1997). The premise of POS is that employees develop global beliefs regarding the extent to which the organization values their contributions and cares about their well-being. These beliefs develop as an employee perceives that the organization is prepared to reward increased effort and meet socioemotional needs (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Rhoades & Eisenberger, 2002). POS is grounded in social exchange theory (Blau, 1964; Cropanzano & Mitchell, 2005; Thibaut & Kelley, 1959) and is typified by an employee’s tendency to attribute human-like characteristics to the organization through the agents who work on its behalf (Levinson, 1965). Whereas mentoring relationships refer to the exchange between supervisor and subordinate, POS is concerned with exchanges between the organization and its members.

Eisenberger et al. (1986) identified a number of antecedents and consequences that were later supported and elaborated in a meta-analysis of the current state of the POS literature (Rhoades & Eisenberger, 2002). These antecedents include an increase in fairness, supervisor support, personality characteristics, organizational rewards and job conditions. The consequences of POS are broad, far-reaching in scope, and impact organizations and their employees. Consequences of POS include organizational commitment, job-related affect, performance, job-strains, turnover intentions, and withdrawal (Rhoades & Eisenberger, 2002).

Research has shown that organizational relationships such as supervisor-subordinate dyads are nested hierarchically within one another and that resources are shared in a top-down fashion (Molm et al., 2001; Tangirala et al., 2007). The mentor-protégé relationship in a SCM relationship has shown incremental variance over and above career mentoring and
transformational leadership for job satisfaction, organizational commitment, and career expectations (Scandura & Williams, 2004), suggesting that this type of relationship may have stronger, more defined vertical resource exchange channels. In other words, differentiation in SCM relationships may have larger career benefits than LMX relationships, expanding relationship differentiation between employees with low-and high-quality relationships.

Erdogan and Enders (2007) demonstrated the hierarchical effects of POS on LMX differentiation. The researchers found that the pattern of resource distribution corresponds to the conscious and non-conscious decisions of resource allocation synonymous with dyadic exchange. The researchers supported a POS-moderated relationship of LMX where supervisor POS amplified the quality of relationship experienced by subordinates. That is to say, employees with high-quality relationships found their relationships strengthened when their leader had higher levels of POS, and employees with low-quality relationships found their relationships further weakened, exacerbating the group’s relationship differentiation. These findings indicate that supervisor POS tended to increase differentiation of high-and low-quality LMX relationships. I propose to expand upon their research by addressing McManus & Russel’s (1997) supposition that LMX relationships are prerequisite for mentoring relationships by analyzing POS as a predictor variable in a moderated mediation model of mentorship relationship quality differentiation (see Figure 1). If the relationship suggested by McManus and Russell (1997) is supported, then a similar relationship to Erdogan and Enders’ (2007) findings should emerge, POS amplifying relationship dispersion would continue to exist in mentorship relationship quality differentiation. Examining the role of POS in mentoring differentiation will allow researchers to understand how organizational phenomena impacting supervisors exhibit downstream effects on leaders’ relationships with subordinates.
Hypothesis 2: Leaders’ perceived organizational support is positively related to relationship quality differentiation

Counterproductive Work Behavior

T. R. Tyler and Blader (2000) suggest that people are highly concerned with their status or standing within social groups, and Festinger (1954) states that people are constantly comparing themselves to one another. Research has also indicated that people who are lower in status more frequently engage in deviant behavior (Aquino, Galperin, & Bennett, 2004; Cohen, 1955; Lee & Brotheridge, 2011; Stamper & Masterson, 2002). As such, group members who view their treatment as detrimentally unequal to other employees may find themselves in a lower status group and thus may be more prone to aggress towards the organization or its agents. CWB is considered any voluntary employee behavior that is viewed by the organization as diverging from the organization’s legitimate interest, violating significant organizational norms, or threatening the well-being of the organization or its members (Bennett & Robinson, 2000). Researchers have found that CWB has expansive deleterious effects in the workplace. Not only does CWB cost organizations billions of dollars annually (Vardi & Weitz, 2004), but these actions have negative consequences for employees as well. Human targets of CWB may experience decreased job satisfaction, increased stress, and increased intentions to quit (Berry, Ones, & Sackett, 2007). In addition, exposure to CWB is positively related to the propensity to reciprocate this harmful behavior in a spiraling effect (Andersson & Pearson, 1999).

Fairhurst and Chandler (1989) characterized out-group membership as one of social distance and powerlessness. Out group members may be more inclined to engage in deviant behavior (Aquino et al., 2004; Gilligan, 1996; Robinson & Bennett, 1997). Furthermore, Hooper and Martin (2008) found that an employee who perceives inequity and inequality in their
workgroup may be more likely to retaliate. Retaliation may take the form of ‘getting even’ with one’s organization, manager or coworkers to settle an injustice that an employee feels they were a victim of (Skarlicki & Folger, 1997; Skarlicki et al., 1999). An employee who feels that he or she experienced unfair treatment may choose to engage in CWB as a way of making right what was wronged.

Consistent with Fox and Spector’s (1999) model of workplace frustration and aggression, employees with low-quality supervisory relationships may interpret the differentiation in relationship quality as a workplace constraint that holds them back from achieving their career goals. This model is rooted in Dollard-Miller frustration-aggression theory (Dollard, Miller, Doob, Mowrer, & Sears, 1939), which states that certain types of workplace situations provoke affective and behavioral responses. Specifically, the model explains that aggression is a consequence of frustration resulting from the interruption of anticipated goal-responses. Fox and Spector (1999) explain that frustration events may include constraints in the work situation that impede individuals from achieving valued work goals or maintaining adequate performance.

Given past CWB research, I propose that a high level of relationship differentiation would constitute an instance where situational constraints in the mentor-protégé relationship cause frustration amongst out-group members. This frustration would manifest as CWB.

**Moderated Mediation of Relationship Differentiation and Individual Relationship Quality**

Adopting methods employed by LMX researchers (Liden et al., 2006; Ma & Qu, 2010; Schyns, 2006), relationship quality differentiation characterizes a dispersion in relationships between peers working in the same supervisor’s work group. Researchers have suggested that LMX differentiation may have differing effects on workers depending on the squared distance of a set LMX scores from the mean (Erdogan & Enders, 2007; Le Blanc & González-Romá, 2012;
Liden et al., 2006; Ma & Qu, 2010; Schyns, 2006). This line of research supports that individuals with low relationship quality who belong to groups with high differentiation suffer more negative consequences than their high-quality counterparts. These findings suggest that employees with low-quality relationships are more likely to attend to the relationship quality of others within the same working group in comparison to their own relationship.

To appropriately analyze this relationship, I propose a multilevel 2-2-1 second stage moderated mediation model (see Figure 1; Edwards & Lambert, 2007; Takeuchi, Chen, & Lepak, 2009; Zhang, Zyphur, & Preacher, 2009), in which the mediator, relationship quality differentiation, and leader predictor variables (Role overload and POS) reside at second level of analysis. The second stage moderator, individual relationship quality, and the criterion variable, CWB, constitute the individual criteria variables residing at the first level of analysis.

Following the moderated mediation model of differentiation methodology of prior research (Liden et al., 2006), I propose that high relationship quality differentiation in groups with a low relationship quality median may lead to role and status differentiation in the group, thus creating a scenario in which employees who have low relationship quality with their supervisors respond negatively to other employees, the organization and their supervisor. Kozlowski and Klein (2000) contend that configurable variables, such as team member performance, perceptions, attitudes, values or demographic characteristics, which theoretically are not expected to result in agreement, should not be aggregated by use of the group’s mean and suggest the median as alternative. Likewise, Liden et al. (2006) demonstrated the use of dispersion in reference to individual and group performance, but not in terms of other attitudinal individual reactions to relationship differentiation. By using the group median and the average squared distance from the mean, I will be able to identify employees whose relationship quality
is lower than that of their work group, demonstrating increased relationship differentiation, which I predict will emphasize the likelihood that employees will engage in CWB directed toward the organization and their coworkers.

**Hypothesis 3:** Relationship Quality differentiation will mediate the relationship between 
1) role overload, 
2) POS and CWB.

**Hypothesis 4:** Relationship quality will moderate the mediated effect of 1) Role overload, and 2) POS on CWB. Such that, when relationship quality is low, the mediated effect of role overload, POS and relationship differentiation on CWB will be stronger than when relationship quality is high.

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**Figure 1.**
Proposed Multilevel Moderated Mediation Model
CHAPTER 3

METHOD

Participants and Procedure

A survey of employees and their respective supervisors was used to examine relationships among the variables of interest. Supervisors responded to variables at the second level of analysis, including POS and RO. Subordinate responses created the first level of analysis. The variables considered within the first level of analysis include CWB and individual relationship quality. Relationship quality from members working under the same supervisor was aggregated to form a construct that resides at the second level of analysis (Henderson et al., 2008; Liden et al., 2006; Ma & Qu, 2010). Participants completed these measures while at work, during normal working hours, and were ensured confidentiality from their employer and supervisor. Subordinates indicated their supervisor, and groups were excluded that did not have at least three subordinates reporting to each supervisor. Groups of less than three were not used due to the inability to measure dispersion accurately (Roberson, Sturman, & Simons, 2007). A total of 490 employees and 101 supervisors formed 101 unique work groups. Group sizes ranged from 3 to 14 with mean of 5.78 (SD=2.68) subordinates per group, and a median of 5.00.

From this sample, supervisors’ ages ranged from 25 to 66 years, (M=48.4, SD= 10.5), with an average of 13.47(SD = 8.27) years in the substance abuse field, and 4.59 (SD= 4.67) years working in their current position. 67.6% of supervisors were female, 79.4% of supervisors self-identified as Caucasian, 10.8% as African-American, 4.9% as Hispanic/Latino, and 5% as other. 62.7% of supervisors reported having obtained a Masters or professional degree.
Subordinates’ ages ranged from 17 to 74 years \((M=43.78, SD=12.52)\), with 7.14 \((SD=7.38)\) average years in the field of substance abuse, 3.22 \((SD=4.27)\) years working in their current position, and working an average of 2.45 \((SD=3.08)\) years with their current supervisor. 67.4\% of subordinates were female, and 65.7\% self-identified as Caucasian, 16.8\% as African-American, 13.3\% as Hispanic/Latino, and 4.2\% as other. 45.9\% of subordinates reported having a Masters or professional degree.

**Measures**

**Relationship Quality and Relationship Quality Differentiation.** Relationship quality was measured using 4-item from Allen and Eby’s (2003) measure of Relationship Quality. Sample items are “The mentoring relationship between my supervisor and I was very effective” and “I was effectively utilized.” Past research (Le Blanc & González-Romá, 2012; Liden et al., 2006; Ma & Qu, 2010; Roberson et al., 2007; Schyns, 2006) has advocated that an appropriate measure of differentiation in multilevel research is an aggregate of the square-root of variance for each group. The standard deviation of a set of scores around the mean has been shown to provide the most accurate results when modeling interaction effects using a measure of dispersion (Roberson et al., 2007; Schmidt & Hunter, 1989). The work group’s relationship quality was computed and aggregated; using the standard deviation of individual relationships, we were able to identify the variance of each individual from the work group mean, creating a measure of relationship quality differentiation.

**Role Overload.** Leader role overload was measured using three items from Cammann, Fichman, Jenkins, and Klesh (1979) measure of role overload. We asked how often \((1=never, 5=always)\) leaders experienced each of the following feelings: “I have too much work to do to do everything well”; “The amount of work I am asked to do is fair”; “I never seem to have enough
time to get everything done.” These items are consistent with the conceptual definition of role overload specified by Kahn et al. (1964) and Rizzo et al. (1970).

Organizational Support. Leader’s perceived organizational support was measured with eight items from the short version of the Survey of Perceived Organizational Support (Eisenberger, Cummings, Armeli, & Lynch, 1997). These items were measured using Likert scales with choices ranging from 1 = strongly disagree to 7 = strongly agree. Sample items include “the organization cares about my opinions” and “Help is available from my organization when I have a problem.” Items were averaged to form the scale.

CWB. Level-1 subordinate CWB was assessed with 20 items from the CWB-C (Spector et al., 2004). Each item asked the subordinate employee how often he or she had engaged in each of the behaviors at their present job. The five response choices range from 1 = never to 5 = always. Sample items from the measure include “Purposely did your work incorrectly”; “Failed to report a problem so it would get worse”; “Purposefully damaged a piece of equipment or property” and “Purposely worked slowly when things needed to get done.” The items all pertained to organizational deviance, as some research (Eisenberger, Stinglhamber, Vandenbergh, Sucharski, & Rhoades, 2002; Purcell & Hutchinson, 2007) has suggested that supervisors are viewed as agents of an organization working on its behalf. Furthermore, Jones (2009) found that instigators of CWB are more likely to direct the behavior toward the source of the mistreatment. Thus, we anticipate that measuring CWB with an organizational target is an appropriate method of measurement.

Control Variables. As recommended by Liden et al. (2006), we controlled for a number of variables found to influence relationship differentiation. Supervisor job tenure, measured in months, was controlled on because the longer that a supervisor holds a position, the more adept
at managing their job demands they become, which may affect protégés’ ability to form high-quality relationships with their supervisor (Allen & Eby, 2003). The median group relationship quality was also entered into the analysis as a control variable. Snijders and Bosker (2012) advocate entering group measures of central tendency into the analyses to account for the difference between within-group and between-group effects. In cases of differentiation, Kozlowski and Klein (2000) discuss the median’s appropriateness to be used as a measure of central tendency as relationship quality constitutes a configural team property and may not be expected to elicit high levels of agreement.
CHAPTER 4
ANALYSES & RESULTS

Preliminary Analyses

To begin data analysis, a confirmatory factor analysis (CFA) was conducted using MPLUS on each measure of interest, including organizational support, role overload, relationship quality, and CWB, to evaluate the latent variable structure. The CFA conducted on organizational support indicated a single factor model fit the data reasonably well, $\chi^2(20)=50.93$ $p < .01$, SRMR=.04, RMSEA=.12, CFI=.94, TLI=.91. Role overload also resulted in a single factor model, $\chi^2(3) = 85.1$ $p < .01$, SRMR=.00, RMSEA=.00, CFI=1.00, TLI=1.00. I retained a single factor model fit for relationship quality, which was also used to measure relationship quality dispersion at the group level, $\chi^2(2) = 43.712$ $p < .01$, SRMR=.02, RMSEA=.20, CFI=.97, TLI=.91. CWB was initially tested as a single factor measure; this process produced inadequate model fit. Using an EFA to suggest appropriate factor loadings the results indicated for CWB, a dual factor model fit the data, $\chi^2(169) = 854.92$ $p < .01$, SRMR=.08, RMSEA=.09, CFI=.80, TLI=.78. Upon closer examination of the items, the dual factor model conceptually fit the items. The first factor concerned sabotaging one’s work or workplace, and theft from the organization; these items are active attempts to disrupt the nature of work. The second factor consisted of items which related to withdrawal from work, namely absenteeism and tardiness, which were more closely were related to passive behavior. For the remainder of the analyses, CWB was treated as a two factor criterion variable (active and passive) and tested in separate regression equations.
In cross-level research, it is necessary to identify the difference of within-group and between-group effects. Between group effects must be evaluated to be sufficient in order to support the aggregation of individuals to groups. Although there must be sufficient between group variance, within group variance is also needed to suggest the presence of variance in relationship quality to detect dispersion (Snijders & Bosker, 2012). The completion of the within and between group variance tests of relationship quality (WABA, Dansereau, Alutto, Yammarino, & Dumas, 1984) revealed that the individuals within groups varied significantly less than a random resampling of the individuals regardless of their group affiliation (Bliese & Halverson, 2002). The eta-square ($\eta^2$) values indicated that 41% and 50% of relationship quality variance occurred between groups on active and passive CWB. The results of the random group resampling technique estimated that 40% (95%CI, .30 to .40) and 45% (95%CI, .38 to .49) was due to between-group variance of active and passive CWB. In addition, I also analyzed the $r_{gw(j)}$: this analysis resulted in a mean coefficient of .42, when using a positive, moderately skewed distribution (James, Demaree, & Wolf, 1984). 75% of groups scored above .70 and groups scores ranged from 0.00 to 1.00. The $r_{gw(j)}$ coefficient obtained indicates a lack of agreement amongst groups. The intra-class correlation coefficient was calculated as ICC(1) for both active and passive CWB factors, which suggests that approximately 6% and 8% of the total variance in the respective CWB factors lies between groups. Although the grouping measures suggest a lack of rationale to aggregate individuals to the group level, the hypotheses were still carried out in full. Table 1 provides descriptive statistics, including the means, standard deviations, and correlations for this study.
### Hypotheses Testing

Hypotheses were tested using a 2-2-1 (Zhang, Zyphur, & Preacher, 2009) cross-level moderated mediation approach. Multilevel hypotheses were tested with mixed effects regression using Version 3.1 of the nonlinear and linear mixed effects (NLME) program for the statistical software R (Pinheiro, Bates, DebRoy, & Sarkar, 2012).

Kenny, Kashy, and Bolger (1998) (see also Chen & Bliese, 2002) advocate a number of steps to assess cross-level mediation. 1) the independent variables (role overload and POS) must predict the mediator (relationship quality differentiation), 2) the independent variables predict the dependent variables (active and passive CWB) when the dependent variables are regressed on both the independent variable and the mediator, 3) the mediator should significantly predict the dependent variables, such that, 4) the coefficients obtained from the independent variables fall out of the range of significance in predicting the dependent variable.

To test Step 1 of the mediation analysis, Hypotheses 1 and 2 were tested simultaneously using multivariate regression because all variables resided at the second level of analysis (Table 2). The dependent variable, relationship quality differentiation, and the predictors, leaders’ role overload and POS and control variables (supervisor job tenure and group relationship quality

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**Table 1. Means, Standard Deviations, Intercorrelations, and Reliabilities**

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Supervisor Job Tenure</td>
<td>55.09</td>
<td>56.03</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Individual Relationship Quality</td>
<td>3.58</td>
<td>0.93</td>
<td>-0.02</td>
<td></td>
<td>(.92)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Relationship Quality Dispersion</td>
<td>0.79</td>
<td>0.35</td>
<td>0.06</td>
<td>-0.22**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Relationship Quality Median</td>
<td>3.65</td>
<td>0.57</td>
<td>-0.09</td>
<td>0.51**</td>
<td>-0.27**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Active CWB</td>
<td>1.11</td>
<td>0.25</td>
<td>0.14**</td>
<td>-0.12**</td>
<td>0.01</td>
<td>-0.09*</td>
<td>(.83)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Passive CWB</td>
<td>1.63</td>
<td>0.51</td>
<td>0.09</td>
<td>-0.10*</td>
<td>-0.03</td>
<td>-0.05</td>
<td>.57**</td>
<td>(0.82)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Role Overload</td>
<td>3.36</td>
<td>0.88</td>
<td>0.00</td>
<td>-0.01</td>
<td>0.14**</td>
<td>-0.03</td>
<td>0.02</td>
<td>-0.02</td>
<td>(.78)</td>
<td></td>
</tr>
<tr>
<td>8. Organizational Support</td>
<td>3.65</td>
<td>0.76</td>
<td>0.00</td>
<td>-0.03</td>
<td>-0.09*</td>
<td>-0.01</td>
<td>0.01</td>
<td>0.06</td>
<td>-0.51**</td>
<td>(.90)</td>
</tr>
</tbody>
</table>

*Note. N=498. *p< .05, **p<.01. Reliability coefficients appear in parentheses on the diagonal. Supervisor Job Tenure scale is months. Relationship Quality Dispersion and Median were calculated with computation and do not have reliability*
median), were entered into the equation. Results indicated that supervisors who experienced more role overload were likely to show greater relationship differentiation among their subordinates ($\beta = .04, t = 2.09, p < .05$), thus supporting Hypothesis 1. The results of Hypothesis 2 indicated that supervisors with higher levels of POS showed no statistical difference in terms of subordinate relationship quality differentiation ($\beta = -.18, t = -.08, p > .05$); thus, Hypothesis 2 did not receive support. This analysis supports the continued examination of mediation for role overload, and although POS was found to be unrelated to the mediator, the mediation analysis was carried out in full.

To test Hypothesis 3 the mediation analyses were continued. Step 2 requires that the dependent variables be regressed upon the independent variables. Step 2 was carried out in two separate analyses for the active factor of CWB (Table 3) and the passive factor (Table 4). Role overload and POS were found to be not significantly related to active CWB (Table 3). Only the control variable of supervisor job tenure was found to significantly influence subordinate active CWB. The same analysis was conducted using the passive CWB factor as a dependent variable (Step 2, Table 4). The results of the analysis also indicated a nonsignificant relationship between role overload, POS and passive CWB. Kenny et al. (1998) state that this step may produce weak or nonsignificant relationships in cases where the independent variables have a more distal influence on the dependent variables. Conceptually, this may be the case for the current research. Because no direct relationship was anticipated for the variables, I continued the mediation analysis.

Step 3 of the mediation process requires the mediator to predict a significant relationship with the dependent variables. This step was tested by regressing the dependent variables upon the mediator and the control variables. Relationship quality differentiation did not significantly
predict subordinate active (Step 3, Table 3) or passive CWB (Step 3, Table 4). The
nonsignificant relationships in Step 2 and Step 3 suggest that relationship quality differentiation
does not mediate the relationship as hypothesized. For completion, I finished the moderated
mediation analysis in Step 4, which would indicate evidence of full mediation.

To test the final step, Step 4, the independent variables and the mediator are concurrently
added to the regression equation. This condition is considered met when the independent
variables fall out of the range of significance when the mediator is added to the model, while the
mediator remains a significant predictor of the dependent variables. The moderated mediation
model proposed requires that the interaction of relationship differentiation and relationship
quality be added to the model as the moderated term predicting both CWB factors. Moderated
mediation was tested using a slopes-as-outcomes approach (Snijders & Bosker, 2012). Table 5
represents Step 4 in the mediation process as well as the test of Hypothesis 4.

Hypothesis 4 predicts that relationship quality will moderate the mediated relationship
between role overload, POS, relationship quality differentiation and the two CWB factors.
Relationship quality was anticipated to strengthen the relationship between relationship
differentiation and active and passive CWB such that when relationship quality is low,
subordinates will engage in more CWB then when relationship quality is high. Hypothesis 4a
proposes role overload moderated mediation relationship. The results from Table 5 do not
support Hypothesis 4a. Similarly, Hypothesis 4b did not receive support from the slopes-as-
outcomes moderated mediation analysis.

A simple slopes analysis was conducted to further explore the moderated relationship
(Figures 2 and 3) and indirect effects of the slopes were tested (Table 6). The results of the
simple slopes analysis suggests that in groups with high differentiation, individuals with low
relationship quality were less likely to engage in active CWB and individuals with high-quality relationships were slightly more likely to engage in active CWB (Figure 2). Similarly, individuals with low-quality SCM relationships were less likely engage in passive CWB. Unlike the active dimension, individuals with high quality SCM relationships were less likely to engage in passive CWB as well (Figure 3). These relationships must be interpreted cautiously as these relationships did not emerge as significantly differing from chance occurrences; rather, the simple slopes graphs are used to visualize results.

Table 2. Step 1 of Mediation Analysis: Regression Analysis

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>SE</th>
<th>t test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.278</td>
<td>0.17</td>
<td>7.58***</td>
</tr>
<tr>
<td>Supervisor Job Tenure</td>
<td>0.002</td>
<td>0.00</td>
<td>0.746</td>
</tr>
<tr>
<td>Relationship Quality Group Median</td>
<td>-0.159</td>
<td>0.03</td>
<td>-6.02***</td>
</tr>
<tr>
<td>Role Overload</td>
<td>0.043</td>
<td>0.02</td>
<td>2.09*</td>
</tr>
<tr>
<td>Organizational Support</td>
<td>-0.182</td>
<td>0.02</td>
<td>-0.0786</td>
</tr>
</tbody>
</table>

R² Total = 0.09

Note. *p < .05, **p < .01, ***p < .001. SE = Standard Error of measurement
### Table 3. Multilevel Mediation Analysis: Active CWB

<table>
<thead>
<tr>
<th>Step 2: DV = Active CWB</th>
<th>Intercept_{(β0)}</th>
<th>Parameter Estimate</th>
<th>SE</th>
<th>t test</th>
<th>Indirect Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept_{(β0)}</td>
<td>1.150</td>
<td>0.18</td>
<td>8.99***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor Job Tenure_{γ(01)}</td>
<td>0.001</td>
<td>0.00</td>
<td>2.30*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship Quality Group Median_{γ(02)}</td>
<td>-0.034</td>
<td>0.03</td>
<td>-1.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role Overload_{γ(03)}</td>
<td>0.009</td>
<td>0.02</td>
<td>0.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Support_{γ(04)}</td>
<td>0.010</td>
<td>0.02</td>
<td>0.57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| R^2 (Individual) | 0.004 |
| R^2 (Group)      | 0.672 |
| R^2 Total        | 0.019 |

<table>
<thead>
<tr>
<th>Step 3: DV = Active CWB</th>
<th>Intercept_{(β0)}</th>
<th>Parameter Estimate</th>
<th>SE</th>
<th>t test</th>
<th>Indirect Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept_{(β0)}</td>
<td>1.230</td>
<td>0.09</td>
<td>13.90***</td>
<td></td>
<td></td>
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<tr>
<td>Supervisor Job Tenure_{γ(01)}</td>
<td>0.001</td>
<td>0.00</td>
<td>2.31*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship Quality Group Median_{γ(02)}</td>
<td>-0.037</td>
<td>0.03</td>
<td>-1.78*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship Quality Dispersion_{γ(03)}</td>
<td>-0.013</td>
<td>0.03</td>
<td>-0.37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| R^2 (Individual) | 0.004 |
| R^2 (Group)      | 0.65 |
| R^2 Total        | 0.018 |

<table>
<thead>
<tr>
<th>Step 4: DV = Active CWB</th>
<th>Intercept_{(β0)}</th>
<th>Parameter Estimate</th>
<th>SE</th>
<th>t test</th>
<th>Indirect Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept_{(β0)}</td>
<td>1.164</td>
<td>0.13</td>
<td>8.64***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor Job Tenure_{γ(01)}</td>
<td>0.001</td>
<td>0.00</td>
<td>2.32*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship Quality Group Median_{γ(02)}</td>
<td>-0.036</td>
<td>0.02</td>
<td>-1.77*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role Overload_{γ(03)}</td>
<td>0.009</td>
<td>0.02</td>
<td>0.63</td>
<td>-0.0004</td>
<td></td>
</tr>
<tr>
<td>Organizational Support_{γ(04)}</td>
<td>0.010</td>
<td>0.02</td>
<td>0.55</td>
<td>0.0003</td>
<td></td>
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<tr>
<td>Relationship Quality Dispersion_{γ(05)}</td>
<td>-0.014</td>
<td>0.03</td>
<td>-0.403</td>
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<td></td>
</tr>
</tbody>
</table>

| R^2 (Individual) | 0.004 |
| R^2 (Group)      | 0.69 |
| R^2 Total        | 0.02 |

*Note.* *p<.10, *p<.05, ***p<.001. SE = Standard Error of measurement
Table 4. Multilevel Mediation Analysis: Passive CWB

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>SE</th>
<th>t test</th>
<th>Indirect Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept $(\beta_0)$</td>
<td>1.497</td>
<td>0.28</td>
<td>5.32***</td>
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<tr>
<td>Supervisor Job Tenure $(\gamma_{01})$</td>
<td>0.001</td>
<td>0.00</td>
<td>1.72*</td>
<td></td>
</tr>
<tr>
<td>Relationship Quality Group Median $(\gamma_{02})$</td>
<td>-0.034</td>
<td>0.04</td>
<td>-0.78</td>
<td></td>
</tr>
<tr>
<td>Role Overload $(\gamma_{03})$</td>
<td>0.005</td>
<td>0.03</td>
<td>0.17</td>
<td></td>
</tr>
<tr>
<td>Organizational Support $(\gamma_{04})$</td>
<td>0.053</td>
<td>0.04</td>
<td>1.35*</td>
<td></td>
</tr>
</tbody>
</table>

$R^2_{\text{ind}} = 0.007$

$R^2_{\text{group}} = 0.122$

$R^2_{\text{total}} = 0.014$

Step 3: DV= Passive CWB

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>SE</th>
<th>t test</th>
<th>Indirect Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept $(\beta_0)$</td>
<td>1.821</td>
<td>0.19</td>
<td>9.47***</td>
<td></td>
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<tr>
<td>Supervisor Job Tenure $(\gamma_{01})$</td>
<td>0.001</td>
<td>0.00</td>
<td>1.78*</td>
<td></td>
</tr>
<tr>
<td>Relationship Quality Group Median $(\gamma_{02})$</td>
<td>-0.049</td>
<td>0.04</td>
<td>-1.09</td>
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<tr>
<td>Relationship Quality Dispersion $(\gamma_{03})$</td>
<td>-0.077</td>
<td>0.07</td>
<td>-1.06</td>
<td></td>
</tr>
</tbody>
</table>

$R^2_{\text{ind}} = 0.002$

$R^2_{\text{group}} = 0.165$

$R^2_{\text{total}} = 0.012$

Step 4: DV= Passive CWB

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>SE</th>
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<th>Indirect Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept $(\beta_0)$</td>
<td>1.588</td>
<td>0.30</td>
<td>5.34***</td>
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<tr>
<td>Supervisor Job Tenure $(\gamma_{01})$</td>
<td>0.001</td>
<td>0.00</td>
<td>1.76*</td>
<td></td>
</tr>
<tr>
<td>Relationship Quality Group Median $(\gamma_{02})$</td>
<td>-0.045</td>
<td>0.04</td>
<td>-1.00</td>
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<tr>
<td>Role Overload $(\gamma_{03})$</td>
<td>0.008</td>
<td>0.03</td>
<td>0.25</td>
<td>-0.0022</td>
</tr>
<tr>
<td>Organizational Support $(\gamma_{04})$</td>
<td>0.050</td>
<td>0.04</td>
<td>1.30*</td>
<td>0.0016</td>
</tr>
<tr>
<td>Relationship Quality Dispersion $(\gamma_{05})$</td>
<td>-0.068</td>
<td>0.07</td>
<td>-0.92</td>
<td></td>
</tr>
</tbody>
</table>

$R^2_{\text{ind}} = 0.007$

$R^2_{\text{group}} = 0.152$

$R^2_{\text{total}} = 0.016$

Note. *p<.10, *p<.05, **p<.01, ***p<.001. SE = Standard Error of Measurement
Table 5. *Step 4 Multilevel Moderated Mediation*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>SE</th>
<th>t test</th>
<th>Coefficient</th>
<th>SE</th>
<th>t test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept 1 (β0)</td>
<td>1.113</td>
<td>0.012</td>
<td>95.9***</td>
<td>1.627</td>
<td>0.025</td>
<td>63.99***</td>
</tr>
<tr>
<td>Intercept (γ10)</td>
<td>0.011</td>
<td>0.007</td>
<td>0.017</td>
<td>0.017</td>
<td>0.026</td>
<td>0.007</td>
</tr>
<tr>
<td>Relationship Quality (γ11)</td>
<td>0.000</td>
<td>0.004</td>
<td>0.001</td>
<td>0.009</td>
<td>0.020</td>
<td>0.005</td>
</tr>
<tr>
<td>Supervisor Tenure (γ01)</td>
<td>0.000</td>
<td>0.000</td>
<td>2.24*</td>
<td>0.001</td>
<td>0.000</td>
<td>1.72*</td>
</tr>
<tr>
<td>Relationship Quality Group Median (γ02)</td>
<td>-0.035</td>
<td>0.021</td>
<td>-1.68*</td>
<td>-0.043</td>
<td>0.045</td>
<td>-0.95</td>
</tr>
<tr>
<td>Supervisor Role Overload (γ03)</td>
<td>0.008</td>
<td>0.015</td>
<td>0.55</td>
<td>0.008</td>
<td>0.033</td>
<td>0.23</td>
</tr>
<tr>
<td>Supervisor POS (γ04)</td>
<td>0.010</td>
<td>0.018</td>
<td>0.57</td>
<td>0.058</td>
<td>0.038</td>
<td>1.50</td>
</tr>
<tr>
<td>Relationship Quality Differentiation ×</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship Quality (γ05)</td>
<td>0.026</td>
<td>0.037</td>
<td>0.70</td>
<td>0.003</td>
<td>0.078</td>
<td>0.04</td>
</tr>
<tr>
<td>Relationship Quality Differentiation (β1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *p < .10, *p < .05, **p < .01, ***p < .001. SE = Standard Error of Measurement
Table 6. Conditional Indirect Effects of Interaction on Active and Passive CWB

<table>
<thead>
<tr>
<th>Moderator</th>
<th>Active</th>
<th></th>
<th></th>
<th>Passive</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Conditional</td>
<td>SE</td>
<td>t test</td>
<td>Conditional</td>
<td>SE</td>
</tr>
<tr>
<td></td>
<td>Indirect Effect</td>
<td>SE</td>
<td></td>
<td>Indirect Effect</td>
<td>SE</td>
</tr>
<tr>
<td>Relationship Quality</td>
<td>Lo (-1 SD)</td>
<td>-0.0016</td>
<td>0.04</td>
<td>-0.04</td>
<td>-0.060</td>
</tr>
<tr>
<td></td>
<td>Hi (+1 SD)</td>
<td>0.017</td>
<td>0.05</td>
<td>0.03</td>
<td>-0.060</td>
</tr>
</tbody>
</table>

*Note.* No relationships emerged as significant. SE = Standard Error of Measurement
Figure 2. Simple Slopes Graph of the Interaction Between Relationship Quality and Relationship Quality Differentiation on Active CWB
Figure 3. Simple Slopes Graph of the Interaction Between Relationship Quality and Relationship Quality Differentiation on Passive CWB
CHAPTER 5

DISCUSSION

The nature of many organizational structures consists of a supervisor overseeing the work of a group of subordinates. As previous research has shown (Allen, 2004; Hooper & Martin, 2008; Le Blanc & González-Romá, 2012; Vidyarthi et al., 2010; Wanberg, Kammeyer-Mueller, & Marchese, 2006), supervisors do not typically have the same types of relationships with each and every one of their subordinates. LMX literature has identified a number of consequences of the social comparison process and relationship differentiation, but relationship differentiation in mentoring relationships has received substantially less consideration in the literature. The benefits afforded to an employee whose mentor and supervisor are the same individual are thought to provide resources over and above what is traditionally seen as leadership (Laschober et al., 2013; Raabe & Beehr, 2003; Scandura & Schriesheim, 1994; Scandura & Williams, 2004). The added benefits of a SCM were thought to exacerbate the differentiation effects identified in LMX.

The addition of psychosocial-related support to career-related support is thought to create more career benefits, be more coveted by employees, and result in more distinct in-groups an out-groups identified by social comparison. As the JD-R model suggest, when a supervisor’s time is limited, they seek methods to maximize the expenditure of their efforts (Bakker & Demerouti, 2007; Bakker et al., 2004). In this study, the maximization of resources was conceptualized as employee differentiation, as it was inferred from previous research (Allen, 2004; Liden et al., 2006; Singh et al., 2009) that supervisors choose employees with whom to
develop high-quality relationships as a method to maximize their resource investment. Highly differentiated relationships in subordinate groups are subject to a social comparison process and the consequences of status and relationship evaluation (Sherony & Green, 2002; Sias & Jablin, 1995; Vidyarthi et al., 2010).

In this paper, I explored the multilevel relationship of supervisor role overload and POS, and its effects on group and subordinate relationships, and the subsequent effect on CWB in a substance abuse counselor-supervisor sample. I used methods which have seen routine use in LMX differentiation literature and adopted them in analyzing the SCM. I found that supervisors experiencing role overload were more likely to have more highly differentiated employee relations in their immediate subordinate workgroup. POS did not show the same hypothesized effects that have been produced in LMX literature by Erdogan and Enders (2007). Furthermore, the moderated mediation relationship of relationship quality differentiation, relationship quality, and CWB behaviors was not supported with the current study’s methodology and model.

To my knowledge, this study was the first to analyze group SCM relationships with similar methodology as previous supervisor-subordinate exchange relationships, such as LMX differentiation. The results of this study do not support the proposition that when supervisors have limited resources and provide some employees with unequal treatment and benefits, employees not receiving these benefits are more likely to engage in CWB to protest or retaliate against the organization.

**Implications**

This research sought to fill a gap in the mentoring literature. Rather than subordinate experiences of negative mentoring relationships, this study attempted to address the consequences of a relative lack of mentoring when performed in a group setting. The positive
career benefits associated with mentoring was thought to create distinct in- and out-groups of individuals who have and do not have positive relationships with their supervisor. Previous research has shown that low status out-groups are more likely to attend to peers relationships (Raabe & Beehr, 2003; Schyns, 2006; Sherony & Green, 2002; Van Breukelen et al., 2002; Vidyarthi et al., 2010) and engage in CWB (Lee & Brotheridge, 2011; Skarlicki & Folger, 1997; Skarlicki et al., 1999; Stamper & Masterson, 2002). The results of this study indicate that supervisor POS and role overload do not significantly influence individuals with comparatively lower-quality relationships with their supervisor than their peers to engage in CWB.

From a practical perspective, this study identifies that when tasked with many things do, such as indicated by role overload, supervisors provide more differentiated relationships to their subordinates. In the past, relationship differentiation has been described as emerging from the necessity of time (Scandura & Graen, 1984) and resource constraints (Erdogan & Enders, 2007; Sparrowe & Liden, 2005) as well as liking and compatibility between supervisor-subordinate (Duchon et al., 1986; Liden et al., 1993). This study supports this research that high-quality relationships are a function of the supervisor having the resources to do so. Taking these findings into account with other research, including the rising star hypothesis (Singh et al., 2009), suggests that investing in certain employees may maximize the mentor’s resource investment, e.g. by providing high potential employees with stronger relationships while at the same time maximizing the input to output ratio which has been found predictive of those who are offered mentoring relationships (Ragins, 1999; Sabatelli & Shehan, 1993; Singh et al., 2009).

Although, by and large, the hypotheses in this study did not receive support, the results of this study may still add to mentoring literature. The inability to replicate a similar relationship of POS and relationship quality differentiation as has been demonstrated in LMX literature
(Erdogan & Enders, 2007) indicates that SCM may not operate in the same capacity as traditional leadership. Supervisors-as-mentors may provide their subordinates enough psychosocial and interpersonal support to make up for a lack of tangible, career-related support offered to employees. Furthermore, this research suggests that individuals who engage in a low-quality relationship with their supervisor do not attempt to reconcile the discrepancy between their own and others’ relationships by retaliating or protesting the behavior in the form of CWB, as measured in the current study. Although some employees do not receive benefits from high-quality mentoring relationships, the results of this study suggest that the consequences of low-quality relationships in highly differentiated groups may not be severe enough to advocate for supervisors to attempt to create more uniform relationships with his or her subordinates.

**Limitations and Future Directions**

As with any study, this study is not without a variety of limitations. The sample used was an archival data source of substance abuse counselors and supervisors. Although archival data sources have advantages, Shultz, Hoffman, and Reiter-Palmon (2005) outline a number of potential weaknesses using archival data in applied psychology, for example, the appropriateness of the measures used. A number of limitations arose in the measurement of CWB. In this study, the organization was the target of subordinate CWB. Measuring organizational-oriented CWB only captures half of the CWB spectrum as outlined by Bennett and Robinson (2000), it may be possible that employees chose to retaliate against their peers and other members of the organization that were not captured by measuring organizational target CWB. An alternative explanation may be that subordinates who are on the receiving end of a low-quality relationship may not engage in CWB as a form of retaliation or protest. CWB is an overt, aggressive behavior that has been described as upward spiraling in nature. The lack of a
positive mentoring relationship may not be viewed as an incident severe enough to warrant purposeful deviant behavior.

Additionally, the measure of the dependent variables (Active and Passive CWB) showed low base rates and little variance ($M=1.11$, $SD=.25$ and $M=1.63$, $SD=.51$), which may inhibit the ability to detect meaningful reliable relationships. A final limitation was the factor structure of CWB. The results of the EFA and CFA resulted in fit indices that were less than the commonly accepted norms (L. Hu & Bentler, 1999). Although the $\chi^2$ test indicated that a two factor structure was the most parsimonious model, and more factors did not significantly help in identifying the latent structure, the poor item fit of the two factors indicates the possibility of more than two latent constructs. Spector et al. (2006) supports this notion by identifying a five factor solution in a more recent iteration of the measure.

Additionally, the aggregation of individual to groups was not supported. The statistical procedures commonly associated with group identification showed little reason to use multilevel analysis with individuals nested within groups. Random resampling showed that group affected only a small portion of an individual’s total variance in the dependent variables.

The assumption of SCM relationships between supervisor and employee may also prove to limit the results of this study. SCM draws upon mentoring and leadership literature and is thought to most closely resemble substance abuse counselor-supervisor relationships (Powell & Brodsky, 2004). Using SCM framework supports the use of differentiation existent in leadership. Without directly measuring SCM relationships or its components, SCM supervisor-subordinate relationships must be inferred from previous research and the career field in which the sample was chosen (Powell & Brodsky, 2004; Scandura & Schriesheim, 1994). The differentiation methodology employed relied upon the blending of mentoring and leadership
literatures. If the supervisors did not adhere to a SCM framework, and instead adhere more closely to a traditional mentoring relationship, it would indicate a critical flaw in this study.

This study also did not identify, at the individual level, why some subordinates develop higher-quality relationships with their supervisors than others. Past research suggests that variables such as performance, similarity and liking, and tenure predict which employees develop high quality relationships with their supervisors. By not identifying the variables which help to delineate employees with high-quality relationships from those with low-quality relationships, I am left to speculate about the individual-level variables which lead to high-quality relationships. A limitation of this study, and a potential avenue for future research, would be to explicitly identify subordinate variables that moderate the relationships at the leader and group level. For example, if higher performance explained why supervisors develop high-quality relationships with some subordinates, peers may find the discrepant relationships fairer than if a supervisor develops a high-quality relationship with an individual who more closely resembles the supervisor, has a similar sense of humor, or resultant from another justification that other individuals deem as not job-relevant.

The null findings that resulted from the study do offer suggestions for future research. SCM and group mentoring dynamics have received comparatively little attention in the mentoring literature. The value that mentoring provides organizations and its employees in terms of employee retention, job performance increases and, informal knowledge sharing channels advocates for an expansion of mentoring. Developing a larger network of antecedents and consequences of SCM and group mentoring would help organizations make informed decisions on how to incorporate features of mentoring into traditional supervision. While CWB did not emerge as significantly predicted by the JD-R model and relationship differentiation,
other forms of deleterious or positive behavior may. It would be advantageous for researchers to continue using this framework to identify how SCM differentiation affects, for example, perceptions of justice, or less overt deviant behavior such as incivility.

**Conclusion**

The present study examined the multilevel moderated mediation relationship between supervisor POS, role overload, group relationship quality differentiation, individual relationship quality and CWB. Support was found in the direct relationship between role overload and relationship differentiation. The results of the remaining hypotheses did not support the predictions. Future research should continue to expand the nomological network and meso-framework of SCM and group mentoring and explore how differentiation affects individuals, groups and organizations.
References


Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and


*Journal of Substance Abuse Treatment, 44*(2), 186-192. doi: 10.1016/j.jsat.2012.05.001

Le Blanc, P. M., & González-Romá, V. (2012). A team level investigation of the relationship between leader–member exchange (LMX) differentiation, and commitment and
performance. *The Leadership Quarterly*, 23(3), 534-544. doi:
10.1016/j.leaqua.2011.12.006

Lee, R. T., & Brotheridge, C. M. (2011). Sex and position status differences in workplace aggression. *Journal of Managerial Psychology, 26*(5), 403-418. doi:
10.1108/02683941111139010


10.1037/0021-9010.78.4.662

10.1016/j.leaqua.2010.07.004


10.1006/jvbe.1997.1597


