

THE GIFT AND THE CURSE OF LMX SOCIAL COMPARISONS:
WHEN THEY HELP AND WHEN THEY HURT

By

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ABSTRACT

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Although most prior LMX research has focused solely on the influence of LMX relationships on employees and supervisors within the leader-member dyad, it is important to consider how this dyadic phenomenon influences the broader network of dyadic coworker thoughts, emotions, and behaviors. In this dissertation, I draw on social comparison theory to suggest that LMX relationships have important implications for not only how employees view themselves and their leaders but also how they view, feel toward, and ultimately behave with their coworkers. This dissertation posits that, regardless of whether a particular employee has a relatively high LMX relationship or a relatively low LMX relationship with their supervisor, LMX social comparisons can produce beneficial and detrimental effects for dyadic coworker interactions depending upon whether an employee experiences self-other overlap with that referent coworker. To test my social comparison theory arguments, my dissertation utilizes dyadic social network data from three large coworker workgroups to demonstrate how these LMX social comparison processes influence the social comparison emotions that employees feel toward their referent coworkers and how these social comparison emotions influence interpersonal discretionary behaviors amongst coworkers. Interestingly, the results of my dissertation provide novel examples in which relatively lower LMX quality (under certain conditions) had beneficial workplace outcomes (in terms of inspiration and OCBI), challenging the implicit assumption in the literature that higher LMX quality always results in superior outcomes.

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INTRODUCTION

Research exploring the relationships between leaders and subordinates over the past 40 years has convincingly demonstrated that leaders do not treat all subordinates in a similar manner (Dansereau, Graen, & Haga, 1975; Graen & Cashman, 1975; Liden & Graen, 1980). Rather, leaders develop differentiated relations (as a result of role-making processes), whereby relationships evolve into (and ultimately become routinized as) either high-quality or low-quality leader-member exchange (LMX) relationships (Dienesch & Liden, 1986; Graen, 1976; Graen & Scandura, 1987). High-quality LMX relationships are built around mutual trust, loyalty, respect, and affect (Liden & Maslyn, 1998) and include the exchange of valued resources such as information, influence, support, attention, and favors (Graen & Scandura, 1987; Wilson, Sin, & Conlon, 2010). Alternatively, low-quality LMX relationships fail to develop in the same way. Thus, in such relationships, work is performed according to the rules defined in the employment contract, information is communicated downward, and relationships do not include the exchange of valued socio-emotional resources.

Beyond demonstrating the existence of differentiated LMX relationships in workgroups, meta-analytic research has demonstrated that LMX quality is associated with many beneficial outcomes for employees including work attitudes, job performance, organizational citizenship behavior (OCB), and turnover intentions (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012; Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007; Rockstuhl, Dulebohn, Ang, & Shore, 2012). Given the importance of LMX, Gerstner and Day (1997, p. 827) positioned LMX theory as “one of the more interesting and useful approaches for studying hypothesized linkages between leadership processes and outcomes.”

Although nearly 2000 articles on leader-member exchange (LMX) relationships have been published since 1975 (Erdogan & Bauer, 2015b), we still know very little about how the dyadic exchange between a leader and subordinate influences the broader network of dyadic coworker thoughts, emotions, and behaviors. For example, of the 2000 articles identified in the PsycINFO database search, only 30 articles explored LMX relationships beyond the leader-member dyad. This is consistent with Henderson, Liden, Glibkowski, and Chaudhry's (2009, p. 517) observation that the overwhelming focus on specific leader-subordinate dyadic relations without considering the broader social context "is both surprising and troubling, given that the LMX model was originally advanced to account for how leaders' differential treatment of multiple subordinates in a work group influences activity within the group."

Moreover, although LMX theory explicitly highlights the dyadic nature of the exchange relationship between a leader and a subordinate, little research or theory has been applied to understand how LMX relationships influence dyadic ties amongst coworkers. Indeed, "most of the empirical studies have typically treated each dyadic LMX relationship in isolation and overlooked its potential impact on the surrounding social context" (Tse, Lam, Lawrence, & Huang, 2013, p. 984). In fact, only 2 of the over 800 articles identified (in the PsycINFO database search) have examined the influence of LMX on coworker thoughts, feelings, and/or behaviors. This is an important oversight because although LMX quality has positive effects for members of the LMX dyad, initial research suggests that differences in LMX quality amongst coworker dyads results in potentially detrimental effects such as reduced exchange of resources and helping behaviors (Sherony & Green, 2002; Tse et al., 2013). Thus, because research on the detrimental effects of LMX (and how to avoid them) remains scant (Matta & Van Dyne, 2015),

further explorations into when LMX relationships can positively or negatively impact the social context surrounding LMX dyads is needed.

One potentially fruitful avenue for understanding when LMX relationships can positively or negatively impact coworker thoughts, feelings, and behaviors is via the application of social comparison theory (Festinger, 1954). Indeed, LMX relationships, almost by definition, mean that some coworkers within a group are “in,” and others are “out” (Dansereau et al., 1975; Graen & Cashman, 1975). Inevitably then, employees likely make social comparisons on where they stand with the leader versus a coworker, and what they conclude about these comparisons should have an impact on how they feel and behave toward their coworkers.

Thus, the goal of this dissertation is to draw on social comparison theory to elucidate the conditions and the social comparison-based emotional mechanisms by which LMX social comparisons amongst employee-coworker dyads influence employee-coworker dyadic behavior. Extending past LMX research using social comparison theory, I suggest that upward (downward) social comparisons with coworkers can not only have detrimental (beneficial) effects on focal employee emotional experiences and behaviors (as the nascent literature suggests), but that these effects can reverse depending on the self-other overlap that the employee experiences toward each coworker (i.e., whether the employee assimilates or contrasts with the coworker). This prediction is consistent with a growing body of research in the social comparison literature on contrast and assimilation effects (for reviews, see A. P. Buunk & Gibbons, 2007; Greenberg, Ashton-James, & Ashkanasy, 2007) as well as contrastive and assimilative social comparison emotions (R. H. Smith, 2000). Contrastive social comparison reactions and emotions occur when upward social comparisons prompt negative thoughts and feelings, and downward social comparisons prompt positive thoughts and feelings. Assimilative social comparison reactions

and emotions occur when upward social comparisons prompt positive thoughts and feelings, and downward social comparisons prompt negative thoughts and feelings.

To derive my specific predictions, I draw on social comparison theory and cross “LMX social comparison with a specific coworker,” defined as the subjective comparison between one’s own LMX and that of a referent coworker (Vidyarthi, Liden, Anand, Erdogan, & Ghosh, 2010), and “self-other overlap with this coworker,” defined as the cognitive representation of perceived closeness of one’s identity with a relationship partner (Aron, Aron, & Smollan, 1992), to make predictions for four types of social comparison emotions that arise due to LMX social comparisons with coworkers. Specifically, I make predictions for upward contrastive social comparison emotions (e.g., envy), upward assimilative social comparison emotions (e.g., inspiration), downward contrastive social comparison emotions (e.g., schadenfreude), and downward assimilative social comparison emotions (e.g., sympathy). I then draw on social comparison theory to propose the behavioral implications of these LMX-based social comparison emotional experiences. Specifically, I make predictions for four types of interpersonal discretionary work behaviors resulting from LMX-based social comparison emotional experiences – active interpersonal counterproductive work behavior, active interpersonal organizational citizenship behavior, passive interpersonal counterproductive work behavior, and passive interpersonal organizational citizenship behavior.

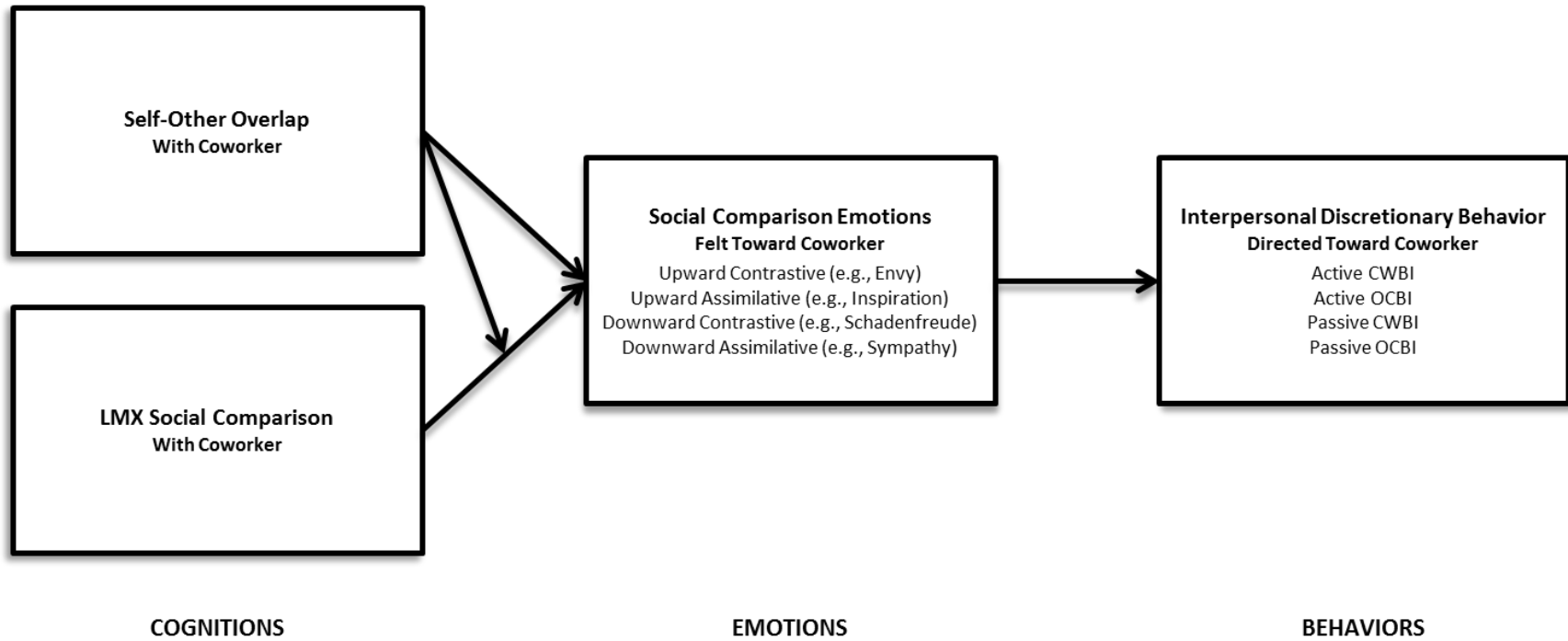
Overall, this dissertation aims to have implications for both theory and practice. From a theoretical perspective, this dissertation extends the nascent research on the social context surrounding LMX dyads by utilizing social comparison theory to unravel both the emotional mechanisms as well as the boundary conditions to the relationships between LMX social comparisons and coworker interactions. Thus, this dissertation collectively answers recent calls

to: a) apply social comparison processes to the study of LMX (Greenberg et al., 2007), b) integrate contrastive and assimilative reactions into social comparisons research (Greenberg et al., 2007; Moore, 2007), c) integrate emotions into the study of leadership generally (Ashkanasy & Humphrey, 2011; Ashkanasy & Jordan, 2008) and LMX specifically (Dasborough, 2006), and d) examine the influences of LMX on the broader social network of dyadic coworker ties (Henderson, Wayne, Shore, Bommer, & Tetrick, 2008; Sherony & Green, 2002; Sparrowe & Liden, 1997; Tse, Ashkanasy, & Dasborough, 2012). From a practical perspective, this dissertation can provide insights for employees and managers as to when and why differences in LMX may or may not produce aversive thoughts, feelings, and actions in employees. Thus, employees and managers can use these insights to manage relationship differences so as to simultaneously maximize the leader/subordinate benefits of LMX and minimize the potential disharmony that LMX differences may garner.

This dissertation proceeds as follows. First, I review the LMX literature. This section includes a macro overview of the LMX domain, describes why LMX is important, and focuses heavily on the nascent literature exploring the social context surrounding the LMX dyad. Next, I introduce social comparison theory as the overarching theoretical perspective that ties my model together. This section includes a high-level overview of social comparison theory, describes the advancements in the theory over the past 60 years, and focuses heavily on the social comparison domains that are most relevant to my theoretical model (e.g., contrastive versus assimilative social comparison effects and social comparison emotions). The third and fourth sections of the manuscript include formal hypotheses derived from social comparison theory for predicting social comparison emotions and downstream interpersonal discretionary work behaviors,

respectively. I then discuss the proposed method for testing the proposed relationships. Figure 1 below depicts the proposed conceptual model.

Figure 1 - Proposed Theoretical Model



LITERATURE REVIEW: LEADER-MEMBER EXCHANGE (LMX)

Research and theory on leader-member exchange (LMX) dates back to several seminal works in the mid-1970s (e.g., Dansereau et al., 1975; Graen, 1976; Graen & Cashman, 1975). Although the majority of the leadership literature at the time tended to focus on general leader traits and behaviors, the core contribution and central idea behind LMX is that leaders develop different types of relationships with their subordinates. Specifically, LMX theory posits that leaders develop high-quality socio-emotional LMX relationships (characterized by mutual trust, respect, and obligation) with some subordinates (originally referred to as “in-group” exchanges), and low-quality transactional LMX relationships (where those feelings are not present) with others (originally referred to as “out-group” exchanges). These differentiated relationships are argued to evolve from a role-making process whereby leaders communicate expectations to a specific follower, and based on the followers’ responses, relationships evolve into (and ultimately become routinized as) either high-quality or low-quality LMX relationships (Dienesch & Liden, 1986; Graen, 1976; Graen & Scandura, 1987).

Empirical research largely supports the tenets of LMX because numerous studies have shown that between 80% and 90% of work units are differentiated in terms of LMX relationships (Dansereau et al., 1975; Graen & Cashman, 1975; Liden & Graen, 1980). Moreover, the antecedents of LMX derived from the seminal works on the role-making process are largely consistent with the empirically demonstrated antecedents of LMX quality. For example, as suggested by Dansereau and colleagues (1975), Graen (1976), and Graen and Cashman (1975), leader-subordinate trust has been meta-analytically associated LMX quality (Dulebohn et al., 2012). As suggested by Graen and Scandura (1987), member competence has been meta-analytically linked with LMX quality (Dulebohn et al., 2012; Gerstner & Day, 1997). Finally, as

suggested by Dienesch and Liden (1986), upward influence as well as member and leader characteristics (e.g., member conscientiousness and leader agreeableness) have been meta-analytically tied to LMX quality (Dulebohn et al., 2012).

Though the tenants for the differentiation and development of LMX relationships have been largely supported, the substantial amount of research attention that the LMX field has received is likely a result of the important consequences that LMX has for leaders and employees. Indeed, the majority of the LMX literature has focused on the consequences of LMX quality (Gerstner & Day, 1997; Liden, Sparrowe, & Wayne, 1997). Thus, the next subsection describes the key reason why the LMX phenomenon is important to researchers and practitioners.

Why LMX Is Important

LMX is important for employees, supervisors, and organizations because “roles based strictly on the employment contract will result in less positive consequences for members than will roles that have developed beyond what is expected according to the employment contract” (Liden et al., 1997, p. 59). One reason for the positive consequences of high LMX quality is that high LMX employees receive more work-related benefits from leaders such as socio-emotional support, words of encouragement, reputational effects, information, raises, bonuses, gifts, office spaces, favors, and development and mentoring than low LMX employees (Wilson et al., 2010). In turn, subordinates who receive such benefits have more positive job attitudes and engage in more positive behaviors than those who do not. Another reason for the positive consequences of high LMX quality (in comparison to low LMX quality) is that employees who receive more benefits from leaders develop an obligation to reciprocate and repay their obligations to leaders due to social exchange processes (Liden et al., 1997). Therefore, high LMX employees repay

their obligations to their leaders with more positive work attitudes and positive behaviors. It is important to note that low LMX quality, in addition to generating less positive consequences (in comparison to high LMX quality), can also lead to negative reactions such as negative attitudes and counterproductive work behavior due to feelings of relative deprivation (Bolino & Turnley, 2009).

Empirical research provides substantial support for the above arguments. For example, the Gerstner and Day (1997) meta-analysis demonstrated positive associations between LMX and satisfaction with the supervisor, job satisfaction, organizational commitment, and performance (both subjective and objective) as well as a negative relationship between LMX and turnover intentions. Similarly, the Ilies and colleagues (2007) meta-analysis linked LMX with overall organizational citizenship behavior (OCB), interpersonal OCB, and organizational OCB. The Dulebohn and colleagues (2012) meta-analysis replicated each of the above associations and also found positive associations between LMX and pay satisfaction and perceptions of organizational justice as well as a negative relationship between LMX and actual turnover. Finally, the Rockstuhl and colleagues (2012) meta-analysis demonstrated that the relationships between LMX and justice perceptions, job satisfaction, turnover intentions, and organizational citizenship behavior hold across 23 cultures but are stronger in Western contexts (in comparison to Asian contexts) and that national culture does not influence the positive associations of LMX with organizational commitment and task performance.

Overall, the literature on LMX has clearly demonstrated that when employees are engaged in high-quality LMX relationships, they respond in ways that are exceedingly valuable to organizations. However, it is important to acknowledge that these dyadic LMX relationships do not exist in a vacuum, and it is important to consider how this dyadic phenomenon influences

the broader network of dyadic coworker thoughts, emotions, and behaviors. Indeed, as described in the introduction, the focus on specific leader-subordinate dyadic relations (without consideration of the broader social context) is concerning because the LMX literature was initially instituted to unravel the influence of differentiation in LMX relations on the thoughts, feelings, and behaviors of various subordinates within the workgroup (Henderson et al., 2009). Therefore, several recent streams of LMX research – specifically, research on LMX differentiation (e.g., Liden, Erdogan, Wayne, & Sparrowe, 2006), relative LMX (e.g., Henderson et al., 2008), LMX social comparisons (e.g., Vidyarthi et al., 2010), LMX relational separation (e.g., Harris, Li, & Kirkman, 2014), and LMX similarity (e.g., Tse et al., 2013) – have begun to expand our understanding of LMX beyond the leader-member dyad. The next subsection reviews research on each of these topics in detail, and the review is organized by level of analysis – starting at the group-level, followed by the individual-level, and then the dyadic-level. This review concludes by discussing the limitations of this research, and how this dissertation plans to address these limitations.

LMX Relationships beyond the Leader-Member Dyad

LMX Differentiation. Of the research areas focused on the social context surrounding LMX relationships, LMX differentiation has received the most research attention. LMX differentiation is defined as “the degree of variability in the quality of LMX relationships formed within work groups” (Liden et al., 2006, p. 723). Due to the many “theoretically compelling explanations for both positive and negative associations between LMX differentiation and individual performance” (Liden et al., 2006, p. 724), the current LMX differentiation literature is fragmented and complex with numerous and sometimes conflicting positive and negative group-level and cross-level effects.

Considering the effects of LMX differentiation on the group-level, research demonstrates that LMX differentiation negatively influences numerous job attitudes such as mean task satisfaction (McClane, 1991), mean group satisfaction and commitment (Schyns, 2006), agreement on work climate (Ford & Seers, 2006), and intrateam trust (Liu, Hernandez, & Wang, 2014). Moreover, research shows that LMX differentiation negatively impacts team financial performance via disrupting team coordination (A. N. Li & Liao, 2014) and enhances the positive relationship between diversity and turnover behavior (Nishii & Mayer, 2009). In terms of positive influences on attitudes and behavior at the group-level, research demonstrates that LMX differentiation strengthens the positive associations between mean LMX and team potency (and the negative associations between mean LMX and team conflict) (Boies & Howell, 2006) and positively influences workgroup performance when diversity was high and mean LMX was high (Stewart & Johnson, 2009), workgroup performance when task interdependence was high and/or median LMX was low (Liden et al., 2006), team performance near the end of the teams work cycle (Naidoo, Scherbaum, Goldstein, & Graen, 2011), and team commitment and performance when median LMX was low (Le Blanc & González-Romá, 2012). In sum, at the group-level of analysis, LMX differentiation appears to be detrimental to job attitudes and performance (via job attitudes), but it also appears to have conditional positive relationships with performance.

The burgeoning literature on cross-level effects of LMX differentiation is even more fragmented and complex than the developing literature described above for group-level effects. Specifically, there are several seemingly conflicting findings. For example, some research has demonstrated that LMX differentiation strengthens the positive relationships between LMX quality (and relative LMX quality) and employee behavioral outcomes including job performance (Ma & Qu, 2010) and psychological contract fulfillment (Henderson et al., 2008).

However, other research shows that LMX differentiation weakens the positive associations between LMX and similar (and, in some cases, the same) behavioral outcomes including job performance (Gooty & Yammarino, in press), OCB (Harris et al., 2014), and creativity (Liao, Liu, & Loi, 2010). Moreover, consistent with Liden and colleagues' (2006) prediction, virtually all of the cross-level outcomes of LMX differentiation are conditional. Indeed, research to date suggests that the cross-level attitudinal and behavioral outcomes of LMX differentiation depend upon conditional factors such as distributive/procedural justice climates (Erdogan & Bauer, 2010; Haynie, Cullen, Lester, Winter, & Svyantek, 2014), LMX quality (Gooty & Yammarino, in press; Harris et al., 2014; Liao et al., 2010; Liden et al., 2006), and relative LMX quality (Henderson et al., 2008).

In addition to research that has focused explicitly on LMX differentiation, it is important to discuss other research areas that indirectly tie to the LMX differentiation literature. First, research has explored the idea of leader differential treatment more broadly without focusing specifically on LMX relationships. Sias and Jablin (1995) showed that differential treatment by leaders was viewed as fair only when group members perceived the differential treatment to be warranted by different levels of employee competence. Moreover, the authors demonstrated that the perceived fairness or unfairness (of the differential treatment) influenced whether employees liked and communicated with their coworkers. van Breukelen, Konst, and van der Vlist (2002) demonstrated that differential treatment by leaders weakened the positive effect of LMX on work unit commitment, and van Breukelen, van der Leeden, Wesselius, and Hoes (2012) showed that differential treatment based on social factors was negatively associated with team atmosphere and that task-related differential treatment was positively associated with subjective perceptions of team performance. Second, Hooper and Martin (2008) studied the effects of perceived LMX

differentiation (i.e., a subjective perception of within-group variability in LMX [a direct measure] as opposed to the typical operationalization that uses objective within-group variability in individual-level LMX ratings [an indirect measure]) and demonstrated that perceptions of LMX differentiation were negatively associated with job satisfaction, negatively associated with well-being, and positively associated with conflict. Third, Y. Chen, Yu, and Son (2014) expanded the idea of LMX to a more context specific leader-member relationship by introducing the construct of leader-member guanxi (LMG). In their study, Y. Chen and colleagues (2014) demonstrated that LMG differentiation was negatively related to employee work attitudes and positively related to employee turnover intentions; however, they also showed that LMG differentiation magnified the positive effects of LMG on job satisfaction, organizational commitment, and coworker helping behaviors.

Relative LMX (RLMX) and LMX Social Comparison (LMXSC). Moving to the individual level of analysis, two key constructs have been presented that explore the social context surrounding LMX relationships at the individual-level – specifically, relative LMX (e.g., Henderson et al., 2008) and LMX social comparisons (e.g., Vidyarthi et al., 2010). Graen, Liden, and Hoel (1982) were the first scholars to introduce the notion of relative LMX standing. Specifically, they showed that deviations from the LMX mean predicted turnover whereas mean LMX (i.e., average leadership style) did not. More recently, Henderson and colleagues (2008, p. 1209) introduced the construct of relative LMX (RLMX), defined as “one’s LMX quality relative to the average LMX quality in a workgroup.” In their study, Henderson and colleagues (2008) showed that RLMX was positively related to psychological contract fulfillment (even after controlling for LMX quality), that psychological contract fulfillment mediated the relationship between RLMX and performance as well as sportsmanship behaviors, and that LMX

differentiation enhanced the positive relationship between RLMX and psychological contract fulfillment. Several other studies have built upon Graen and colleagues (1982) as well as Henderson and colleagues (2008) RLMX work. For example, Tse and colleagues (2012) demonstrated that social identification mediated the positive relationship between RLMX and job performance and that negative affectivity buffered the mediated effect. Hu and Liden (2013) showed that self-efficacy mediated the positive relationships between RLMX and in-role performance, job satisfaction, and OCB and that team identification and team supportive behavior acted as buffers in the mediated model. Epitropaki and Martin (2013) positioned RLMX as an indicator of whether an employee was in a resource-munificent situation (high RLMX) or a resource-constrained condition (low RLMX) and demonstrated that RLMX buffered the positive effects of transformational leadership and transactional leadership on upward influence tactics. H. Li, Feng, Liu, and Cheng (2014) showed that psychological contract fulfillment mediated the positive relationships between RLMX and employee task performance as well as innovative behavior.

Recently, Vidyarthi and colleagues (2010) drew upon social comparison theory and argued that LMX social comparison (LMXSC), defined as a subjective comparison between one's own LMX and that of his or her coworkers, explains unique variance in outcomes beyond LMX and RLMX. In their study, Vidyarthi and colleagues (2010) not only showed that LMXSC explained unique variance in job performance and OCB above and beyond LMX and RLMX, but the authors also demonstrated that LMXSC mediated the effects of RLMX on job performance and OCB (controlling for LMX). In sum, at the individual-level of analysis, research has overwhelmingly shown that RLMX and LMXSC have strong positive effects on in-role

performance and extra-role performance via mechanisms such as psychological contract fulfillment, social identification, self-efficacy, and LMX social comparisons.

LMX Relational Separation and LMX Similarity. Some recent research has expanded on the ideas of LMX differentiation and relative LMX to introduce new constructs that focus on notions of similarity. This subsection briefly describes some of this nascent work. Harris and colleagues (2014, p. 2) recently introduced the concept of LMX relational separation, defined as “the absolute separation between an individual and his or her group members in terms of perceived LMX quality.” LMX relational separation differs from LMX differentiation because it is an individual-level euclidean distance measure, and it also differs from other individual-level LMX constructs (e.g., relative LMX) because it does not capture direction (i.e., better than or worse than). In their recent study, Harris and colleagues (2014) demonstrated that LMX relational separation buffered the positive association between LMX and OCB and the negative association between LMX and turnover intentions. Several other studies have focused specifically on the concept of LMX similarity. For example, Sherony and Green (2002) demonstrated that LMX similarity was positively associated with coworker exchanges (CWX) and that diversity in CWX relationships was negatively associated with work attitudes. Omilion-Hodges and Baker (2013) showed that LMX similarity was positively associated with CWX and that CWX was positively associated with sharing resources amongst coworkers. Tse and colleagues (2013), using a round-robin data collection and social relations modeling, demonstrated that objective dissimilarity in LMX between two coworkers positively influenced feelings of contempt for the other coworker and negatively impacted perceptions of help received from the other coworker. Moreover, they showed that subjective perceptions of dissimilarity (regardless of whether the dissimilarity was higher or lower) were also positively

associated with contempt. Finally, they showed that the above relationships held only for individuals who were high in social comparison orientation.

Areas for Opportunity. When jointly considering research across levels of analyses on the social context surrounding LMX relationships, a rather complex picture emerges. Specifically, research on the group-level suggests that LMX differentiation is detrimental to workgroups attitudes and performance (via job attitudes) but can be conditionally beneficial for workgroup performance as well as individual performance and behavior. On the individual-level (i.e., LMX, RLMX, and LMXSC) of analysis, research suggests that being high (or relatively high) on LMX is beneficial both attitudinally and behaviorally for employees and being low (or relatively low) is detrimental both attitudinally and behaviorally for employees. Finally, research on LMX relational separation and similarity suggests that LMX similarity produces a wide array of positive effects for coworker relationships, attitudes, and feelings. Despite the growing body of work in this area, our understanding of the LMX relationships beyond the leader-member dyad is limited for three specific reasons.

First, the emerging literature on the social context surrounding LMX dyads has lacked an overarching theoretical framework to integrate findings across studies and provide clear directions for future research. To date, the most common lens to explore the phenomenon has been social comparison theory (or its conceptual extension – equity theory) (e.g., see Y. Chen et al., 2014; Henderson et al., 2008; Hooper & Martin, 2008; Hu & Liden, 2013; Liden et al., 2006; Liu et al., 2014; Nishii & Mayer, 2009; Omilion-Hodges & Baker, 2013; Sias & Jablin, 1995; Stewart & Johnson, 2009; Tse et al., 2012; Tse et al., 2013) – other lenses include balance theory (e.g., see Schyns, 2006; Sherony & Green, 2002; Tse et al., 2013), role theory (e.g., see A. N. Li & Liao, 2014; Liden et al., 2006), social information processing theory (e.g., see Haynie et al.,

2014; Liu et al., 2014), justice climate theory (e.g., see Erdogan & Bauer, 2010), status characteristics theory (e.g., see Stewart & Johnson, 2009), social cognitive theory (e.g., see Liao et al., 2010), social identity theory (e.g., see Tse et al., 2012), resource theory (e.g., see Epitropaki & Martin, 2013), shared reality theory (e.g., see Gooty & Yammarino, in press), and the group engagement model (e.g., see Harris et al., 2014). However, the utilization of social comparison theory in the literature has assumed contrastive reactions to LMX-based social comparisons. That is, the literature has assumed that upward social comparisons are aversive to experience and downward social comparisons are comforting to experience. But as I describe in the next section, research in the social comparison literature continues to demonstrate that individuals often react to social comparisons in assimilative ways. That is, people are often motivated and inspired by upward social comparisons, and they are often demotivated and feel sympathy following downward social comparisons (for a review on social comparisons in organizations including contrastive and assimilative effects, see Greenberg et al., 2007). Thus, the use of social comparison theory as a unifying theory for the domain has the potential to both allow for better integration of findings as well as reveal ignored portions of the theory that can potentially shed light on conflicting findings.

Second, research on the social context surrounding LMX dyads has largely ignored the role of employee emotion. This is surprising considering that emotions play an important role in both the LMX literature and the social comparison literature. For example, affect is one of the four “currencies of exchange” in LMX relationships (Dienesch & Liden, 1986) and social comparison emotions influence employee reactions to social comparisons (R. H. Smith, 2000). Of the 30 articles identified in the literature exploring LMX relationships beyond the leader-member dyad, Tse and colleagues (2013) was the only article to invoke employee emotion into

their model. Specifically, the authors linked LMX dissimilarity (regardless of whether the dissimilarity was higher or lower) to contempt (as described in the next section, R. H. Smith [2000] classified contempt as a downward contrastive social comparison emotion). That said, the lack of research integrating emotion with LMX is consistent with Ashkanasy and Humphrey's (2011, p. 365) recent observation that "leadership scholars have in general been slow to develop broadly-based theories of leadership that incorporate an emotional dimension," and Tse, Troth, and Ashkanasy's (2015) description of the LMX and emotions literature as "underdeveloped" (in their recent review of the LMX and emotion literature).

Third, although the LMX literature has mostly focused on the vertical dyad linkage (i.e., the dyadic linkage between leaders and subordinates; Dansereau et al., 1975), LMX scholars have generally ignored coworker dyadic ties surrounding the LMX dyad. For example, research on LMX differentiation has focused on how variability in LMX within the workgroup generally influences the attitudes and behaviors of all employees within the workgroup. Similarly, research on RLMX has focused on how one's relative LMX position within the workgroup influences general workplace attitudes and behaviors. Finally, research on LMXSC has focused on how perceived LMX in comparison to *all* other members of the workgroup (i.e., a direct assessment of an employee's social comparison after aggregating across all dyadic relationships within their workgroup and therefore removing all dyadic within-person variability) influences general workplace attitudes and behaviors. Thus, beyond the two studies identified that have collected round-robin data (i.e., Sherony & Green, 2002; Tse et al., 2013), we have a limited understanding of how differential treatment affects dyadic interactions with coworkers and therefore do not know the full range of consequences associated with differentiation. Interestingly, even though social comparison theory suggests that leader-based social

comparisons have important implications for how employees will think of, feel about, and behave toward *specific* referent coworkers (Festinger, 1954; for a review, see A. P. Buunk & Gibbons, 2007), an empirical understanding of these dyadic coworker thoughts, feelings, and behaviors has been mainly missing from the literature.

Using social comparison theory as an overarching theoretical framework, this dissertation addresses each of these three areas for opportunity. Having reviewed the LMX literature, I next introduce social comparison theory (i.e., the overarching theoretical perspective that ties my model together). In this social comparison theory section, I provide an overview of the original theory, and the developments in the theory over the past 60 years. In particular, I highlight the advancements with regard to contrastive versus assimilative social comparison effects and social comparison emotions (i.e., the two advancements that are most theoretically pertinent to my model).

THEORETICAL BACKGROUND: SOCIAL COMPARISON THEORY

According to social comparison theory (Festinger, 1954), individuals have a desire for self-evaluation, and this desire motivates individuals to evaluate themselves based on social comparisons with referent others when objective information (to evaluate standing) is not available (for a review, see A. P. Buunk & Gibbons, 2007). Festinger's (1954) original theory had several central propositions. For example, he proposed the "similarity hypothesis," suggesting that individuals prefer to compare themselves with similar others because such comparisons provide more accurate, precise, and stable comparisons for individuals. He also posited a "unidirectional drive upward" for abilities, suggesting that individuals not only desire to evaluate their abilities but also desire to continually improve their abilities until they are at least slightly better than those of referent others. In describing the interpersonal consequences of social comparisons, he suggested that "people will seek out the company of others similar to themselves" (A. P. Buunk & Gibbons, 2007, p. 4). Moreover, Festinger (1954, p. 129) suggested that dissimilarity in opinions can lead to cessation of comparisons and that a "cessation of comparisons with others will be accompanied by hostility or derogation." In sum, social comparison theory suggests that social comparisons provide a means for individuals to assess their relative status within their group so that they can navigate their specific social environment, and "evidence very strongly supports Festinger's (1954) original theory" (Wood, 1989, p. 243).

As a result of the immense impact of Festinger's (1954) seminal work, sixty years of social comparison research has provided several extensions to the original theory. For example, social comparison theory originally focused solely on evaluations of abilities and opinions, however, later research broadened the theory to also encompass evaluations of traits and circumstances (Wood, 1989). Similarly, research has broadened social comparison targets

beyond individual referents to also include groups of individuals (e.g., Goethals & Darley, 1987; Levine & Moreland, 1987) and oneself over time (e.g., Albert, 1977; Masters & Keil, 1987).

Beyond broadening the scope of the theory, several other expansions of the original theory have occurred. First, Schachter (1959) advanced social comparison theory by demonstrating that fear leads individuals to affiliate with others who are in a similar emotional situation and that social comparison drives this desire for affiliation (see also B. P. Buunk, 1995; B. P. Buunk, Schaufeli, & Ybema, 1994; B. P. Buunk, VanYperen, Taylor, & Collins, 1991; Gerard, 1963; Gerard & Rabbie, 1961). Extending Schachter's (1959) fear-affiliation theory, various studies described by Kulik and Mahler (2000) demonstrate that individuals tend to affiliate with others who are likely to have the most information about the threat that they may face. Second, Brickman and Bulman (1977) suggested that upward social comparisons, although informative for self-improvement, can also be threatening to individuals. Thus, Wills (1981) extended social comparison theory to include downward social comparisons and argued that individuals can enhance their well-being by engaging in downward social comparisons with others that are worse off (see also Dias & Lobel, 1997; Gibbons, 1986; Gibbons & Boney McCoy, 1991; Gibbons, Gerrard, Lando, & McGovern, 1991; Helgeson & Taylor, 1993; Suls, Marco, & Tobin, 1991; Tennen, McKee, & Affleck, 2000; Wood, Taylor, & Lichtman, 1985). Third, Wood (1989) advanced social comparison theory by illuminating that the "similarity hypothesis" should be modified. Specifically, Wood's (1989) review of the literature suggested that individuals do not necessarily prefer to compare themselves with similar others (as Festinger [1954] theorized), but rather social comparisons with similar others provide especially potent social comparisons for individuals. Finally, A. P. Buunk and Gibbons' (2006) review of individual differences in the tendency to engage in social comparisons shows that, although

everyone engages in social comparison, certain individuals engage in more social comparisons than others and the impact of these comparisons are greater for these individuals relative to others.

Beyond the extensions described above, the two developments in the social comparison literature which are most important to this dissertation are differentiating contrastive versus assimilative reactions to social comparisons and differentiating emotional reactions to social comparisons. I describe each of these areas in the next two subsections.

Contrastive and Assimilative Reactions to Social Comparisons

It is well established in the literature that social comparisons elicit contrastive reactions, i.e., individuals experience positive thoughts and feelings when making downward social comparisons and individuals experience negative thoughts and feelings when making upward social comparisons (for reviews, see A. P. Buunk & Gibbons, 2007; Greenberg et al., 2007). These contrast effects are argued to occur because “comparing oneself to others who are better off prompts an unfavorable self-image, whereas comparing oneself to those who are worse off enhances one’s self-image” (Greenberg et al., 2007, p. 31). Work over the past 25 years, however, has extended social comparison theory to suggest that social comparisons can also elicit assimilative reactions, i.e., individuals sometimes experience negative thoughts and feelings when making downward social comparisons, and individuals sometimes experience positive thoughts and feelings when making upward social comparisons (e.g., Brown, Novick, Lord, & Richards, 1992; B. P. Buunk, Collins, Taylor, VanYperen, & Dakof, 1990; Collins, 1996; Gardner, Gabriel, & Hochschild, 2002; Lockwood, 2002; Lockwood, Jordan, & Kunda, 2002; Lockwood & Kunda, 1997; Lockwood, Shaughnessy, Fortune, & Tong, 2012; Mussweiler, Rüter, & Epstude, 2004; Stapel & Koomen, 2001). These assimilation effects are posited to

occur because “in response to the fate of another person, individuals may experience feelings that are concordant with the lot of the other” (B. P. Buunk, Zurriaga, Péiró, Nauta, & Gosalvez, 2005, p. 63).

Considering the establishment of both contrastive and assimilative effects as well as the conflicting nature of these reactions, scholars have more recently explored the conditions by which upward and downward social comparisons garner contrastive or assimilative effects (A. P. Buunk & Gibbons, 2007). The results of this theory and research suggest that similarity (e.g., Mussweiler, 2001b, 2003; Mussweiler et al., 2004), personal versus interdependent self-construal (e.g., Gardner et al., 2002; Kemmelmeier & Oyserman, 2001; Stapel & Koomen, 2001), psychological closeness (e.g., Brown et al., 1992), the type of self-concept (i.e., identity) activated (e.g., Schwinghammer, Stapel, & Blanton, 2006), and control and attainability (e.g., B. P. Buunk et al., 1990; Lockwood & Kunda, 1997) influence whether contrastive or assimilative thoughts and feelings are evoked from social comparisons. Specifically, decreases (increases) in: a) similarity with regard to the referent other, b) interdependent self-construal with regard to the referent other, c) psychological closeness with regard to the referent other, and d) positive self-concept elicit contrastive (assimilative) reactions. As I will describe in greater detail in the hypothesis development section, several theoretical extensions of social comparison theory such as the selective accessibility model (Mussweiler, 2001a, 2003) and the self-evaluation maintenance model (Tesser, 1988) are theorized to drive these effects. Although not directly relevant to my theorizing, I also note that some research suggests that perceived sense of control and the attainability of the desired outcome differentially predict contrastive and assimilative reactions depending upon whether the comparison is upward or downward in direction (Major, Testa, & Blysmá, 1991; R. H. Smith, 2000).

Having described contrastive and assimilative effects as well as the established conditions that garner these effects, the next subsection introduces R. H. Smith's (2000) social comparison emotions framework. R. H. Smith (2000) built his social comparison emotions framework upon the burgeoning literature (described above) on contrastive and assimilative reactions to social comparisons.

Social Comparison Emotions

There are a wide range of terms used by organizational scholars to describe affect in organizations including affect, moods, and emotions. In this dissertation, I focus on emotions. Schwarz and Clore (1996, p. 385) defined emotions as feelings that arise “in response to ongoing, implicit appraisals of situations with respect to positive or negative implications for one's goals and concerns.” As alluded to in the above definition, emotions are elicited by a particular target or cause and their experience is relatively intense (Barsade & Gibson, 2007). In the case of social comparison emotions, the intense emotional experience is elicited due to a comparison with a referent other. Theory suggests that such emotional states are accompanied by social comparison tension and that individuals are motivated to reduce this tension (Adams, 1965).

Emotions are typically differentiated based upon two primary characteristics: valence (i.e., whether the emotion is positive or negative) and activation level (i.e., whether the emotion is high or low in arousal) (Larsen & Diener, 1992; Russell, 1980; Watson & Tellegen, 1985). However, social comparison emotions differ from other discrete emotions in two important ways. Going beyond valence and activation level, social comparison emotions are differentiated by the direction of the comparison (i.e., whether the comparison is upward or downward) and whether the emotion is contrastive or assimilative (i.e., whether the comparison highlights

differences and directs cognitions away from the comparison other or highlights similarities and directs cognitions toward the comparison other) (R. H. Smith, 2000). According to R. H. Smith (2000, p. 175), the direction of comparison is determined “based on whether the emotion-eliciting comparison is with someone superior or inferior.” As discussed in the previous section, whether the emotional experience is contrastive or assimilative is determined based on various factors such as similarity with regard to the referent other (e.g., Mussweiler, 2001b, 2003; Mussweiler et al., 2004), personal versus interdependent self-construal with regard to the referent other (e.g., Gardner et al., 2002; Kimmelmeier & Oyserman, 2001; Stapel & Koomen, 2001), psychological closeness with regard to the referent other (e.g., Brown et al., 1992), the type of self-concept (i.e., identity) activated (e.g., Schwinghammer et al., 2006), and control and attainability (e.g., B. P. Buunk et al., 1990; Lockwood & Kunda, 1997).

According to R. H. Smith’s (2000) typology of social comparison emotions, crossing the direction of the comparison with whether the nature of the comparison is contrastive or assimilative results in four types of social comparison emotions. Upward contrastive social comparison emotions (e.g., envy) are elicited when the comparison other is superior and the experienced social comparison tension highlights differences between the self and the comparison other. Upward assimilative social comparison emotions (e.g., inspiration) are elicited when the target is superior and the experienced social comparison tension highlights similarities between the self and the comparison other. Downward contrastive social comparison emotions (e.g., schadenfreude) are elicited when the comparison other is inferior and the experienced social comparison tension highlights differences between the self and the comparison other. Finally, downward assimilative social comparison emotions (e.g., sympathy) are elicited when the target is inferior and the experienced social comparison tension highlights similarities

between the self and the comparison other.

Having described Festinger's (1954) original social comparison theory and the major advancements in the social comparison literature over the past 60 years (including the introduction of both contrastive and assimilative reactions to social comparisons as well as the introduction of social comparison emotions), I next describe the assumptions I make in this dissertation as well as some of the key differences between the LMX social comparisons terminology used in this dissertation and the terminology used in past research on LMX social comparisons.

Assumptions in the Model

The first assumption of this dissertation is that LMX is a desirable characteristic to most (if not all) employees. Some research does suggest that certain employees may decline offers to become high LMX employees. For example, some employees may reject these offers when they lack trust in their leader (Graen & Scandura, 1987) or when leaders do not "have sufficient organizational power, autonomy, and resources in order to treat members in a differential manner" (Dienesch & Liden, 1986, p. 630). However, the majority of the research suggests that LMX is desirable to both high and low LMX employees. For example, high LMX employees sacrifice time (Dansereau et al., 1975), effort (Maslyn & Uhl-Bien, 2001), and resources (Liden et al., 1997) in order to maintain these relations. Interestingly, research on low LMX employees also suggests that such employees view LMX as desirable. For instance, the experiences of relative deprivation and envy require outcomes to be desirable (Crosby, 1976; Tai, Narayanan, & McAllister, 2012), and both have been linked to low LMX. Specifically, Bolino and Turnley (2009) posited that low LMX employees feel relative deprivation toward high LMX peers, and Vecchio (1995) demonstrated that low LMX employees feel envy toward high LMX peers.

Moreover, Maslyn and Uhl-Bien (2001, p. 704) argued that “[t]he findings of the present study indicate that individuals in these [low LMX] relationships wanted the relationships to be better and that they believed they tried, but the relationships did not work.”

The second assumption that I make is that LMX is an observable two-way exchange relationship (Colquitt, Baer, Long, & Halvorsen-Ganepola, 2014). This expectation is consistent with the growing body of theory and empirical work in the literature. Indeed, Tse and colleagues (2013, p. 975) theorized that “individual members are aware, through observations and nonverbal communications, of the LMX quality of each peer–leader relationship,” and LMX is traditionally defined as the “the quality of the exchange relationship between leader and subordinate” (Schriesheim, Castro, & Cogliser, 1999, p. 77). Moreover, this conceptualization is consistent with research showing that individuals within workgroups recognize leader differential treatment (Duchon, Green, & Taber, 1986; Sias & Jablin, 1995), and that coworkers are both aware of and are able to observe the LMX relationships of peers within their workgroup (Harris et al., 2014; Sherony & Green, 2002; Tse et al., 2013).

The third and final assumption of this dissertation is that perceptions of LMX social comparisons are aligned with actual differences in LMX amongst coworkers. This is important in order for my theory and results to generalize to the broader LMX literature. Research to date suggests that this assumption is tenable. For example, Vidyarathi and colleagues (2010) showed a correlation of .55 between LMXSC (i.e., subjective comparison between one’s own LMX and that of his or her coworkers) and RLMX (i.e., one’s LMX quality relative to the average LMX quality in a workgroup), and the authors demonstrated that LMXSC mediates the effects of RLMX on job performance and organizational citizenship behaviors. Furthermore, in a dyadic context, Tse and colleagues (2013) demonstrated similar relationships between perceived and

actual (dis)similarity in LMX and outcomes, such that both perceived and actual dissimilarity in LMX between two coworkers were positively associated with contempt amongst the two coworkers and perceptions of help received amongst the two coworkers. Having outlined these three assumptions, the next subsection describes some of the differences between the LMX social comparisons terminology used in this dissertation and the terminology used in past research on LMX social comparisons.

Differences in Terminology with Past Research on LMX Social Comparisons

The terminology used in this dissertation differs in two minor ways from past research on LMX social comparisons. First, Vidyarthi and colleagues (2010) described LMX social comparisons, defined as a subjective comparison between one's own LMX and that of his or her coworkers, as ranging from low LMX social comparisons to high LMX social comparisons. The use of low LMX social comparisons and high LMX social comparisons has the potential to confound the direction of comparison with the saliency of comparisons (e.g., low LMX social comparison may be interpreted as an upward LMX social comparison or a lack of engagement in LMX social comparisons). Thus, to remedy this issue and to be consistent with social comparison theory and the social comparison emotions framework, this dissertation will describe (and measure) LMX social comparisons as ranging from upward LMX social comparisons (lower LMX in comparison to a referent coworker) to downward LMX social comparisons (higher LMX in comparison to a referent coworker).

Second, Vidyarthi and colleagues (2010) explored perceived LMX in comparison to *all* other members of the workgroup (i.e., a direct assessment of an employee's social comparison after aggregating across all dyadic relationships within their workgroup and therefore removing all dyadic within-person variability). This dissertation extends the LMX social comparison

notions advanced by Vidyarthi and colleagues (2010) to look beyond social comparisons with the entire workgroup by considering social comparisons with each specific coworker. This is important because social comparison theory suggests that leader-based social comparisons have important implications for how employees will think about, feel about, and behave toward *specific* referent coworkers (Festinger, 1954; for a review, see A. P. Buunk & Gibbons, 2007). Moreover, recent research on the social context surrounding LMX relationships shows that a substantial portion of the variance in emotional reactions (i.e., 61% of variance in study 1 and 24% in study 2) lies at the dyadic level of analysis (e.g., Tse et al., 2013), and this variance is ignored when LMX is compared to all other members of the workgroup. Thus, we may be missing important insights about the nature of LMX social comparisons (e.g., when relatively low LMX quality may result in beneficial outcomes and relatively high LMX quality may result in detrimental outcomes).

Having described the assumptions I make in this dissertation as well as some of the key differences between the LMX social comparisons terminology used in this dissertation and the terminology used in past research on LMX social comparisons, the next section of the dissertation draws upon social comparison theory and social comparison emotions to advance specific hypotheses on the influences of LMX on the dyadic emotions experienced amongst coworkers.

HYPOTHESIS DEVELOPMENT: PREDICTING SOCIAL COMPARISON EMOTIONS

In this dissertation, I suggest that the social comparison-based emotional experiences that employees have toward each of their coworkers and their ultimate reactions to these social comparison-based emotional experiences is determined based upon the direction of the social comparison emotion (whether LMX social comparisons with each referent coworker are upward or downward) and whether the emotional experience is contrastive or assimilative (whether the employee experiences self-other overlap with each referent coworker). Table 1 presents a two-by-two framework that describes when each of the four types of social comparison emotions will be experienced in response to combinations of “LMX social comparison with a specific coworker” and “self-other overlap with this coworker.” Below, I describe the two-by-two framework in detail. First, I describe “LMX social comparison with a specific coworker” as a determinant of the direction of the social comparison emotion. Second, I describe “self-other overlap with this coworker” as a determinant of whether the social comparison emotion is contrastive versus assimilative in nature. Then, I proceed with presenting the first four formal hypotheses.

Table 1 – Crossing LMX Social Comparison with Coworker and Self-Other Overlap

	Low Self-Other Overlap	High Self-Other Overlap
Upward LMX Social Comparison	<p>Upward Contrastive Social Comparison Emotions e.g., Envy</p>	<p>Upward Assimilative Social Comparison Emotions e.g., Inspiration</p>
Downward LMX Social Comparison	<p>Downward Contrastive Social Comparison Emotions e.g., Schadenfreude</p>	<p>Downward Assimilative Social Comparison Emotions e.g., Sympathy</p>

Direction of Social Comparison Emotion: LMX Social Comparisons with Coworker

R. H. Smith's (2000) social comparison emotions framework posits that the direction of a social comparison emotion is determined based on whether the emotion-eliciting comparison is with someone who is superior or inferior on the criterion being compared. In the case of LMX, because of the beneficial resources associated with higher levels of LMX quality (Graen & Scandura, 1987; Wilson et al., 2010), this dissertation suggests that having lower LMX quality in comparison to a specific referent coworker will result in an upward social comparison emotion (elicited by that coworker) because he/she is superior on the emotion-eliciting comparison of LMX. Similarly, this dissertation suggests that having higher LMX quality in comparison to a specific referent coworker will result in a downward social comparison emotion (elicited by that coworker) because he/she is inferior on the emotion-eliciting comparison of LMX.

Contrastive versus Assimilative Social Comparison Emotion: Self-Other Overlap

Past theory and research suggests that similarity, personal versus interdependent self-construal, psychological closeness, the type of self-concept (i.e., identity) activated, and control and attainability influence whether contrastive or assimilative thoughts and feelings are evoked from social comparisons. In this dissertation, I focus on self-other overlap (Aron & Aron, 1986; Aron et al., 1992; Aron, Aron, Tudor, & Nelson, 1991), defined as the cognitive representation of perceived closeness of one's identity with a relationship partner, as the primary driving factor influencing whether contrastive or assimilative thoughts and feelings are evoked from social comparisons. The notion of self-other overlap (SOO) is derived from Aron and Aron's (1986) self-expansion model, which posits that people are motivated to enter and maintain close relationships in order to expand the self and enhance one's ability to accomplish goals via including resources, perspectives, characteristics, and identities of others into the self.

This dissertation focuses on self-other overlap because self-other overlap is a broad and parsimonious construct, serving as a higher-order factor that encompasses the well-established moderators (from the social comparison literature) which influence whether social comparisons reactions are contrastive or assimilative in nature. For example, self-other overlap indicates cognitions about the psychological closeness of a relationship (e.g., Aron et al., 1991) and empirical research demonstrates convergent validity between self-other overlap and indicators of relationship closeness (e.g., Aron et al., 1992). Similarly, the construct of self-other overlap is intertwined with the notions of identity and personal versus interdependent self-construal (e.g., Aron et al., 2004; Wright, Aron, & Tropp, 2002) and Aron and colleagues' (1992) empirical evidence suggests that employee identity is a factor that drives employee perceptions of self-other overlap. Finally, although similarity is argued to be conceptually distinct from self-other overlap, Aron and colleagues' (1992) empirical evidence also suggests that similarity is an indicator that drives employee perceptions of self-other overlap (beyond identity and similarity, the other three indicators that drive employee perceptions of self-other overlap are feeling close, behaving close, and connectedness). Thus, self-other overlap provides an overarching construct that integrates prior piecemeal research on contrastive versus assimilative reactions.

Drawing upon past research on the determinants of contrastive versus assimilative reactions to social comparisons, this dissertation suggests that low self-other overlap with a referent coworker will garner contrastive social comparison emotional reactions (i.e., the emotional experience will highlight differences and direct cognition away from the comparison other) and high self-other overlap with a referent coworker will garner assimilative social comparison emotional reactions (i.e., the emotional experience will highlight similarities and direct cognition toward the comparison other).

Several theoretical extensions of social comparison theory support this argument. For example, the selective accessibility model (Mussweiler, 2001a, 2003) posits that individuals actively seek and generate self-related information during the social comparison process and that individuals contrast with referents that they perceive as dissimilar (i.e., they engage in dissimilarity testing and selectively focus on information indicating that their standing is different from the referent other) and assimilate with referents that they perceive as similar (i.e., they engage in similarity testing and selectively focus on information indicating that they are similar to the referent other). Tesser's (1988) self-evaluation maintenance model also supports these arguments. For example, Brown and colleagues (1992) drew on the self-evaluation maintenance model to argue that closeness influences whether reactions to social comparisons are contrastive or assimilative. Specifically, when a referent other outperformed the self, the authors showed that psychological closeness determined whether assimilative or contrastive social comparison reactions were experienced because psychological closeness allowed for individuals to increase self-worth by basking in the glory of the referent other. Similarly, Gardner and colleagues (2002) demonstrated that interdependent (as opposed to independent) self-construal elicited assimilative (as opposed to contrastive) social comparison reactions to upward social comparisons because the successes of referents became causes for celebration rather than being regarded as costs to esteem. Moreover, these theoretical arguments and this empirical evidence is consistent with empirical work in the social comparison literature demonstrating that contrastive (assimilative) social comparison emotional reactions are elicited as: a) similarity with regard to the referent other decreases (increases) (e.g., Mussweiler, 2001b, 2003; Mussweiler et al., 2004), b) interdependent self-construal with regard to the referent other decreases (increases) (e.g., Gardner et al., 2002; Kimmelmeier & Oyserman, 2001; Stapel &

Koomen, 2001), c) and psychological closeness with regard to the referent other decreases (increases) (e.g., Brown et al., 1992).

Table 1 summarizes the above arguments and shows that “LMX social comparison with a specific coworker” indicates the direction of the social comparison emotional reaction elicited by the referent coworker and that “self-other overlap with this coworker” indicates whether the emotional reaction to the referent coworker will be contrastive or assimilative in nature. In the next four sub-sections, I present more detailed theoretical and empirical justification for hypotheses predicting four types of social comparison emotions. I start by developing the logic for upward contrastive social comparison emotions as an outcome of “LMX social comparison with a specific coworker” and “self-other overlap with this coworker.”

Upward LMX Social Comparison and Low Self-Other Overlap with Coworker

When an individual has lower LMX quality than a specific referent coworker and has low self-other overlap with that coworker, he/she will experience upward contrastive social comparison emotions such as envy, depression, shame, and resentment. In addition, these emotional experiences will be accompanied by upward contrastive social comparison tension (Adams, 1965). In describing and differentiating upward contrastive social comparison emotions, R. H. Smith (2000, p. 180) argued that “[r]esentment refers to angry feelings resulting from the perception that another's advantage is unfair. Depressive feelings [and shame] are more likely to result when another's advantages creates a sense of inferiority. Envy ... is the combination of both discontent and hostility resulting from another person's advantage.” As such, the theoretical arguments in this dissertation focus on envy because envy includes both feelings about oneself and feelings about the referent – making it a quintessential upward contrastive social comparison emotion. Indeed, R. H. Smith (2000, p. 177) posited that envy is “the prototype of the social

comparison-based emotion as it so clearly requires a social comparison for it to take place.”

Upward contrastive social comparison emotions (e.g., envy) are likely to occur when an individual has lower LMX quality than a specific referent coworker and has low self-other overlap with that coworker. When the focal employee has lower LMX quality than a specific referent coworker, he/she receives fewer resources from the leader than the referent coworker (Graen & Scandura, 1987; Wilson et al., 2010). This upward discrepancy will cause the focal employee to feel inferior on the criterion being compared (i.e., LMX quality). Thus, he/she will experience an upward social comparison emotion. When the focal employee has low self-other overlap with a specific referent coworker, the selective accessibility model (Mussweiler, 2001a, 2003) suggests that he/she will engage in dissimilarity testing and selectively focus on information indicating that his/her standing is different from the referent coworker. This occurs because individuals actively seek and generate self-related information during the social comparison process and contrast with referents that they perceive as dissimilar. Moreover, Tesser’s (1988) self-evaluation maintenance model suggests that the success of a coworker with whom the focal employee has low self-other overlap will lower self-worth. Thus, when the focal employee has low self-other overlap with the referent coworker, the emotional experience of the social comparison will be contrastive in nature. Taken together, upward LMX social comparison (upward social comparison emotion) and low self-other overlap (contrastive social comparison emotion) will jointly maximize upward contrastive social comparison emotions (e.g., envy).

Consistent with these theoretical arguments, indirect empirical evidence supports the proposed relations in predicting upward contrastive social comparison emotions (i.e., envy, depression, shame, and resentment). For example, H. J. Smith, Pettigrew, Pippin, and Bialosiewicz (2012) meta-analytically linked upward social comparisons with resentment, R. H.

Smith, Parrott, Ozer, and Moniz (1994) showed that upward social comparisons result in depressive affect, and Salovey and Rodin (1984) as well as Fischer, Kastenmüller, Frey, and Peus (2009) demonstrated that upward social comparisons and envy were positively related. Moreover, suggesting that self-other overlap moderates these effects, Gino and Pierce (2010) demonstrated that workers experience envy toward wealthier customers and experience empathy toward customers that they perceive as similar to themselves (in terms of status), and Kim and Glomb (2014) showed that workgroup identification buffered the effects of envy experienced toward high performing others.

Combining the above theoretical arguments with these empirical findings, I hypothesize that LMX social comparison with a specific coworker will be negatively associated with upward contrastive social comparison emotions (e.g., envy) felt toward that coworker, that self-other overlap with a specific coworker will be negatively associated with upward contrastive social comparison emotions (e.g., envy) felt toward that coworker, and that upward contrastive social comparison emotions (e.g., envy) will be maximized when LMX social comparison with a specific coworker is upward and self-other overlap with that coworker is low (see Figure 2). Specifically, I posit a neutralizing effect such that high self-other overlap buffers (and low self-other overlap enhances) the negative relationship between LMX social comparisons and upward contrastive social comparison emotions. In other words, the relationship between LMX social comparison (ranging from upward to downward) and upward contrastive social comparison emotions is negative when the focal employee has low self-other overlap with the referent coworker, but not when the focal employee has high self-other overlap with the referent coworker.

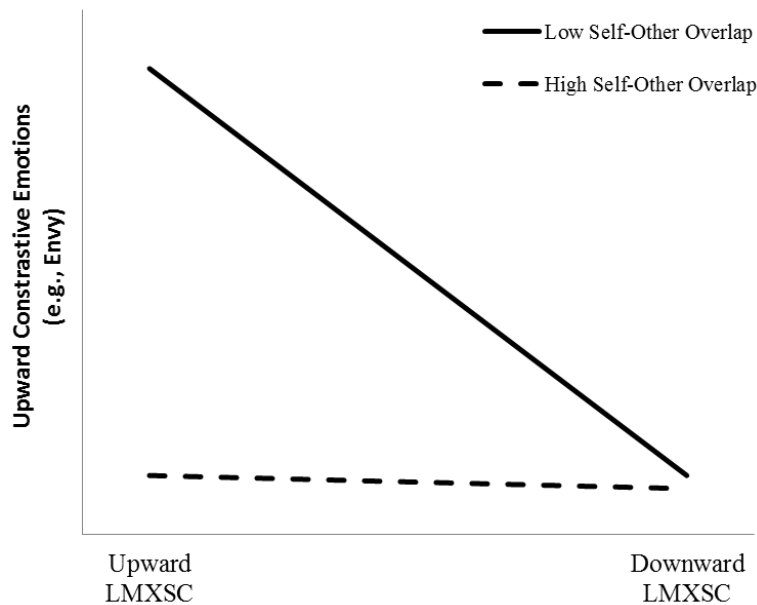
Hypothesis 1a: LMX social comparisons with a referent coworker (ranging from

upward to downward) are negatively related to upward contrastive social comparison emotions (e.g., envy).

Hypothesis 1b: Self-other overlap is negatively related to upward contrastive social comparison emotions (e.g., envy).

Hypothesis 1c: LMX social comparisons with a referent coworker (ranging from upward to downward) are negatively related to upward contrastive social comparison emotions (e.g., envy) for coworkers who have low self-other overlap with the focal employee, but not for coworkers who have high self-other overlap with the focal employee.

Figure 2 - Proposed Interaction for Upward Contrastive Social Comparison Emotions



Upward LMX Social Comparison and High Self-Other Overlap with Coworker

When an individual has lower LMX quality than a specific referent coworker and has high self-other overlap with that coworker, he/she will experience upward assimilative social comparison emotions such as inspiration, optimism, and admiration. In addition, these emotional

experiences will be accompanied by upward assimilative social comparison tension (Adams, 1965). R. H. Smith (2000) described and differentiated upward assimilative social comparison emotions as follows. Optimistic feelings are most likely to occur when the “advantage of the other person may bring about a predominant focus on the positive implications for the self,” “[a]dmiration occurs when another person arouses a sense of wonder, delight, and pleased approval,” and inspiration occurs when there is a “dual focus on both the positive implications for the self and the admirable attributes of the other person” (R. H. Smith, 2000, pp. 184-186). As such, the theoretical arguments in this dissertation focus on inspiration because inspiration combines both feelings about oneself and feelings about the referent – making it a prototypical upward assimilative social comparison emotion.

Upward assimilative social comparison emotions (e.g., inspiration) are likely to occur when an individual has lower LMX quality than a specific referent coworker and has high self-other overlap with that coworker. When the focal employee has lower LMX quality than a specific referent coworker, he/she receives fewer resources from the leader than the referent coworker (Graen & Scandura, 1987; Wilson et al., 2010). Thus, this upward discrepancy will garner an upward social comparison emotion. In contrast to hypothesis 1 (i.e., upward LMX social comparison and low self-other overlap), however, when the focal employee has high self-other overlap with a specific referent coworker, the selective accessibility model (Mussweiler, 2001a, 2003) suggests that he/she will engage in similarity testing and selectively focus on information indicating that his/her standing is similar to that of the referent coworker. Indeed, the selective accessibility model suggests that individuals actively seek and generate self-related information during the social comparison process and that individuals assimilate with referents that they perceive as similar. Similarly, Tesser’s (1988) self-evaluation maintenance model

suggests that the success of a coworker with whom the focal employee has high self-other overlap will allow the employee to bask in the glory of the referent other, increasing self-worth. Thus, when the focal employee has high self-other overlap with the referent coworker, the emotional experience of the social comparison will be assimilative in nature. Considered together, upward LMX social comparison (upward social comparison emotion) and high self-other overlap (assimilative social comparison emotion) will jointly maximize upward assimilative social comparison emotions (e.g., inspiration).

Indirect empirical evidence supports the proposed relationships in predicting upward assimilative social comparison emotions (i.e., inspiration, optimism, and admiration). For example, a growing body of research demonstrates that upward social comparisons predict inspiration in many settings including amongst students (A. P. Buunk, Peiro, & Griffioen, 2007), cardiac patients (Helgeson & Taylor, 1993), and individuals making major life transitions (Lockwood et al., 2012). Furthermore, suggesting that self-other overlap moderates these effects, Brickman and Bulman (1977) demonstrated that successful achievements by a referent other produced greater personal satisfaction when the referent other had a similar (versus dissimilar) background, and Lockwood and Kunda (1997) showed that upward social comparisons influenced inspiration only for individuals who believed it was possible to achieve success like the referent other.

Combining the above conceptual arguments with these empirical findings, I hypothesize that LMX social comparison with a specific coworker will be negatively associated with upward assimilative social comparison emotions (e.g., inspiration) felt toward that coworker, that self-other overlap with a specific coworker will be positively associated with upward assimilative social comparison emotions (e.g., inspiration) felt toward that coworker, and that upward

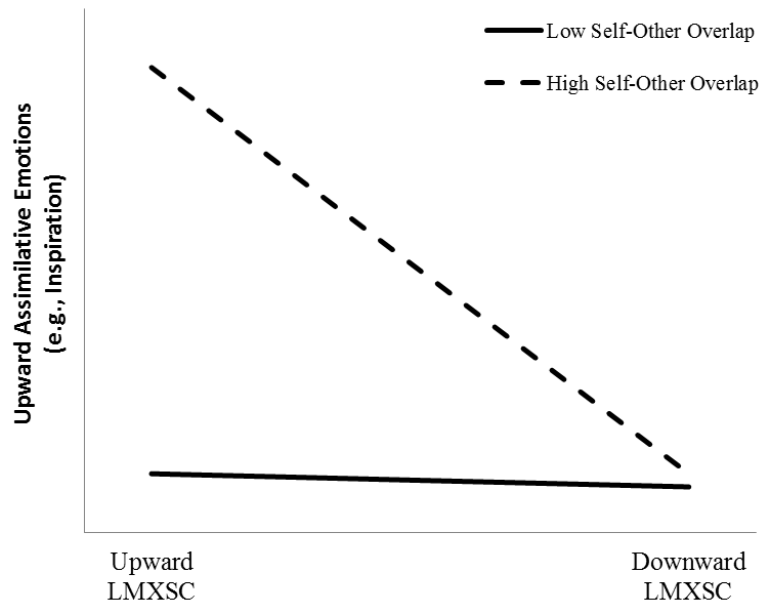
assimilative social comparison emotions (e.g., inspiration) will be maximized when LMX social comparison with a specific coworker is upward and self-other overlap with that coworker is high (see Figure 3). Specifically, I posit an enhancement effect such that high self-other overlap enhances (and low self-other overlap buffers) the negative relationship between LMX social comparisons and upward assimilative social comparison emotions. In other words, the relationship between LMX social comparison (ranging from upward to downward) and upward assimilative social comparison emotions is negative when the focal employee has high self-other overlap with the referent coworker, but not when the focal employee has low self-other overlap with the referent coworker.

Hypothesis 2a: LMX social comparisons with a referent coworker (ranging from upward to downward) are negatively related to upward assimilative social comparison emotions (e.g., inspiration).

Hypothesis 2b: Self-other overlap is positively related to upward assimilative social comparison emotions (e.g., inspiration).

Hypothesis 2c: LMX social comparisons with a referent coworker (ranging from upward to downward) are negatively related to upward assimilative social comparison emotions (e.g., inspiration) for coworkers who have high self-other overlap with the focal employee, but not for those coworkers who have low self-other overlap with the focal employee.

Figure 3 - Proposed Interaction for Upward Assimilative Social Comparison Emotions



Downward LMX Social Comparison and Low Self-Other Overlap with Coworker

When an individual has higher LMX quality than a specific referent coworker and has low self-other overlap with that coworker, he/she will experience downward contrastive social comparison emotions such as schadenfreude, pride, contempt, and scorn. In addition, these emotional experiences will be accompanied by downward contrastive social comparison tension (Adams, 1965). R. H. Smith (2000) provided the following descriptions and distinctions for downward contrastive social comparison emotions. Pride is a pleasant feeling “likely to occur if a positive internal characteristic seems to cause the [downward] discrepancy,” “Contempt and scorn involve feelings toward someone whom one considers low, worthless, or beneath notice,” and schadenfreude occurs when there is a dual focus on both the self and other such that “[t]he self-enhancing aspect of the downward social comparison provides the pleasure (Brigham et al., 1997), and the apparently contemptible aspects of the person may produce the malicious edge that also seems part of the emotion” (R. H. Smith, 2000, pp. 187-189). As such, the theoretical

arguments in this dissertation focus on schadenfreude because schadenfreude contains both feelings about oneself and feelings about the referent – making it a model downward contrastive social comparison emotion.

Downward contrastive social comparison emotions (e.g., schadenfreude) are likely to occur when an individual has higher LMX quality than a specific referent coworker and has low self-other overlap with that coworker. When the focal employee has higher LMX quality than a specific referent coworker, he/she receives more resources from the leader than the referent coworker (Graen & Scandura, 1987; Wilson et al., 2010). This downward discrepancy will cause the focal employee to feel superior on the criterion being compared (i.e., LMX quality). Thus, he/she will experience a downward social comparison emotion. When the focal employee has low self-other overlap with a specific referent coworker, theory suggests that he/she will engage in dissimilarity testing and selectively focus on information indicating that his/her standing is different from the referent coworker (Mussweiler, 2001a, 2003) and that success relative to such a coworker will increase self-worth (Tesser, 1988). Thus, when the focal employee has low self-other overlap with the referent coworker, the emotional experience of the social comparison will be contrastive in nature. In conjunction, downward LMX social comparison (downward social comparison emotion) and low self-other overlap (contrastive social comparison emotion) will jointly maximize downward contrastive social comparison emotions (e.g., schadenfreude).

Consistent with these theoretical arguments, empirical evidence supports the proposed relations in predicting downward contrastive social comparison emotions (i.e., schadenfreude, pride, contempt, and scorn). For example, in the only LMX social context study (to my knowledge) to incorporate emotional reactions, Tse and colleagues (2013) showed the importance of LMX social comparisons in predicting contempt. Specifically, the authors

demonstrated that objective dyadic LMX dissimilarity as well as subjective perceptions of dyadic LMX dissimilarity were both positively associated with contempt. Also consistent with the above arguments, Webster, Duvall, Gaines, and Smith (2003) demonstrated that pride was positively associated with relative performance, and Dvash, Gilam, Ben-Ze'ev, Hendler, and Shamay-Tsoory (2010) showed that downward social comparisons garnered schadenfreude (using fMRI technology). Moreover, suggesting that self-other overlap moderates these effects, Exline and Lobel (2001) demonstrated that individuals were less likely to experience pride and happiness (i.e., schadenfreude) after outperforming others when they were in closer and more satisfying relationships (as opposed to more conflictual and hostile relationships).

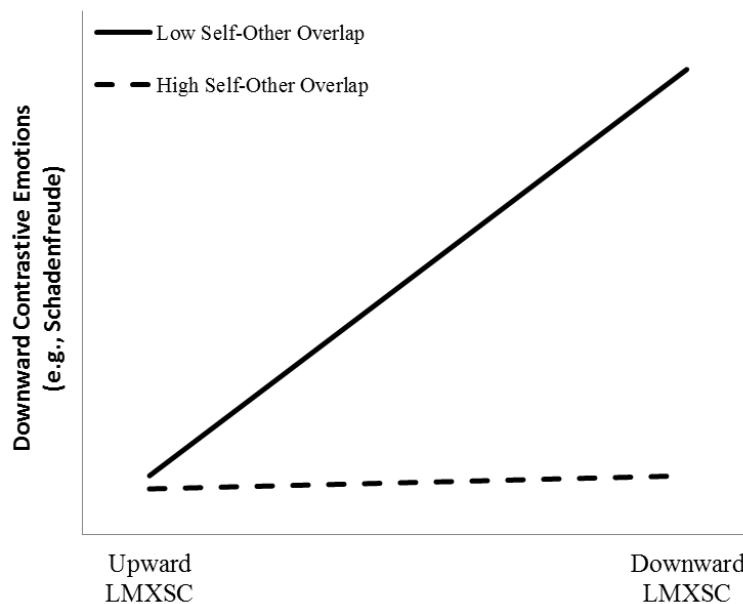
Combining the above conceptual arguments with these empirical findings, I hypothesize that LMX social comparison with a specific coworker will be positively associated with downward contrastive social comparison emotions (e.g., schadenfreude) felt toward that coworker, that self-other overlap with a specific coworker will be negatively associated with downward contrastive social comparison emotions (e.g., schadenfreude) felt toward that coworker, and that downward contrastive social comparison emotions (e.g., schadenfreude) will be maximized when LMX social comparison with a specific coworker is downward and self-other overlap with that coworker is low (see Figure 4). Specifically, I posit a neutralizing effect such that high self-other overlap buffers (and low self-other overlap enhances) the positive relationship between LMX social comparisons and downward contrastive social comparison emotions. In other words, the relationship between LMX social comparison (ranging from upward to downward) and downward contrastive social comparison emotions is positive when the focal employee has low self-other overlap with the referent coworker, but not when the focal employee has high self-other overlap with the referent coworker.

Hypothesis 3a: LMX social comparisons with a referent coworker (ranging from upward to downward) are positively related to downward contrastive social comparison emotions (e.g., schadenfreude).

Hypothesis 3b: Self-other overlap is negatively related to downward contrastive social comparison emotions (e.g., schadenfreude).

Hypothesis 3c: LMX social comparisons with a referent coworker (ranging from upward to downward) are positively related to downward contrastive social comparison emotions (e.g., schadenfreude) for coworkers who have low self-other overlap with the focal employee, but not for coworkers who have high self-other overlap with the focal employee.

Figure 4 - Proposed Interaction for Downward Contrastive Social Comparison Emotions



Downward LMX Social Comparison and High Self-Other Overlap with Coworker

When an individual has higher LMX quality than a specific referent coworker and has high self-other overlap with that coworker, he/she will experience downward assimilative social

comparison emotions such as sympathy, pity, fear, and worry. In addition, these emotional experiences will be accompanied by downward assimilative social comparison tension (Adams, 1965). R. H. Smith (2000) described and distinguished downward assimilative social comparison emotions as follows. Fear and worry occur when “the other person establishes the negative possible outcome, but it is the prospect of a similar outcome for the self, rather than its unfortunate attainment by the other person, that anchors one's thoughts and generates negative feelings,” “[w]hen we feel pity, we feel sorrow for another's suffering or misfortune,” and sympathy captures “both the worry and fear over one's future outcomes plus a pity for the current disadvantaged condition of the other person” (R. H. Smith, 2000, pp. 190-191). As such, the theoretical arguments in this dissertation focus on sympathy because sympathy incorporates both feelings about oneself and feelings about the referent – making it an ideal downward assimilative social comparison emotion.

Downward assimilative social comparison emotions (e.g., sympathy) are likely to occur when an individual has higher LMX quality than a specific referent coworker and has high self-other overlap with that coworker. When the focal employee has higher LMX quality than a specific referent coworker, he/she receives more resources from the leader than the referent coworker (Graen & Scandura, 1987; Wilson et al., 2010). Thus, this downward discrepancy will garner a downward social comparison emotion. However, in contrast to hypothesis 3 (i.e., downward LMX social comparison and low self-other overlap), when the focal employee has high self-other overlap with a specific referent coworker, he/she will engage in similarity testing and selectively focus on information indicating that his/her standing is similar to that of the referent coworker (Mussweiler, 2001a, 2003). Indeed, at the heart of assimilative emotions is the idea that when similarity is highlighted, “in response to the fate of another person, individuals

may experience feelings that are concordant with the lot of the other” (B. P. Buunk et al., 2005, p. 63). Moreover, in such situations, research in the social comparison theory domain suggests that the referent other will serve as a “feared self” because the focal employee recognizes that he/she may suffer a similar fate in the future (Lockwood, 2002; Lockwood et al., 2002). Thus, when the focal employee has high self-other overlap with the referent coworker, the emotional experience of the social comparison will be assimilative in nature. Collectively, downward LMX social comparison (downward social comparison emotion) and high self-other overlap (assimilative social comparison emotion) will jointly maximize downward assimilative social comparison emotions (e.g., sympathy).

Indirect empirical evidence supports the proposed relationships in predicting downward assimilative social comparison emotions (i.e., sympathy, pity, fear, and worry). For example, Moscatelli, Albarello, Prati, and Rubini (2014) demonstrated that groups experiencing relative gratification (i.e., downward intergroup comparisons) are more likely to experience fear/worry of losing intergroup advantage. Moreover, suggesting that self-other overlap moderates these effects, Alicke, Klotz, Breitenbecher, Yurak, and Vredenburg (1995) demonstrated that better-than-average effects (i.e., the tendency to maintain positive images of oneself relative to others) are diminished when individuals have personalized contact with referent others. Similarly, Gelbrich (2011) showed that, in advantaged price inequality situations, relationship quality positively influenced pity.

Combining the above conceptual arguments with these empirical findings, I hypothesize that LMX social comparison with a specific coworker will be positively associated with downward assimilative social comparison emotions (e.g., sympathy) felt toward that coworker, that self-other overlap with a specific coworker will be positively associated with downward

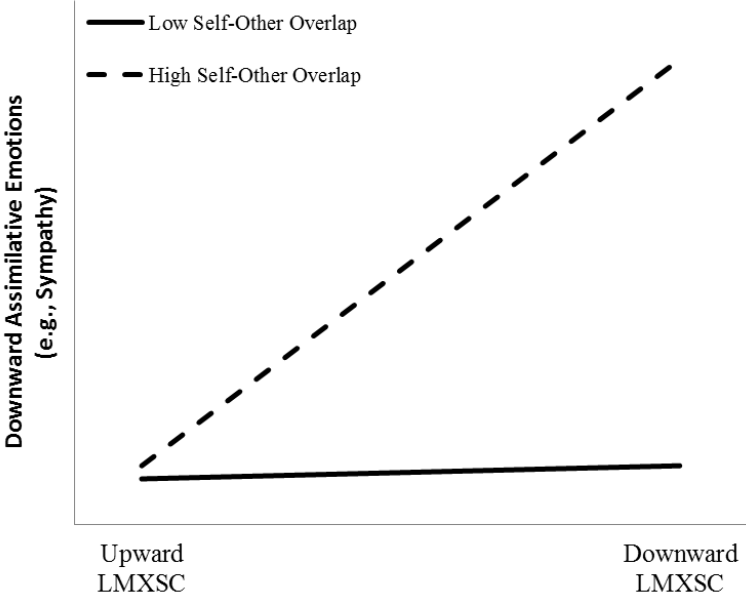
assimilative social comparison emotions (e.g., sympathy) felt toward that coworker, and that downward assimilative social comparison emotions (e.g., sympathy) will be maximized when LMX social comparison with a specific coworker is downward and self-other overlap with that coworker is high (see Figure 5). Specifically, I posit an enhancement effect such that high self-other overlap enhances (and low self-other overlap buffers) the positive relationship between LMX social comparisons and downward assimilative social comparison emotions. In other words, the relationship between LMX social comparison (ranging from upward to downward) and downward assimilative social comparison emotions is positive when the focal employee has high self-other overlap with the referent coworker, but not when the focal employee has low self-other overlap with the referent coworker.

Hypothesis 4a: LMX social comparisons with a referent coworker (ranging from upward to downward) are positively related to downward assimilative social comparison emotions (e.g., sympathy).

Hypothesis 4b: Self-other overlap is positively related to downward assimilative social comparison emotions (e.g., sympathy).

Hypothesis 4c: LMX social comparisons with a referent coworker (ranging from upward to downward) are positively related to downward assimilative social comparison emotions (e.g., sympathy) for coworkers who have high self-other overlap with the focal employee, but not for coworkers who have low self-other overlap with the focal employee.

Figure 5 - Proposed Interaction for Downward Assimilative Social Comparison Emotions



HYPOTHESIS DEVELOPMENT: DOWNSTREAM BEHAVIORAL OUTCOMES

Going beyond the above predictions of how LMX social comparison with a specific coworker and self-other overlap with that coworker predict social comparison emotions, I next consider the implications of these social comparison emotions for the interpersonal discretionary behaviors that employees engage in toward that coworker. Because social comparison emotional experiences are accompanied by social comparison tension, employees are motivated to engage in behaviors to relieve this tension. Indeed, Adams (1965, p. 283) posited that social comparisons evoke emotion as well as social comparison tension and “[t]he tension created in Person will drive him to reduce it.” This dissertation suggests that interpersonal discretionary work behavior is a one way in which employees can reduce this tension.

Interpersonal Discretionary Work Behaviors

Past research demonstrates that discretionary work behaviors serve as a critical motivational, affective, and social exchange mechanism to aid employees in rectifying social comparison imbalances (Cohen-Charash & Mueller, 2007; Spence, Ferris, Brown, & Heller, 2011). Moreover, considering the focus on social comparison emotions in this dissertation, discretionary work behaviors are particularly relevant because these behaviors are affect-laden (e.g., Dalal, Lam, Weiss, Welch, & Hulin, 2009; Spector & Fox, 2002) and can be directly targeted at referent coworkers (i.e., the source of social comparison tension). As such, I focus on two contrasting interpersonal discretionary work behaviors – interpersonal organizational citizenship behavior and interpersonal counterproductive work behavior – because both allow employees to alleviate social comparison tensions but one is beneficial to the target and the other is detrimental to the target. Thus, I posit that employees employ positive and negative behaviors in response to social comparison emotions with the goal of alleviating social comparison tension.

Organ (1988, p. 4) defined organizational citizenship behavior (OCB) as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization.” Interpersonal OCB (OCBI) is OCB that is intended to benefit a specific person. Examples of OCBI include coworker helping and cooperating behavior that goes beyond the formal task requirements of the job (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Dalal and colleagues (2009, p. 1052) defined counterproductive work behavior (CWB) as “volitional employee behavior that harms, or at least is intended to harm, the legitimate interests of an organization.” Interpersonal CWB (CWBI) is CWB that is intended to harm a specific person. Examples of CWBI include competing destructively, gossiping, blaming coworkers, and abusing coworkers (Robinson & Bennett, 1995).

In this dissertation, in addition to predicting the engagement of OCBI and CWBI, I also distinguish between active and passive forms of these behaviors. Although OCBI and CWBI are defined as proactive discretionary or volitional behaviors, I posit that they can vary from more passive to more active forms. This distinction is consistent with past research in both the OCBI and CWBI literatures. Indeed, the Settoon and Mossholder (2002, p. 259) factor analysis demonstrated that the OCBI items loaded on two factors, “behaviors that provided passive support to others ... [and] behaviors representing active assistance to those in need.” Active OCBI includes behaviors such as helping a coworker with a difficult assignment or assisting a coworker with a heavy work-load, whereas passive OCBI includes behaviors such as listening to a coworker when he/she has to get something off his/her chest or taking time to listen to a coworker’s problems and worries (Settoon & Mossholder, 2002). Similarly, Bing and colleagues’ (2007) factor analysis of the Bennett and Robinson (2000) CWB checklist showed

that the items loaded onto four factors – passive organizational deviance, active organizational deviance, active interpersonal deviance, and passive interpersonal deviance. Active CWBI includes behavior such as acting rudely toward a coworker at work or saying something hurtful to a coworker at work, whereas passive CWBI includes behavior such as repeating a rumor or gossip about a coworker. These arguments are also consistent with research on a wide range of other interpersonal behaviors that have used the active-passive distinction [e.g., aggression (Buss, 1961), leadership styles (Judge & Piccolo, 2004), relationship behaviors (Sinclair & Fehr, 2005), and retaliation (Shaw, Wild, & Colquitt, 2003)].

Table 2 presents a two-by-two framework that describes when employees will engage in each type of discretionary work behavior. Continuing to contrast the assimilative versus contrastive nature of the social comparison tension and the direction of the social comparison tension, I posit that employees will engage in CWBI in response to contrastive social comparison tension and OCBI in response to assimilative social comparison tension. Regarding the form of these behaviors, I posit that employees will enact active behaviors in response to upward social comparison tension and passive behaviors in response to downward social comparison tension. Below I describe the two-by-two framework in more detail, followed by the final four formal hypotheses.

Table 2 – Crossing Assimilative versus Contrastive with Direction of Tension

	Contrastive Social Comparison Tension CWBI Salient	Assimilative Social Comparison Tension OCBI Salient
Upward Social Comparison Tension Active Discretionary Work Behavior	Active CWBI e.g., Accompanying Envy	Active OCBI e.g., Accompanying Inspiration
Downward Social Comparison Tension Passive Discretionary Work Behavior	Passive CWBI e.g., Accompanying Schadenfreude	Passive OCBI e.g., Accompanying Sympathy

CWBI versus OCBI Salient: Contrastive versus Assimilative Social Comparison Tension

Whether a social comparison emotion is contrastive in nature, highlights differences, and directs cognitions away from the comparison other or is assimilative in nature, highlights similarities, and directs cognitions toward the comparison other has important implications for whether CWBI or OCBI become salient. A major reason why the nature of the social comparison emotion and tension matters for determining the type of behavior made salient is because similarity is one of the most important predictors of attraction (Lott & Lott, 1965). For example, similarity attraction theory (Byrne, 1971) posits that individuals’ similarity with respect to various attitudes and preferences influences their attraction and behavior toward others. Similarly, social identity theory (Tajfel, 1982) suggests that “dissimilar employees may engage in deviant behavior as a result of lower levels of identification” (Liao, Joshi, & Chuang, 2004, p. 974). These arguments echo the contentions of social comparison theory that “people will seek out the company of others similar to themselves” (A. P. Buunk & Gibbons, 2007, p. 4), that dissimilarity in opinions can lead to cessation of comparisons, and that a “cessation of

comparisons with others will be accompanied by hostility or derogation” (Festinger, 1954, p. 129).

Empirical evidence supports the linkage between assimilation (i.e., highlighting similarities) and OCBI as well as the linkage between contrast (i.e., highlighting differences) and CWBI. For example, Chattopadhyay (1999) as well as Tsui, Porter, and Egan (2002) showed that demographic similarity was positively associated with OCB and Liao and colleagues (2004) demonstrated that both demographic and personality dissimilarities were positively associated with interpersonal and organizational CWB. In sum, this dissertation suggests that contrastive social comparison emotion and tension will elicit CWBI and assimilative social comparison emotion and tension will elicit OCBI.

Active versus Passive Behavior: Direction of Social Comparison Tension

Social comparisons serve a wide array of needs and therefore individuals engage in social comparisons for many reasons (Taylor & Lobel, 1989; Wood, 1989; Wood & Taylor, 1991). For example, Corcoran, Crusius, and Mussweiler (2011) posited that upward social comparisons activate self-improvement needs, which motivate individuals to improve relative standing. Alternatively, downward social comparisons activate self-enhancement needs, which garner positive thoughts about relative standing. Indeed, “[u]pward comparisons can motivate people and can provide information on how to make progress” (Corcoran et al., 2011, p. 124), whereas downward social comparisons lead individuals to “feel better about his or her own situation” (Wills, 1981). Differentiating self-improvement and self-enhancement, Wood (1989) suggested that self-improvement needs motivate individuals to improve relative standing through overt motivational or learning mechanisms, whereas self-enhancement needs motivate individuals to view themselves in a positive light and can even lead individuals to bias information in a self-

serving manner. Consistent with these arguments, past research shows that failures (as opposed to successes) not only allow for more effective learning but are better motivators for improvement (e.g., Ellis & Davidi, 2005; Keith & Frese, 2008; Madsen & Desai, 2010; Sitkin, 1992). Thus, this dissertation suggests that the direction of the social comparison emotion and accompanying tension will determine the type of need activated, and thus how employees will attempt to alleviate social comparison tension. Specifically, I posit that upward social comparisons activate self-improvement needs and motivate active behaviors to reduce social comparison tension, and downward social comparisons activate self-enhancement needs and trigger passive behaviors to alleviate social comparison tension.

Table 2 summarizes the above arguments and shows that “contrastive versus assimilative social comparison tension” indicates the type of interpersonal discretionary work behavior made salient and that the “direction of social comparison tension” indicates whether the particular interpersonal discretionary work behavior will be active or passive. In the next four sub-sections, I present more detailed theoretical and empirical justification for hypotheses predicting interpersonal discretionary work behaviors. I start by developing the logic for active CWBI as an outcome of “contrastive versus assimilative social comparison tension” and the “direction of social comparison tension.”

Upward Contrastive Social Comparison Emotions and Tension

To review, Hypothesis 1 predicted that upward LMX social comparisons with a coworker trigger upward contrastive social comparison emotions (e.g., envy), accompanied by upward contrastive social comparison tension, for coworkers with whom the employee has low self-other overlap. Specifically, the focal employee experiences upward contrastive social comparison emotions (e.g., envy) and tension because lower LMX quality causes the focal employee to feel

inferior on the criterion being compared and low self-other overlap leads to dissimilarity testing and decreases in self-worth.

When an individual experiences upward contrastive social comparison emotions (e.g., envy) toward a referent coworker, he/she will engage in active CWBI toward that coworker. Contrastive social comparison emotions highlight differences and direct cognitions away from the comparison other. Social comparison theory (Festinger, 1954), social identity theory (Tajfel, 1982) and empirical evidence (Liao et al., 2004) suggest that contrastive reactions trigger CWBI. Indeed, research demonstrates that envy prompts threat-oriented action tendencies (e.g., Duffy, Scott, Shaw, Tepper, & Aquino, 2012; Dunn & Schweitzer, 2006; Tai et al., 2012) and that identity threats trigger negative behavior, such as CWB (Aquino & Douglas, 2003). When this type of contrastive social comparison emotion and tension is upward in direction, self-improvement needs are activated and the focal employee is motivated to improve relative standing (Corcoran et al., 2011). Because self-improvement needs motivate individuals to increase relative standing through overt motivational or learning mechanisms (Wood, 1989), the focal employee will engage in active forms of CWBI toward the referent coworker.

For example, an employee experiencing envy toward a coworker (due to upward LMX social comparison with a coworker with whom he/she has low self-other overlap) is likely to engage in behaviors such as acting rudely toward the high LMX coworker or saying something hurtful to the high LMX coworker (e.g., calling the coworker a brown-nose). By engaging in such active CWBI, this employee relieves upward contrastive social comparison tension by a) detracting from the high LMX referent coworker, b) reducing the personal frustration over low LMX quality, and c) compensating for the LMX social comparison gap by “evening the score” (Cohen-Charash & Mueller, 2007). Thus, I expect a positive relationship between upward

contrastive social comparison emotions (e.g., envy) and the enactment of active CWBI.

Past empirical research supports the positive relationship between upward contrastive social comparison emotions (i.e., envy, depression, shame, and resentment) and active CWBI. For example, Cohen-Charash and Mueller (2007) showed positive associations between envy and CWBI. Similarly, Cohen-Charash (2009) demonstrated that episodic envy was positively related to negative actions (e.g., creating a negative work atmosphere and harming the organization). Thus, I propose that upward contrastive social comparison emotions (e.g., envy) influence the enactment of active CWBI.

Hypothesis 5: Upward contrastive social comparison emotions (e.g., envy) elicited by a coworker are positively related to active CWBI directed at that coworker.

Upward Assimilative Social Comparison Emotions and Tension

To recap, Hypothesis 2 predicted that upward LMX social comparisons with a coworker trigger upward assimilative social comparison emotions (e.g., inspiration), accompanied by upward assimilative social comparison tension, for coworkers with whom the employee has high self-other overlap. Specifically, the focal employee experiences upward assimilative social comparison emotions (e.g., inspiration) and tension because lower LMX quality causes the focal employee to feel inferior on the criterion being compared and high self-other overlap leads to similarity testing and allows the focal employee to bask in the glory of the referent other (thus increasing his/her self-worth).

When an individual experiences upward assimilative social comparison emotions (e.g., inspiration) toward a referent coworker, he/she will engage in active OCBI toward that coworker. Assimilative social comparison emotions highlight similarities and direct cognitions toward the comparison other. Social comparison theory (Festinger, 1954), social identity theory

(Tajfel, 1982), similarity attraction theory (Byrne, 1971), and empirical evidence (Chattopadhyay, 1999; Tsui et al., 2002) suggest that assimilative reactions trigger OCBI. Indeed, because upward assimilative social comparisons illustrate “the accomplishment one can hope to achieve” (Lockwood & Kunda, 1997, p. 93), assimilative social comparison emotions (e.g., inspiration) motivate contact (Cuddy, Fiske, & Glick, 2007) and cooperation (De Cremer & van Knippenberg, 2002) with upward social comparison referents. Moreover, because this type of assimilative social comparison emotion and tension is upward in direction, self-improvement needs are activated and the focal employee is motivated to improve relative standing (Corcoran et al., 2011). Thus, the focal employee will engage in active forms of OCBI toward the referent coworker because self-improvement needs motivate individuals to increase relative standing through overt motivational or learning mechanisms (Wood, 1989).

For instance, an employee experiencing inspiration toward a coworker (due to upward LMX social comparison with a coworker with whom he/she has high self-other overlap) is likely to engage in behaviors such as helping the high LMX coworker with a difficult assignment or assisting the high LMX coworker with a heavy work-load. By engaging in such active OCBI, this employee reduces upward assimilative social comparison tension by a) facilitating collaboration with (and learning from) the high LMX referent coworker, b) reinforcing personal hope for future improvement in LMX quality, and c) compensating for the LMX social comparison gap by providing evidence of constructive contributions. Thus, I expect a positive relationship between upward assimilative social comparison emotions (e.g., inspiration) and the enactment of active OCBI.

Past empirical research indirectly supports these relationships for upward assimilative social comparison emotions (i.e., inspiration, optimism, and admiration). For example, Cuddy

and colleagues (2007) showed that admiration was positively associated with helping and associating behaviors. Similarly, Sharrock, Day, Qazi, and Brewin (1990) showed a positive link between optimism and helping behavior. Thus, I posit that upward assimilative social comparison emotions (e.g., inspiration) influence the enactment of active OCBI.

Hypothesis 6: Upward assimilative social comparison emotions (e.g., inspiration) elicited by a coworker are positively related to active OCBI directed at that coworker.

Downward Contrastive Social Comparison Emotions and Tension

To review, Hypothesis 3 predicted that downward LMX social comparisons with a coworker trigger downward contrastive social comparison emotions (e.g., schadenfreude), accompanied by downward contrastive social comparison tension, for coworkers with whom the employee has low self-other overlap. Specifically, the focal employee experiences downward contrastive social comparison emotions (e.g., schadenfreude) and tension because higher LMX quality causes the focal employee to feel superior on the criterion being compared and low self-other overlap leads to dissimilarity testing and increases in self-worth.

When an individual experiences downward contrastive social comparison emotions (e.g., schadenfreude) toward a referent coworker, he/she will engage in passive CWBI toward that coworker. Contrastive social comparison emotions highlight differences and direct cognitions away from the comparison other. Theory (Festinger, 1954; Tajfel, 1982) and research (Liao et al., 2004) suggest that contrastive reactions will trigger CWBI. Indeed, individuals experiencing downward contrastive social comparison emotions (e.g., schadenfreude) “react in ways opposite to what they imagine as the target’s reaction” (Blader, Wiesenfeld, Fortin, & Wheeler-Smith, 2013, p. 63). For instance, the receipt of CWBI is destructive for the comparison other, so it is

constructive for the focal employee who is feeling *schadenfreude*. When this type of contrastive social comparison emotion and tension is downward in direction, self-enhancement needs are activated and the focal employee feels better about his or her relative standing (Corcoran et al., 2011; Wills, 1981). Because self-enhancement needs motivate individuals to view themselves in a positive light (rather than motivating action to improve relative standing) and can even lead individuals to bias information in a self-serving manner (Wood, 1989), the focal employee will engage in passive forms of CWBI toward the referent coworker to maintain downward contrastive social comparisons. Consistent with this argument, research shows that the experience of downward contrastive social comparison emotions (e.g., *schadenfreude*) is indirect and passive rather than action-inducing (Leach, Spears, Branscombe, & Doosje, 2003).

For example, an employee experiencing *schadenfreude* toward a coworker (due to downward LMX social comparison with a coworker with whom he/she has low self-other overlap) is likely to engage in behaviors such as repeating a rumor or gossip about the low LMX coworker. By engaging in such passive CWBI, this employee rectifies downward contrastive social comparison tension by a) emphasizing differences to direct attention away from the low LMX referent coworker, b) reinforcing personal pride in high LMX quality, and c) compensating for the LMX social comparison gap by eliminating the referent other as a source of comparison. Thus, I expect a positive relationship between downward contrastive social comparison emotions (e.g., *schadenfreude*) and the enactment of passive CWBI.

Research supports these relationships for downward contrastive social comparison emotions (i.e., *schadenfreude*, pride, contempt, and scorn). For example, Cuddy and colleagues (2007) showed that contempt was positively associated with passive harm. Similarly, Cikara, Botvinick, and Fiske (2011), using fMRI technology, showed that pleasure at the pain of a

referent other (i.e., schadenfreude) was positively related to the likelihood of CWBI directed at the referent other. Finally, Mitchell, Vogel, and Folger (2015) showed that contentment at a coworker's mistreatment resulted in motivation to exclude that coworker. Thus, I posit that downward contrastive social comparison emotions (e.g., schadenfreude) predict the enactment of passive CWBI.

Hypothesis 7: Downward contrastive social comparison emotions (e.g., schadenfreude) elicited by a coworker are positively related to passive CWBI directed at that coworker.

Downward Assimilative Social Comparison Emotions and Tension

To recap, Hypothesis 4 predicted that downward LMX social comparisons with a coworker trigger downward assimilative social comparison emotions (e.g., sympathy), accompanied by downward assimilative social comparison tension, for coworkers with whom the employee has high self-other overlap. Specifically, the focal employee experiences downward assimilative social comparison emotions (e.g., sympathy) and tension because higher LMX quality causes the focal employee to feel superior on the criterion being compared but high self-other overlap leads to similarity testing and elicits an affective outcome similar to that of the referent other.

When an individual experiences downward assimilative social comparison emotions (e.g., sympathy) toward a referent coworker, he/she will engage in passive OCBI toward that coworker. Assimilative social comparison emotions highlight similarities and direct cognitions toward the comparison other. Theory (Byrne, 1971; Festinger, 1954; Tajfel, 1982) and research (Chattopadhyay, 1999; Tsui et al., 2002) suggest that assimilative reactions trigger OCBI. Indeed, Schachter's (1959) fear-affiliation theory suggests that fear leads individuals to affiliate

with referent others who have the most information about the threat. When this type of assimilative social comparison emotion and tension is downward in direction, self-enhancement needs are activated and the focal employee feels better about his or her relative standing (Corcoran et al., 2011; Wills, 1981). More specifically, the focal employee will engage in passive forms of OCBI toward the referent coworker because self-enhancement needs motivate individuals to view themselves in a positive light instead of motivating them to act (Wood, 1989). Consistent with this argument, Cuddy and colleagues (2007) suggested that sympathy often leads to inaction.

For instance, an employee experiencing sympathy toward a coworker (due to downward LMX social comparison with a coworker with whom he/she has high self-other overlap) is likely to engage in behaviors such as listening to the low LMX coworker when he/she has to get something off his/her chest or taking time to listen to the low LMX coworker's problems and worries. By engaging in such passive OCBI, this employee alleviates downward assimilative social comparison tension by a) facilitating affiliation with the low LMX referent coworker who serves as a "feared self," b) reducing the worry over receiving superior high LMX resources, and c) compensating for the LMX social comparison gap by providing support to the referent other. Thus, I expect a positive relationship between downward assimilative social comparison emotions (e.g., sympathy) and the enactment of passive OCBI.

Research indirectly supports these arguments for downward assimilative social comparison emotions (i.e., sympathy, pity, fear, and worry). For example, primary and meta-analytic research demonstrates a positive link between sympathy and OCBI (Eisenberg, Fabes, et al., 1989; Eisenberg, Miller, et al., 1989; Greitemeyer & Rudolph, 2003; Marjanovic, Greenglass, Struthers, & Faye, 2009; McGinley et al., 2010; Rudolph, Roesch, Greitemeyer, &

Weiner, 2004; Seacat, Hirschman, & Mickelson, 2007). Similarly, primary research also supports a positive relationship between pity and OCBI (e.g., Badahdah, 2005; Camps, Stouten, Tuteleers, & van Son, 2014; Menec & Perry, 1998; Van Zomeren & Lodewijkx, 2005; Zucker & Weiner, 1993). Thus, I posit that downward assimilative social comparison emotions (e.g., sympathy) predict the enactment of passive OCBI.

Hypothesis 8: Downward assimilative social comparison emotions (e.g., sympathy) elicited by a coworker are positively related to passive OCBI directed at that coworker.

Summary

In sum, my model theorized that “LMX social comparison with a specific coworker” and “self-other overlap with this coworker” interact to predict four types of social comparison emotions (i.e., upward contrastive [e.g., envy], upward assimilative [e.g., inspiration], downward contrastive [e.g., schadenfreude], and downward assimilative [e.g., sympathy]), and that (in turn) each of these four social comparison emotions predict a specific type of interpersonal discretionary work behavior (i.e., active CWBI, active OCBI, passive CWBI, and passive OCBI). Thus, my model implies four mediated moderation (also known as first-stage moderated mediation) paths, such that “the path from X to M varies across levels of Z, whereas the path from M to Y is unaffected by Z” (Edwards & Lambert, 2007, p. 7). Indeed, social comparison-based emotional states are accompanied by social comparison tension, individuals are motivated to reduce this tension (Adams, 1965), and discretionary work behaviors serve as a critical motivational, affective, and social exchange mechanism to aid employees in rectifying social comparison imbalances (Cohen-Charash & Mueller, 2007; Spence et al., 2011). Taken together, these linkages result in the following four mediated moderation hypotheses.

Hypothesis 9: Upward contrastive social comparison emotions (e.g., envy) mediate the interactive effect of LMX social comparisons with a referent coworker and self-other overlap with that coworker on active CWBI directed at that coworker.

Hypothesis 10: Upward assimilative social comparison emotions (e.g., inspiration) mediate the interactive effect of LMX social comparisons with a referent coworker and self-other overlap with that coworker on active OCBI directed at that coworker.

Hypothesis 11: Downward contrastive social comparison emotions (e.g., schadenfreude) mediate the interactive effect of LMX social comparisons with a referent coworker and self-other overlap with that coworker on passive CWBI directed at that coworker.

Hypothesis 12: Downward assimilative social comparison emotions (e.g., sympathy) mediate the interactive effect of LMX social comparisons with a referent coworker and self-other overlap with that coworker on passive OCBI directed at that coworker.

METHODS

Sample

The dyadic social network data for this dissertation was collected from three network samples. Participants in all three samples were floor nurses at a large hospital in the Midwest United States. One nursing sample was a Mother/Baby unit, and the other two nursing samples were Labor/Delivery units (one night and one day unit). These worksites provided a favorable setting to study the exchange of emotions and interpersonal discretionary work behaviors because the team-based work settings required coworker interactions to accomplish tasks (Lyons & Scott, 2012).

Sample 1 consisted of 22 out of a possible 27 employees (response rate = 81.5%) from a Mother/Baby unit. The dyadic data from these employees resulted in a sample size of 462 dyadic relationships. In terms of demographics, 100% of the sample was female, 77% was Caucasian, the average job tenure was 3.55 years, the average hours per week worked was 34.64, and the average age was 35.86 years. Sample 2 consisted of 37 out of a possible 48 employees (response rate = 77.1%) from a Labor/Delivery unit. The dyadic data from these employees resulted in a sample size of 1,332 dyadic relationships. In terms of demographics, 100% of the sample was female, 92% was Caucasian, the average job tenure was 4.74 years, the average hours per week worked was 34.83, and the average age was 36.22 years. Sample 3 consisted of 39 out of a possible 49 employees (response rate = 79.6%) from a Labor/Delivery unit. The dyadic data from these employees resulted in a sample size of 1,482 dyadic relationships. In terms of demographics, 100% of the sample was female, 100% was Caucasian, the average job tenure was 17.51 years, the average hours per week worked was 35.42, and the average age was 46.33 years. The response rates in all three samples (specifically, 81.5%, 77.1%, and 79.6%) were on

par with other dyadic social network studies published in top-tier management journals (e.g., Bowler & Brass, 2006; Lyons & Scott, 2012; Venkataramani & Dalal, 2007). In sum, the 98 employees that participated across all three samples provided an aggregate sample size of 3,276 dyadic ties.

In order to compare respondents to non-respondents, I conducted independent samples t-tests on all focal variables in all samples (e.g., testing whether the level of envy felt toward respondents was different than the level of envy felt toward non-respondents). In all three samples, the results of independent samples t-tests showed no statistically significant differences between respondents and non-respondents on any of the focal variables.

Procedure

I collected dyadic data for both theoretical and empirical reasons. With regards to theoretical reasons, social comparison theory specifically recognizes that social comparisons have important implications for how employees will think of, feel about, and behave toward *specific* referent coworkers (Festinger, 1954). Indeed, Tse and colleagues (2013) argued that LMX and social comparison should be studied on the dyadic-level of analysis, and researchers have made several calls to examine the influences of LMX on the broader social network of dyadic coworker ties (Henderson et al., 2008; Sherony & Green, 2002; Sparrowe & Liden, 1997; Tse et al., 2012). Moreover, Tse and colleagues' (2015) recent review of the LMX and emotions literature recommended that researchers study LMX and discrete emotions using dyadic data collected via peer-rating research designs in order to align the level of analysis of the measurement with that of the theory. Empirically, dyadic data is appropriate because prior research has shown that the focal variables considered in this dissertation vary on the dyadic-

level (e.g., Bowler & Brass, 2006; Lam, Van der Vegt, Walter, & Huang, 2011; Lyons & Scott, 2012; Tse et al., 2013).

The data collection used a roster approach, whereby individuals provided ratings for every other coworker in their work unit, where the work unit was defined as all employees working for the same supervisor (Wasserman & Faust, 1994). Using a roster approach in this context (in comparison to a free recall approach) provided a more complete view of LMX social comparisons, self-other overlap, the experience of emotions, and the exchange of interpersonal discretionary work behaviors across the entire work unit, and it also facilitated recall as well as limited measurement error (Holland & Leinhardt, 1973). At each worksite, the PI met with potential participants and informed them that, due to the potentially sensitive nature of the data, all names would be replaced with anonymous identification numbers after the data was collected. Next, rosters were collected by the PI at each worksite. The rosters included the names of employees nested under the same supervisors. The PI then sent the participants an email with the informed consent and a link to the customized survey. The online survey (hosted on Qualtrics) asked participants to respond to questions about their thoughts, feelings, and behaviors in reference to every other coworker in their work unit. Consistent with past social network studies (e.g., Bowler & Brass, 2006; Lyons & Scott, 2012; Venkataramani & Dalal, 2007), each network variable was measured using a single item in order to minimize fatigue and low response rates (Marsden, 1990).

One potential drawback of using social network analysis is the sensitivity of the approach to missing data (Neal, 2008). To mitigate this concern, I used several methods to improve response rates (e.g. compensation, personal appeals, and management introduction and

encouragement) (Shadish, Cook, & Campbell, 2002). In exchange for participating, employees were compensated \$25.

Measures

All measures, including the instructions that accompanied them, are listed in the Appendix.

LMX Social Comparisons. I used peer ratings from employees to assess LMX social comparisons, similar to approaches used in past social network research (e.g., Bowler & Brass, 2006; Lyons & Scott, 2012). Specifically, employees were presented with a roster of all coworkers in their work unit and were asked to indicate the extent to which their relationship with their supervisor was better than or worse than the relationship their supervisor had with each coworker, using a Likert scale with the anchors 1 = much worse than, 2 = somewhat worse than, 3 = about the same as, 4 = somewhat better than, 5 = much better than. In answering this question, the employees were asked to consider: a) whether their supervisor would be more or less likely to ask them (rather than their coworker) to fill in for him/her if he/she was unable to attend an important meeting, b) whether they received more or less support from their supervisor than did their coworker, c) whether their working relationship with their supervisor was more or less effective than the working relationship their supervisor had with their coworker, d) whether their supervisor was more or less loyal to them than he/she was to their coworker, and e) whether their supervisor enjoyed their company more or less than the company of their coworker. These statements were adapted from the Viduyarthi and colleagues (2010) LMXSC scale.

Self-Other Overlap. Self-other overlap was also assessed with peer ratings from employees. Specifically, employees were presented with a roster of all coworkers in their work unit and were asked to complete the Aron and colleagues (1992) self-other overlap scale. The

one-item measure presents seven pairs of circles representing various degrees of self and other overlap and asks participants to describe the closeness of their relationship on a 1 to 7 scale, with higher numbers indicating greater self-other overlap.

Social Comparison Emotions. Similar to past social network studies measuring affective states (e.g., Lyons & Scott, 2012), I used peer ratings with a one-item measure to assess employee's social comparison emotions toward each of their coworkers. Drawing from R. H. Smith's (2000) social comparison framework, the upward contrastive (upward assimilative, downward contrastive, downward assimilative) social comparison emotion item asked employees to indicate the extent to which they feel envy (inspiration, schadenfreude [pleasure at his/her misfortunes], sympathy) when they interact with or are around the coworker. Responses were recorded using a five-point Likert scale ranging from 1 = almost never to 5 = very often.

Active and Passive OCBI. Active and passive OCBI were assessed with peer ratings from coworkers. Indeed, LePine and colleagues (2002) suggested that coworkers are best suited to capture work behaviors categorized as OCBI. Specifically, employees were presented with a roster of all coworkers in their work unit and were asked to indicate the extent to which they are treated well by each coworker through their coworker's engagement in specific behaviors (i.e., employees were first provided with a list of active OCBI example statements and rated the receipt of active OCBI from each coworker; they were then provided with a list of passive OCBI example statements and rated the receipt of passive OCBI from each coworker), using a Likert scale with the anchors 1 = almost never to 5 = very often. The distinction between active and passive OCBI was drawn directly from the factor analysis of OCBI conducted by Settoon and Mossholder (2002, p. 259) which demonstrated that the OCBI items loaded on two factors: "behaviors that provided passive support to others ... [and] behaviors representing active

assistance to those in need.” Thus, the one-item measure for active OCBI included the three highest loading statements that represented active assistance to those in need (e.g., helping you with difficult assignments or assisting you with a heavy work-load), and the one-item measure for passive OCBI incorporated the three highest loading statements that represented passive support to others (e.g., listening to you when you have to get something off your chest or taking time to listen to your problems and worries).

Active and Passive CWBI. Active and passive CWBI were also measured with peer ratings from coworkers. Employees were presented with a roster of all coworkers in their work unit and were asked to indicate the extent to which they are treated poorly by each coworker through their coworker’s engagement in specific behaviors (i.e., employees were first provided with a list of active CWBI example statements and rated the receipt of active CWBI from each coworker; they were then provided with a list of passive CWBI example statements and rated the receipt of passive CWBI from each coworker), using a Likert scale with the anchors 1 = almost never to 5 = very often. The distinction between active and passive CWB is commonly used in the literature (e.g., Duffy, Ganster, & Pagon, 2002; Spector & Fox, 2002). The one-item measure for active CWBI included the three highest loading statements from the Bing and colleagues (2007) active CWBI factor (e.g., acting rudely toward you at work or saying something hurtful to you at work), and the one-item measure for passive CWBI included the one coworker specific statement from the Bing and colleagues (2007) passive CWBI factor (e.g., repeating a rumor or gossip about you).

Controls. Consistent with past research studying affective states and/or interpersonal discretionary work behaviors in social network settings (e.g., Bowler & Brass, 2006; Lyons & Scott, 2012; Venkataramani & Dalal, 2007), I controlled for the big five personality traits.

Indeed, research (including meta-analytic evidence) suggest that personality could serve as a potential confound of the predicted relationships (e.g., Berry, Ones, & Sackett, 2007; Bowling & Beehr, 2006; Dalal, 2005; Dulebohn et al., 2012; LePine et al., 2002; Organ & Ryan, 1995; Watson, 2000). Agreeableness, conscientiousness, extraversion, neuroticism, and openness to experience were assessed using the mini-marker instrument developed by Saucier (1994). Coefficient α for agreeableness, conscientiousness, extraversion, neuroticism, and openness to experience were .89, .91, .85, .83, and .83, respectively. Each of the personality control variables was entered as an attribute matrix, with focal employee ratings for each control variable repeated across columns (Bowler & Brass, 2006; Lyons & Scott, 2012; Venkataramani & Dalal, 2007). In accordance with recent recommendations concerning the use of control variables (e.g., Breaugh, 2008; Spector & Brannick, 2011; Spector, Zapf, Chen, & Frese, 2000), I also retested my hypotheses using no control variables and report any discrepancies in results.

Analyses

To create the coworker-reported focal employee engagement in active and passive OCBI and CWBI, I transposed the columns and rows of the receipt of active and passive OCBI and CWBI matrices, such that rows become columns and columns become rows (see also Bowler & Brass, 2006; Lyons & Scott, 2012; Venkataramani & Dalal, 2007). After this transformation, instead of having self-reported data for the receipt of active and passive OCBI and CWBI from other coworkers, I had coworker-reports of focal employee engagement in active and passive OCBI and CWBI. To illustrate, a self-report of how much active OCBI employee A *receives* from employee B becomes an other report of how much active OCBI employee B *directs* toward employee A, once the matrix containing this data has been transposed.

In order to test the study hypotheses, I used the Multiple Regression Quadratic Assignment Procedure (MRQAP) included in UCINET 6.545 (Borgatti, Everett, & Freeman, 2002). MRQAP regresses a dependent network matrix on multiple independent network matrices and addresses the non-independence in observations that arises due to employees providing multiple ratings of each other. QAP analyses provide a nonparametric test of the relationship between two or more matrices, eliminating the autocorrelation (in both rows and columns) that would bias the standard errors if ordinary least squares was used to analyze the relational data. The MRQAP procedure is a two-step process. In the first step, observed coefficients are obtained by a multiple regression across corresponding cells of the dependent, independent, and control matrices. In the second step, a population of coefficients is generated by randomly permuting the rows and columns of the dependent variable matrix and recomputing the regression. The population of coefficients calculated in step two is then compared to the observed coefficients calculated in step one to test whether less than five percent of the population observations for a given statistic are as extreme as the observed coefficients for the same statistic, thus providing a test of statistical significance (for more details on the MRQAP procedure, see Kilduff & Krackhardt, 1994). In my analyses, I used the seed “12345” and conducted 2000 random permutations to create the population of coefficients. To test my hypothesized interaction effects, as recommended by Aiken and West (1991), and consistent with other social network studies testing moderation (e.g., M. J. Chen, Su, & Tsai, 2007; Stam, 2010), I first mean-centered the variables in the independent network matrices and then created a product term independent network matrix. Correlations among the social network variables were also derived in UCINET 6.545 via Quadratic Assignment Procedure (QAP).

Consistent with the majority of past social network studies using multiple workgroups (e.g., Lyons & Scott, 2012), I tested each of the network matrices (i.e., workgroups) separately. To test hypotheses 1-4, I entered the predictors in two steps. In the first step, I entered the control variables (i.e., the personality variables) as predictors of each social comparison emotion. In the second step, I added leader-member exchange social comparisons, self-other overlap, and the leader-member exchange social comparisons and self-other overlap product term as predictors of each social comparison emotion. To test hypotheses 5-8, I repeated steps 1 and 2 with the interpersonal discretionary work behaviors as the dependent variables (instead of social comparison emotions) and added a third step. Specifically, in the third step, I added the social comparison emotions as predictors of each interpersonal discretionary work behavior.

To test hypotheses 9-12, because MRQAP does not provide tests for mediation or integrative tests of moderation and mediation, I conducted a review of studies using MRQAP that tested mediated moderation or moderated mediation. From this review, only one study fit both criteria. Specifically, Stam (2010) used the moderated causal steps approach which combines moderation and mediation by adding product terms to the regression equations involved in the Baron and Kenny (1986) causal steps procedure (Muller, Judd, & Yzerbyt, 2005). Thus, I tested mediated moderation using the moderated causal steps approach. In order to support mediated moderation in predicting each interpersonal discretionary work behavior, I had to: a) establish that LMX social comparison and self-other overlap interact to predict the relevant social comparison emotion, b) establish that the relevant social comparison emotion is associated with the interpersonal discretionary work behavior, c) establish that LMX social comparison and self-other overlap interact to predict the interpersonal discretionary work behavior and that the

product term is no longer significant when the relevant social comparison emotion is added to the equation.

RESULTS

Tables 3-5 show the means, standard deviations, and correlations among the focal variables in this dissertation in each of the three samples collected. One important pattern that stands out in the correlation matrices is the distinctions between active and passive forms of OCBI and CWBI (especially CWBI). The average correlation between active and passive OCBI was .75 (SD = .03, range = .72 – .78), and the average correlation between active and passive CWBI was .54 (SD = .13, range = .41 – .67). Another interesting pattern is the weak correlations between LMX social comparison and self-other overlap (average $r = .06$, SD = .09, range = -.01 – .16), suggesting that self-other overlap is unlikely to be an antecedent of LMX social comparison (and vice versa).

Before testing my hypotheses, I tested whether focal employee-ratings of LMXSC corresponded to coworker-ratings of LMXSC (i.e., if an employee rated their LMX quality as superior to a coworker, did that coworker rate their LMX quality as inferior to the focal employee). In order to empirically assess this, I examined the correlations between focal employee-ratings of LMXSC and coworker-ratings of LMXSC. The results of these analyses revealed negative correlations in two of the three samples: the Mother/Baby Sample ($r = -.41$, $p < .01$) and the Labor/Delivery Day Sample ($r = -.08$, $p < .01$). The correlation in the Labor/Delivery Night Sample was negative but not statistically significant ($r = -.03$, *ns*). As such, I received partial support for the idea that focal employee-ratings of LMXSC corresponded to coworker-ratings of LMXSC.

Table 3 – Mother/Baby Sample Social Network Descriptives and Correlations

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. LMX Social Comparison	3.06	0.55	-												
2. Self-Other Overlap	3.05	1.79	.04	-											
3. Social Comparison Referent	1.36	0.72	-.09	.28*	-										
4. Friendship	1.26	0.67	-.10*	.54*	.12	-									
5. Similarity	3.98	1.60	-.10	.54*	.17*	.40*	-								
6. Envy	1.03	0.23	-.18*	.11	.05	.12	.18	-							
7. Inspiration	2.07	1.19	-.18*	.50*	.25*	.36*	.57*	.20	-						
8. Schadenfreude	1.12	0.59	-.11	-.11	.18*	-.01	-.22*	-.03	-.16*	-					
9. Sympathy	2.08	1.18	-.02	.38*	.07	.26*	.38*	.05	.37*	-.18*	-				
10. Active OCBI	2.61	1.31	-.04	.39*	.03	.35*	.27*	.02	.31*	-.16*	.14	-			
11. Passive OCBI	2.88	1.36	-.03	.41*	.06	.32*	.30*	.07	.35*	-.16*	.13	.78*	-		
12. Active CWBI	1.10	0.46	.13	-.06	.06	-.05	-.12*	.01	-.10*	.03	-.04	-.20*	-.20*	-	
13. Passive CWBI	1.24	0.62	.07	.05	.08	.21*	-.06	-.06*	-.01	.10	.04	-.03	-.02	.41*	-

n = 462 dyadic relationships. Social comparison referent, friendship, and similarity included for supplemental analyses.

* p < .05

Table 4 – Labor/Delivery Night Sample Social Network Descriptives and Correlations

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. LMX Social Comparison	3.04	0.38	-												
2. Self-Other Overlap	3.58	1.60	-.01	-											
3. Social Comparison Referent	1.68	0.97	-.09	.26*	-										
4. Friendship	1.24	0.63	.07	.36*	.22*	-									
5. Similarity	4.29	1.13	-.14*	.47*	.29*	.31*	-								
6. Envy	1.24	0.61	-.23*	.16*	.29*	.19*	.10	-							
7. Inspiration	2.22	1.09	-.19*	.48*	.32*	.27*	.50*	.26*	-						
8. Schadenfreude	1.11	0.50	.04	.02	-.11	-.07	-.16*	-.08	-.23*	-					
9. Sympathy	1.91	1.06	-.06	.26*	.11	.10*	.11	.20	.10	-.10	-				
10. Active OCBI	3.13	1.27	.10*	.18*	.07	.19*	.13*	-.01	.08	-.01	.06	-			
11. Passive OCBI	3.00	1.31	.09*	.18*	.06	.21*	.16*	-.02	.06	-.02	.08	.74*	-		
12. Active CWBI	1.10	0.42	.08*	-.03	-.07	-.08*	-.07	-.07*	-.08*	.08	-.09*	-.19*	-.19*	-	
13. Passive CWBI	1.10	0.39	.05	-.04	-.08*	-.09*	-.15*	-.09*	-.14*	.10	-.08*	-.17*	-.17*	.53*	-

n = 1,332 dyadic relationships. Social comparison referent, friendship, and similarity included for supplemental analyses.

* p < .05

Table 5 – Labor/Delivery Day Sample Social Network Descriptives and Correlations

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. LMX Social Comparison	3.04	0.37	-												
2. Self-Other Overlap	3.76	1.66	.16	-											
3. Social Comparison Referent	1.61	0.89	-.05	.29*	-										
4. Friendship	1.34	0.72	-.06	.29*	.25*	-									
5. Similarity	4.21	1.23	.12	.46*	.15*	.30*	-								
6. Envy	1.17	0.48	.01	.12	.46*	.14	.06	-							
7. Inspiration	2.37	1.13	.00	.44*	.37*	.16*	.36*	.25*	-						
8. Schadenfreude	1.09	0.42	.01	.13	.15	-.07	-.03	-.05	.03	-					
9. Sympathy	2.17	1.21	.05	.20	.07	.01	.14	.07	.41*	-.15	-				
10. Active OCBI	3.00	1.24	-.01	.21*	.22*	.14*	.16*	.11*	.21*	.11*	.08	-			
11. Passive OCBI	2.88	1.25	-.06	.23*	.21*	.20*	.18*	.13*	.20*	.07	.08	.72*	-		
12. Active CWBI	1.04	0.26	.01	-.06	-.04	-.04	-.04	-.04	-.07*	.00	-.04	-.09*	-.13*	-	
13. Passive CWBI	1.06	0.31	.05	-.04	-.04	-.01	-.01	-.02	-.05	-.02	.00	-.12*	-.13*	.67*	-

n = 1,482 dyadic relationships. Social comparison referent, friendship, and similarity included for supplemental analyses.

* p < .05

Tests of Hypotheses

The MRQAP results testing hypothesis 1 are presented in Table 6. Hypothesis 1a predicted that LMX social comparisons (ranging from upward to downward) with a referent coworker are negatively related to upward contrastive social comparison emotions (e.g., envy). Support for hypothesis 1a was found in two of the three samples: the Mother/Baby Sample ($B = -.07, p < .01$) and the Labor/Delivery Night Sample ($B = -.31, p < .01$). All results were qualitatively identical when analyzed without personality controls. Thus, hypothesis 1a was partially supported.

Hypothesis 1b predicted that self-other overlap is negatively related to upward contrastive social comparison emotions (e.g., envy). No support was found for hypothesis 1b. Rather, a positive association was found between self-other overlap and upward contrastive social comparison emotions (e.g., envy) in two of the three samples: the Labor/Delivery Night Sample ($B = .09, p < .01$) and the Labor/Delivery Day Sample ($B = .05, p < .05$). When analyzed without the personality controls, however, the positive association in the Labor/Delivery Day Sample became marginally significant ($B = .03, p < .10$).

Hypothesis 1c predicted that LMX social comparisons with a referent coworker are negatively related to upward contrastive social comparison emotions (e.g., envy) for coworkers who have low self-other overlap with the focal employee, but not for coworkers who have high self-other overlap with the focal employee. Although a significant interaction emerged in two of the three samples: the Mother/Baby Sample ($B = -.08, p < .01$) and the Labor/Delivery Night Sample ($B = -.09, p < .01$), the form of the interaction (see Figures 6 – 7) suggested that LMX social comparisons with a referent coworker is negatively related to upward contrastive social comparison emotions (e.g., envy) for coworkers who have high self-other overlap with the focal

employee, but not for coworkers who have low self-other overlap with the focal employee. All results were qualitatively identical when analyzed without personality controls. Thus, hypothesis 1c was not supported.

Table 6 – MRQAP Results Predicting Envy

Predictors	Mother/Baby Sample		Labor/Delivery Sample 1 (N)		Labor/Delivery Sample 2 (D)	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Intercept	1.27**	.93**	2.15**	2.45**	1.51**	1.93**
<i>Controls</i>						
Agreeableness	.28**	.35**	-.03	-.12	-.19	-.23†
Conscientiousness	-.31**	-.32**	-.10	-.08	.16	.16
Extraversion	.02	.07	-.17†	-.15†	.04	.02
Neuroticism	-.02	-.01	.16	.18	.11	.10
Openness	-.04	-.07*	-.04	-.08	-.17†	-.19†
<i>Predictors</i>						
LMXSC		-.07**		-.31**		.03
SOO		.01		.09**		.05*
LMXSC*SOO		-.08**		-.09**		-.01
<i>Variance Explained</i>						
R^2	.12†	.21†	.09**	.20**	.06*	.09*

n ranges from 462 to 1,482 dyadic relationships. LMXSC = LMX social comparisons. SOO = self-other overlap. (N) = night unit. (D) = day unit.

† $p < .10$, * $p < .05$, ** $p < .01$

Figure 6 – Interaction in Mother/Baby Sample Predicting Envy

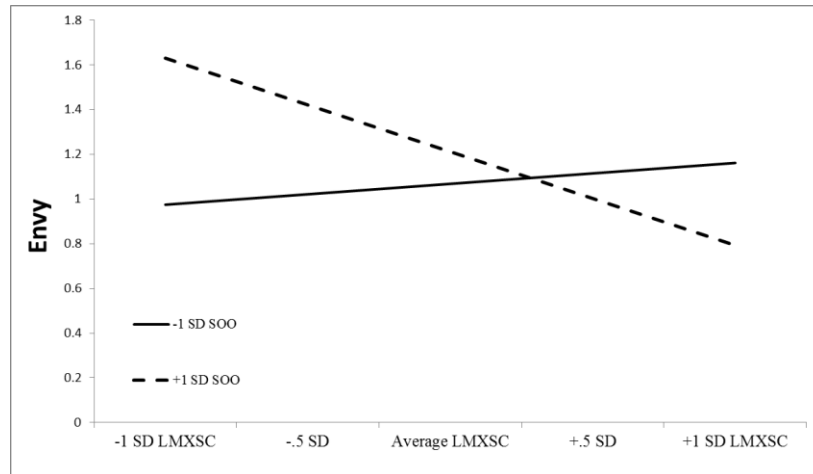
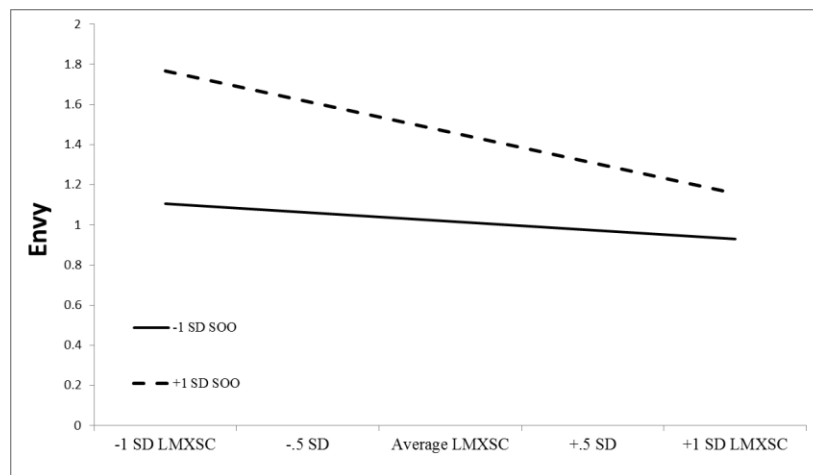


Figure 7 – Interaction in Labor/Delivery Night Sample Predicting Envy



The MRQAP results testing hypothesis 2 are presented in Table 7. Hypothesis 2a predicted that LMX social comparisons with a referent coworker are negatively related to upward assimilative social comparison emotions (e.g., inspiration). Support for hypothesis 2a was found in two of the three samples: the Mother/Baby Sample ($B = -.59, p < .01$) and the Labor/Delivery Night Sample ($B = -.42, p < .01$). All results were qualitatively identical when analyzed without personality controls. Thus, hypothesis 2a was partially supported.

Hypothesis 2b predicted that self-other overlap is positively related to upward assimilative social comparison emotions (e.g., inspiration). The results in all three samples supported hypothesis 2b. Self-other overlap was positively associated with inspiration in the Mother/Baby Sample ($B = .38, p < .01$), the Labor/Delivery Night Sample ($B = .35, p < .01$), and the Labor/Delivery Day Sample ($B = .30, p < .01$). All results were qualitatively identical when analyzed without personality controls.

Hypothesis 2c predicted that LMX social comparisons with a referent coworker are negatively related to upward assimilative social comparison emotions (e.g., inspiration) for coworkers who have high self-other overlap with the focal employee, but not for those coworkers who have low self-other overlap with the focal employee. A significant interaction was present in one of the three samples: the Mother/Baby Sample ($B = -.28, p < .01$). I also note that a marginally significant interaction emerged in the Labor/Delivery Day Sample ($B = -.14, p < .10$). The form of the interactions (see Figures 8 – 9) were consistent with my prediction that LMX social comparisons with a referent coworker is negatively related to inspiration for coworkers who have high self-other overlap with the focal employee, but not for those coworkers who have low self-other overlap with the focal employee. All results were

qualitatively identical when analyzed without personality controls. Thus, hypothesis 2c was partially supported.

Table 7 – MRQAP Results Predicting Inspiration

Predictors	Mother/Baby Sample		Labor/Delivery Sample 1 (N)		Labor/Delivery Sample 2 (D)	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Intercept	2.11**	-.37**	1.24**	3.32**	2.24**	4.02**
<i>Controls</i>						
Agreeableness	.80†	.85*	.08	-.29	-.28	-.52*
Conscientiousness	-.89†	-.33	.22	.22	-.23	-.19
Extraversion	.24	.55*	-.11	-.13	.23	.13
Neuroticism	-.42†	-.54**	-.19	.29	.02	-.05
Openness	.07	-.24	.16	.09	.41†	.33
<i>Predictors</i>						
LMXSC		-.59**		-.42**		-.25
SOO		.38**		.35**		.30**
LMXSC*SOO		-.28**		.00		-.14†
<i>Variance Explained</i>						
R ²	.06*	.45**	.03†	.29**	.05*	.24**

n ranges from 462 to 1,482 dyadic relationships. LMXSC = LMX social comparisons. SOO = self-other overlap. (N) = night unit. (D) = day unit.

† p < .10, * p < .05, ** p < .01

Figure 8 – Interaction in Mother/Baby Sample Predicting Inspiration

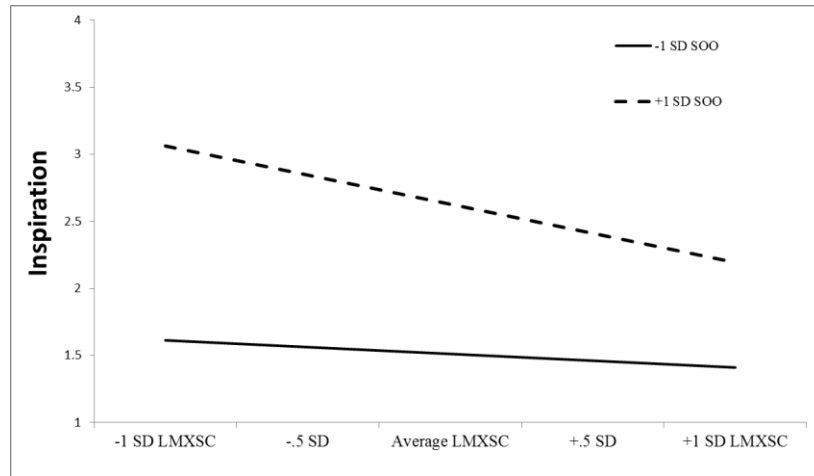
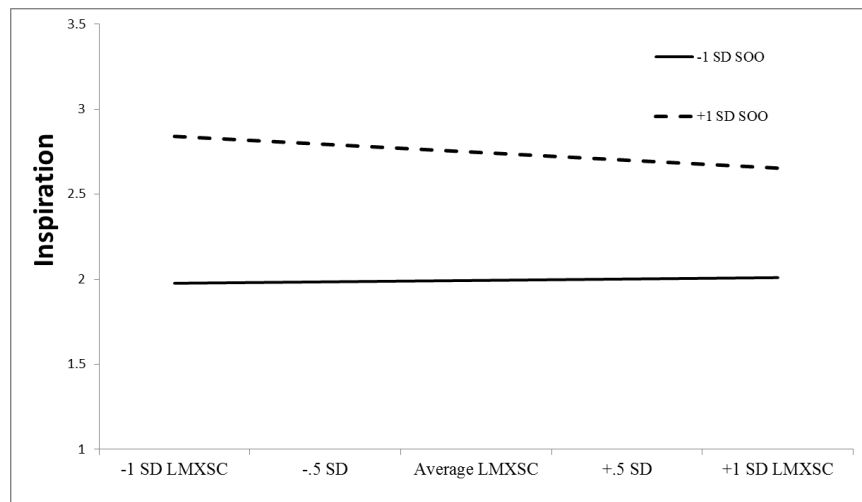


Figure 9 – Interaction in Labor/Delivery Day Sample Predicting Inspiration



The MRQAP results testing hypothesis 3 are presented in Table 8. Hypothesis 3a predicted that LMX social comparisons with a referent coworker are positively related to downward contrastive social comparison emotions (e.g., schadenfreude). No support was found for hypothesis 3a, and all results were qualitatively identical when analyzed without personality controls. Thus, hypothesis 3a was not supported.

Hypothesis 3b predicted that self-other overlap is negatively related to downward contrastive social comparison emotions (e.g., schadenfreude). Support for hypothesis 3b was found in one of the three samples: the Mother/Baby Sample ($B = -.04, p < .05$). All results were qualitatively identical when analyzed without personality controls. Thus, hypothesis 3b was partially supported.

Hypothesis 3c predicted that LMX social comparisons with a referent coworker are positively related to downward contrastive social comparison emotions (e.g., schadenfreude) for coworkers who have low self-other overlap with the focal employee, but not for coworkers who have high self-other overlap with the focal employee. A significant interaction emerged in two of the three samples: the Mother/Baby Sample ($B = .10, p < .05$) and the Labor/Delivery Night Sample ($B = -.09, p < .01$). However, the form of the interactions did not match the hypothesized form (see Figures 10 – 11). Additionally, when analyzed without the personality controls, the interaction in the Mother/Baby Sample became marginally significant ($B = .09, p < .10$). Thus, in sum, hypothesis 3c was not supported.

Table 8 – MRQAP Results Predicting Schadenfreude

Predictors	Mother/Baby Sample		Labor/Delivery Sample 1 (N)		Labor/Delivery Sample 2 (D)	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Intercept	2.36**	2.53**	-.07**	-.34**	.30**	.28**
<i>Controls</i>						
Agreeableness	-.19	-.34	-.30†	-.29†	.02	.01
Conscientiousness	-.03	.06	.35*	.38*	.12	.14
Extraversion	-.04	-.06	.05	.07	.02	.03
Neuroticism	-.01	-.01	.26†	.30*	-.03	-.04
Openness	-.03	.03	.05	.05	.05	.05
<i>Predictors</i>						
LMXSC		-.09†		-.06		-.08
SOO		-.04*		.00		.01
LMXSC*SOO		.10*		-.09**		-.03
<i>Variance Explained</i>						
R ²	.03*	.07**	.13*	.15*	.05†	.06*

n ranges from 462 to 1,482 dyadic relationships. LMXSC = LMX social comparisons. SOO = self-other overlap. (N) = night unit. (D) = day unit.

† p < .10, * p < .05, ** p < .01

Figure 10 – Interaction in Mother/Baby Sample Predicting Schadenfreude

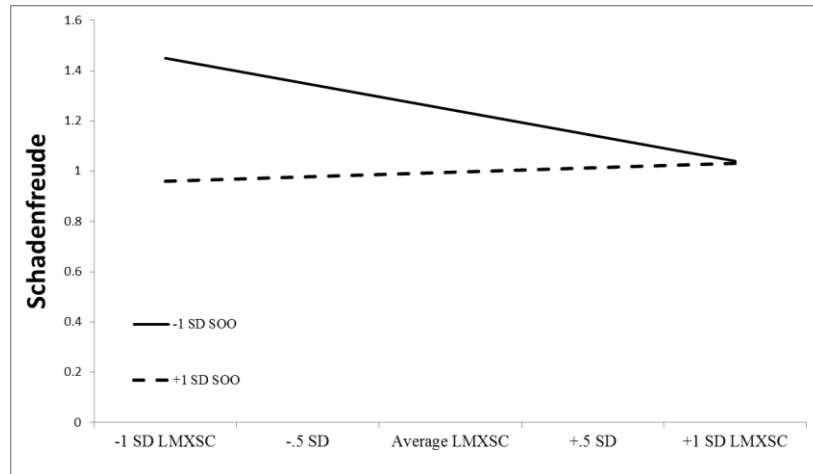
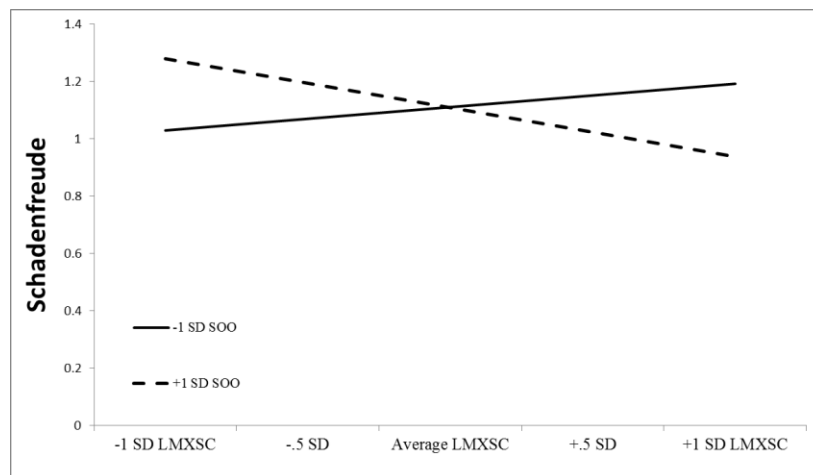


Figure 11 – Interaction in Labor/Delivery Night Sample Predicting Schadenfreude



The MRQAP results testing hypothesis 4 are presented in Table 9. Hypothesis 4a predicted that LMX social comparisons with a referent coworker are positively related to downward assimilative social comparison emotions (e.g., sympathy). No support was found for hypothesis 4a. Counter to my prediction, a negative association emerged between LMX social comparisons and downward assimilative social comparison emotions (e.g., sympathy) in the Labor/Delivery Night Sample ($B = -.39, p < .01$). When analyzed without the personality controls, however, the negative association in the Labor/Delivery Night Sample was no longer significant ($B = -.14, ns$).

Hypothesis 4b predicted that self-other overlap is positively related to downward assimilative social comparison emotions (e.g., sympathy). Support for hypothesis 4b was found in two of the three samples: the Mother/Baby Sample ($B = .26, p < .01$) and the Labor/Delivery Night Sample ($B = .11, p < .01$). When analyzed without the personality controls, a positive association also emerged in the Labor/Delivery Day Sample ($B = .14, p < .05$). Thus, hypothesis 4b was supported.

Hypothesis 4c predicted that LMX social comparisons with a referent coworker are positively related to downward assimilative social comparison emotions (e.g., sympathy) for coworkers who have high self-other overlap with the focal employee, but not for coworkers who have low self-other overlap with the focal employee. No support was found for hypothesis 4c as no significant interactions emerged in the data, and all results were qualitatively identical when analyzed without personality controls.

Table 9 – MRQAP Results Predicting Sympathy

Predictors	Mother/Baby Sample		Labor/Delivery Sample 1 (N)		Labor/Delivery Sample 2 (D)	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Intercept	.59**	-.36**	-1.77**	-2.10**	-1.42**	-1.26**
<i>Controls</i>						
Agreeableness	1.37†	1.71*	1.03**	.95**	.85*	.81*
Conscientiousness	-1.34	-1.39	-.53†	-.46†	-.43	-.37
Extraversion	.20	.08	.34*	.38*	-.04	-.04
Neuroticism	-.09	-.13	.53*	.61*	-.16	-.19
Openness	.62†	.41	-.25	-.25	.60†	.56†
<i>Predictors</i>						
LMXSC		.00		-.39**		-.09
SOO		.26**		.11**		.08
LMXSC*SOO		-.05		-.02		.01
<i>Variance Explained</i>						
R ²	.12*	.28**	.18**	.24**	.12*	.14**

n ranges from 462 to 1,482 dyadic relationships. LMXSC = LMX social comparisons. SOO = self-other overlap. (N) = night unit. (D) = day unit.

† p < .10, * p < .05, ** p < .01

The MRQAP results testing hypothesis 5 are presented in Table 10. Hypothesis 5 predicted that upward contrastive social comparison emotions (e.g., envy) elicited by a coworker are positively related to active CWBI directed at that coworker (as rated by that coworker). No support was found for hypothesis 5. In contrast, when analyzed without the personality controls, envy was negatively associated coworker-reported active CWBI in the Labor/Delivery Night Sample ($B = -.05, p < .05$). This effect was consistent with the negative zero-order correlation in that sample ($r = -.07, p < .05$).

Table 10 – MRQAP Results Predicting Active CWBI

Predictors	Mother/Baby Sample			Labor/Delivery Sample 1 (N)			Labor/Delivery Sample 2 (D)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Intercept	1.18**	1.25**	1.16**	.77**	.75**	.81**	.82**	.78**	.78**
<i>Controls</i>									
Agreeableness	-.27*	-.22†	-.25†	-.08	-.07	-.09	.01	.02	.02
Conscientiousness	.22	.12	.15	.05	.05	.07	.00	.00	.00
Extraversion	.01	.00	-.01	.03	.03	.02	.02	.01	.02
Neuroticism	.03	.04	.04	.06	.05	.06	.01	.02†	.02†
Openness	.03	.07	.08	.05	.06	.06	.03	.03†	.03†
<i>Predictors</i>									
LMXSC		.13*	.14*		.07†	.06†		.02	.02
SOO		-.03†	-.03*		-.01	-.01		-.01**	-.01**
LMXSC*SOO		.05†	.06†		-.04*	-.04*		.03**	.03**
<i>Mediator</i>									
Envy			.09			-.04			-.01
<i>Variance Explained</i>									
R ²	.01	.04*	.04*	.02*	.02**	.03**	.01*	.02**	.02**

n ranges from 462 to 1,482 dyadic relationships. LMXSC = LMX social comparisons. SOO = self-other overlap. (N) = night unit. (D) = day unit.

† p < .10, * p < .05, ** p < .01

The MRQAP results testing hypothesis 6 are presented in Table 11. Hypothesis 6 predicted that upward assimilative social comparison emotions (e.g., inspiration) elicited by a coworker are positively related to active OCBI directed at that coworker (as rated by that coworker). Support for hypothesis 6 was found in one of the three samples: the Labor/Delivery Day Sample ($B = .13, p < .01$). Additionally, when analyzed without the personality controls, inspiration was also positively associated with coworker-reported active OCBI in the Mother/Baby Sample ($B = .21, p < .01$). Thus, hypothesis 6 was partially supported.

Table 11 – MRQAP Results Predicting Active OCBI

Predictors	Mother/Baby Sample			Labor/Delivery Sample 1 (N)			Labor/Delivery Sample 2 (D)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Intercept	6.59**	5.79**	6.33**	1.24**	2.99**	2.56**	2.61**	3.73**	3.32**
<i>Controls</i>									
Agreeableness	-.39	.17	.28	.20	.09	.19	.02	-.13	-.07
Conscientiousness	-.13	-.34	-.54	.19	.02	-.10	-.09	-.10	-.09
Extraversion	-.04	.09	-.03	.16*	.11	.22*	.16†	.11	.09
Neuroticism	-.59*	-.70**	-.79**	.22*	.05	.10	.09	.06	.05
Openness	-.09	-.38*	-.31*	-.25*	-.24*	-.24*	-.02	-.06	-.10
<i>Predictors</i>									
LMXSC		-.28*	-.24*		.28*	.27*		-.15	-.14
SOO		.31**	.27**		.14**	.12**		.17**	.13**
LMXSC*SOO		-.21*	-.15†		.06	.06		-.16*	-.13*
<i>Mediator</i>									
Inspiration			.08			.04			.13**
<i>Variance Explained</i>									
R ²	.05*	.23**	.24**	.02**	.05**	.07**	.01†	.06**	.07**

n ranges from 462 to 1,482 dyadic relationships. LMXSC = LMX social comparisons. SOO = self-other overlap. (N) = night unit. (D) = day unit.

† p < .10, * p < .05, ** p < .01

The MRQAP results testing hypothesis 7 are presented in Table 12. Hypothesis 7 predicted that downward contrastive social comparison emotions (e.g., schadenfreude) elicited by a coworker are positively related to passive CWBI directed at that coworker (as rated by that coworker). Support for hypothesis 7 was found in one of the three samples: the Labor/Delivery Night Sample ($B = .05, p < .05$). It was also marginally supported in the Mother/Baby Sample ($B = .12, p < .10$). Importantly, when analyzed without the personality controls, the positive association in the Mother/Baby Sample became statistically significant ($B = .12, p < .05$). Thus, hypothesis 7 was partially supported.

Table 12 – MRQAP Results Predicting Passive CWBI

Predictors	Mother/Baby Sample			Labor/Delivery Sample 1 (N)			Labor/Delivery Sample 2 (D)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Intercept	1.05**	1.04**	.74**	.65**	.49**	.58**	.85**	.82**	.81**
<i>Controls</i>									
Agreeableness	-.43**	-.40**	-.36**	-.03	-.01	.02	.00	.01	.01
Conscientiousness	.40**	.37*	.36*	.05	.05	.03	-.06†	-.06*	-.06*
Extraversion	.03	.03	.04	.05*	.05*	.02	.03*	.03*	.03*
Neuroticism	.05	.04	.04	.04	.05	.01	.01	.02	.02
Openness	.04	.05	.05	.03	.03	.03	.08**	.08**	.08**
<i>Predictors</i>									
LMXSC		.07	.08†		.01	.04†		.06**	.06*
SOO		.02	.02		-.02*	-.02**		-.01**	-.01**
LMXSC*SOO		.06†	.06		.00	.00		.04**	.04**
<i>Mediator</i>									
Schadenfreude			.12†			.05*			-.01
<i>Variance Explained</i>									
R ²	.02*	.02*	.03*	.02*	.02**	.03**	.02**	.03**	.03**

n ranges from 462 to 1,482 dyadic relationships. LMXSC = LMX social comparisons. SOO = self-other overlap. (N) = night unit. (D) = day unit.

† p < .10, * p < .05, ** p < .01

The MRQAP results testing hypothesis 8 are presented in Table 13. Hypothesis 8 predicted that downward assimilative social comparison emotions (e.g., sympathy) elicited by a coworker are positively related to passive OCBI directed at that coworker (as rated by that coworker). Support for hypothesis 8 was found in one of the three samples: the Labor/Delivery Day Sample ($B = .08, p < .05$). However, when analyzed without the personality controls, the positive association between sympathy and coworker-reported passive OCBI in the Labor/Delivery Day Sample was no longer statistically significant ($B = .04, ns$). Thus, I found little support for hypothesis 8.

Table 13 – MRQAP Results Predicting Passive OCBI

Predictors	Mother/Baby Sample			Labor/Delivery Sample 1 (N)			Labor/Delivery Sample 2 (D)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Intercept	5.05**	4.62**	4.51**	1.54**	3.29**	3.15**	3.02**	4.23**	4.29**
<i>Controls</i>									
Agreeableness	-.35	.07	.17	.05	-.05	-.06	-.03	-.20	-.25†
Conscientiousness	.05	-.07	-.15	.16	-.02	-.06	-.34*	-.29†	-.26†
Extraversion	.27	.35†	.36†	.12†	.07	.15*	.20*	.12	.13
Neuroticism	-.43*	-.58**	-.61**	.19†	.01	.06	.17*	.13	.14†
Openness	-.26	-.52**	-.49*	-.10	-.09	-.09	.08	.00	-.04
<i>Predictors</i>									
LMXSC		-.26*	-.28*		.27*	.25*		-.23*	-.23*
SOO		.33**	.33**		.15**	.15**		.19**	.19**
LMXSC*SOO		-.24**	-.22*		.06	.05		-.06	-.07
<i>Mediator</i>									
Sympathy			-.04			.03			.08*
<i>Variance Explained</i>									
R ²	.04*	.25**	.24**	.01*	.04**	.05**	.02**	.08**	.08**

n ranges from 462 to 1,482 dyadic relationships. LMXSC = LMX social comparisons. SOO = self-other overlap. (N) = night unit. (D) = day unit.

† p < .10, * p < .05, ** p < .01

The final four hypotheses focus on four mediated moderation (also known as first-stage moderated mediation) paths. Hypothesis 9 predicted that upward contrastive social comparison emotions (e.g., envy) mediate the interactive effect of LMX social comparisons with a referent coworker and self-other overlap with that coworker on active CWBI directed at that coworker. In terms of the first stage (α path) when predicting envy, significant interactions emerged in the Mother/Baby Sample ($B = -.08, p < .01$) and the Labor/Delivery Night Sample ($B = -.09, p < .01$). However, in terms of the second stage (β path), envy was unrelated to active CWBI. As such, I failed to support hypothesis 9.

Hypothesis 10 predicted that upward assimilative social comparison emotions (e.g., inspiration) mediate the interactive effect of LMX social comparisons with a referent coworker and self-other overlap with that coworker on active OCBI directed at that coworker. In terms of the first stage (α path) when predicting inspiration, a significant interaction was present in the Mother/Baby Sample ($B = -.28, p < .01$). However, in terms of the second stage (β path), inspiration was only related to active OCBI in the Labor/Delivery Day Sample ($B = .13, p < .01$). As such, I failed to support hypothesis 10.

Hypothesis 11 predicted that downward contrastive social comparison emotions (e.g., schadenfreude) mediate the interactive effect of LMX social comparisons with a referent coworker and self-other overlap with that coworker on passive CWBI directed at that coworker. In terms of the first stage (α path) when predicting schadenfreude, a significant interaction emerged in the Mother/Baby Sample ($B = .10, p < .05$) and the Labor/Delivery Night Sample ($B = -.09, p < .01$). In terms of the second stage (β path), schadenfreude was related to passive CWBI in the Labor/Delivery Night Sample ($B = .05, p < .05$). However, there was no significant

interaction between LMX social comparison and self-other overlap in predicting passive CWBI in the Labor/Delivery Night Sample. As such, I failed to support hypothesis 11.

Finally, hypothesis 12 predicted that downward assimilative social comparison emotions (e.g., sympathy) mediate the interactive effect of LMX social comparisons with a referent coworker and self-other overlap with that coworker on passive OCBI directed at that coworker. In terms of the first stage (α path) when predicting sympathy, no significant interactions were found. As such, I failed to support hypothesis 12.

Supplemental Analyses – Alternative Moderators of α Path

I conducted supplemental analyses to investigate the role of several other theoretically relevant moderators of LMX social comparisons in predicting social comparison emotions. For example, a likely important feature of whether social comparison emotions are elicited by LMX social comparisons with a specific coworker is whether the focal employee actually utilizes that coworker as a social comparison referent (Shah, 1998). Additionally, past theory and research suggests that friendship (e.g., Brown et al., 1992) and similarity (e.g., Mussweiler, 2001b, 2003; Mussweiler et al., 2004) likely influence whether individuals will experience assimilative or contrastive reactions to social comparisons. As such, I explored social comparison referent (SCR), friendship, and similarity as potential moderators of the relationships between LMX social comparisons and social comparison emotions.

For social comparison referent and envy, social comparison referent had a positive main effect on envy in two of the three samples: the Labor/Delivery Night Sample ($B = .15, p < .01$) and the Labor/Delivery Day Sample ($B = .26, p < .01$). When predicting envy, an interaction between LMX social comparisons and social comparison referent (see Figure 12) was found in

the Labor/Delivery Night Sample ($B = -.17, p < .01$). I also note that a similar form of interaction (see Figure 13) was also marginally significant in the Mother/Baby Sample ($B = -.04, p < .10$).

Figure 12 – SCR Interaction in Labor/Delivery Night Sample Predicting Envy

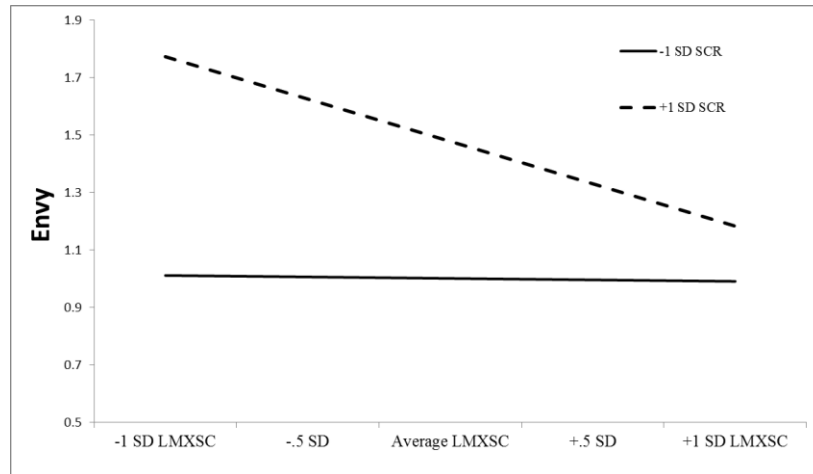
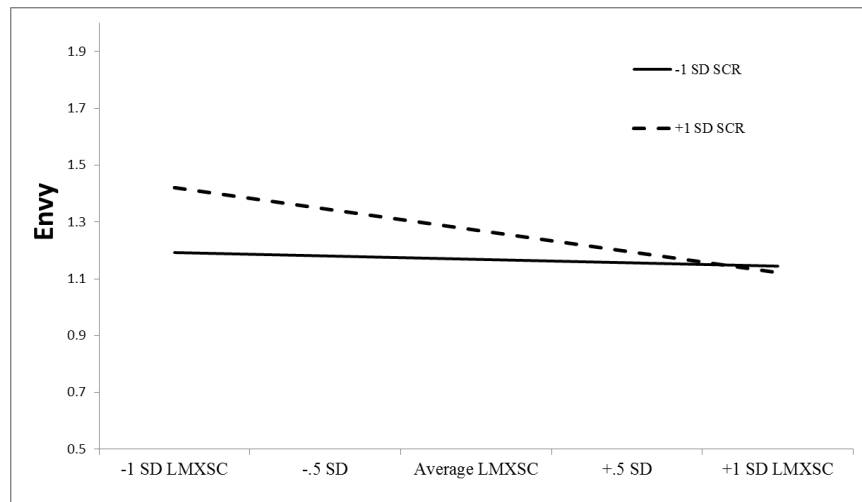


Figure 13 – SCR Interaction in Mother/Baby Sample Predicting Envy



For social comparison referent and inspiration, social comparison referent had a positive main effect on inspiration in all three samples: the Mother/Baby Sample ($B = .48, p < .01$), the Labor/Delivery Night Sample ($B = .36, p < .01$), and the Labor/Delivery Day Sample ($B = .47, p < .01$). When predicting inspiration, no similar forms of the interaction between LMX social comparisons and social comparison referent emerged across samples.

For social comparison referent and schadenfreude, social comparison referent had a marginally significant positive main effect on schadenfreude in the Mother/Baby Sample ($B = .07, p < .10$) and the Labor/Delivery Day Sample ($B = .08, p < .10$). When predicting schadenfreude, no similar forms of the interaction between LMX social comparisons and social comparison referent emerged across samples.

For social comparison referent and sympathy, social comparison referent had a positive main effect on sympathy in one of the three samples: the Mother/Baby Sample ($B = .31, p < .05$). When predicting sympathy, no similar forms of the interaction between LMX social comparisons and social comparison referent emerged across samples.

For friendship and envy, friendship had a positive main effect on envy in all three samples: the Mother/Baby Sample ($B = .03, p < .05$), the Labor/Delivery Night Sample ($B = .20, p < .01$), and the Labor/Delivery Day Sample ($B = .11, p < .01$). When predicting envy, no similar forms of the interaction between LMX social comparisons and friendship emerged across samples.

For friendship and inspiration, friendship had a positive main effect on inspiration in all three samples: the Mother/Baby Sample ($B = .54, p < .01$), the Labor/Delivery Night Sample ($B = .50, p < .01$), and the Labor/Delivery Day Sample ($B = .21, p < .01$). When predicting inspiration, no similar forms of the interaction between LMX social comparisons and friendship emerged across samples.

For friendship and schadenfreude, friendship had a negative main effect on schadenfreude in two of the three samples: the Labor/Delivery Night Sample ($B = -.09, p < .01$) and the Labor/Delivery Day Sample ($B = -.05, p < .05$). When predicting schadenfreude, no

similar forms of the interaction between LMX social comparisons and friendship emerged across samples.

For friendship and sympathy, friendship had a positive main effect on sympathy in two of the three samples: the Mother/Baby Sample ($B = .43, p < .01$) and the Labor/Delivery Night Sample ($B = .15, p < .01$). When predicting sympathy, no similar forms of the interaction between LMX social comparisons and friendship emerged across samples.

For similarity and envy, similarity had a positive main effect on envy in two of the three samples: the Mother/Baby Sample ($B = .01, p < .05$) and the Labor/Delivery Night Sample ($B = .06, p < .05$). When predicting envy, a similar form of the interaction between LMX social comparisons and similarity (see Figures 14 – 15) was found in two of the three samples: the Mother/Baby Sample ($B = -.06, p < .01$) and the Labor/Delivery Night Sample ($B = -.10, p < .01$).

Figure 14 – Similarity Interaction in Mother/Baby Sample Predicting Envy

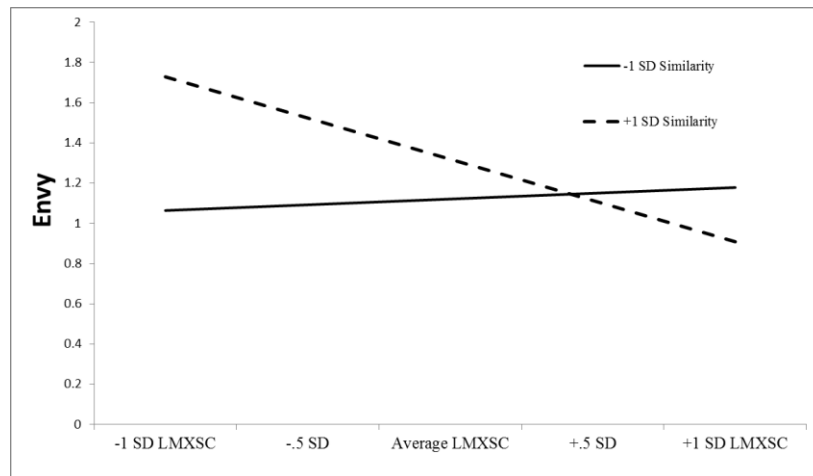
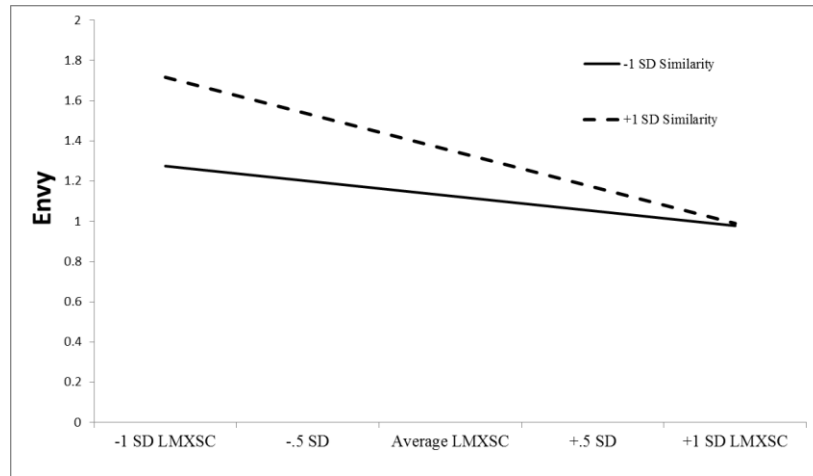


Figure 15 – Similarity Interaction in Labor/Delivery Night Sample Predicting Envy



For similarity and inspiration, similarity had a positive main effect on inspiration in all three samples: the Mother/Baby Sample ($B = .41, p < .01$), the Labor/Delivery Night Sample ($B = .46, p < .01$), and the Labor/Delivery Day Sample ($B = .34, p < .01$). When predicting inspiration, a similar form of the interaction between LMX social comparisons and similarity (see Figures 16 – 17) was found in two of the three samples: the Mother/Baby Sample ($B = -.17, p < .01$) and the Labor/Delivery Day Sample ($B = -.19, p < .05$).

Figure 16 – Similarity Interaction in Mother/Baby Sample Predicting Inspiration

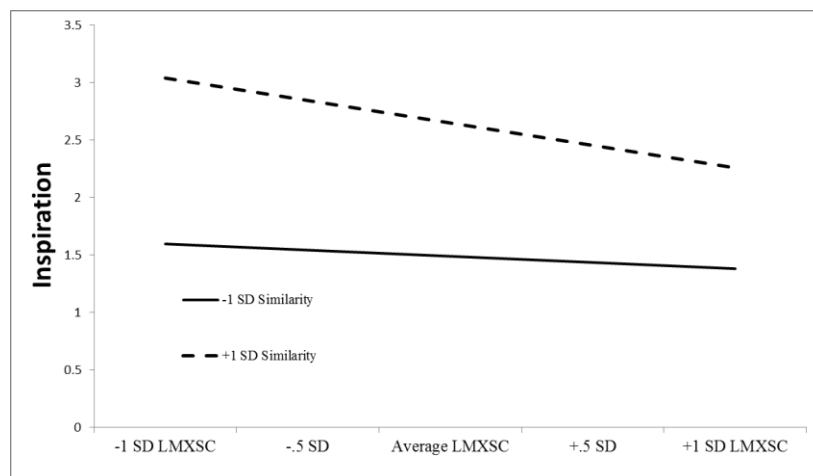
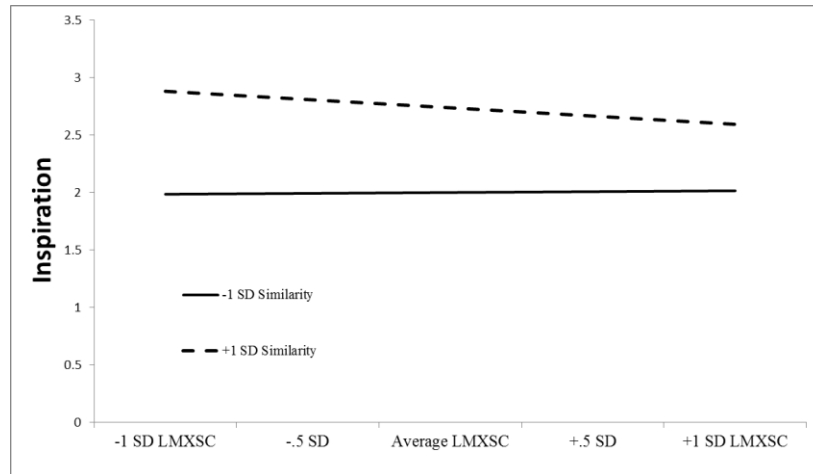
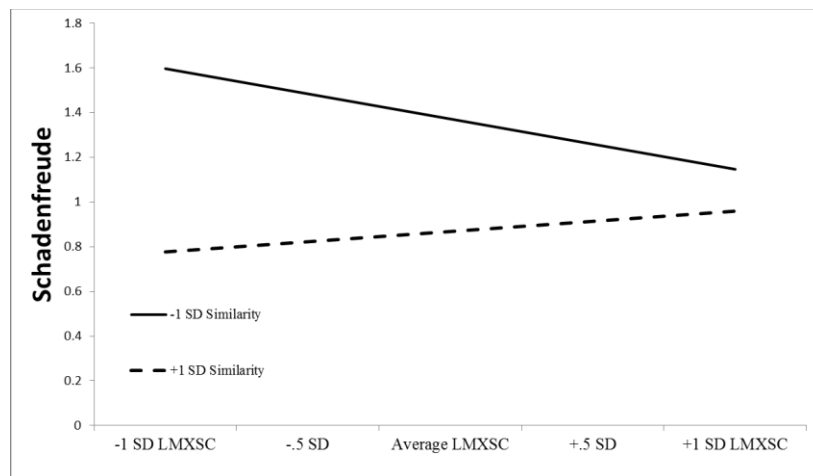


Figure 17 – Similarity Interaction in Labor/Delivery Day Sample Predicting Inspiration



For similarity and schadenfreude, similarity had a negative main effect on schadenfreude in two of the three samples: the Mother/Baby Sample ($B = -.09, p < .01$) and the Labor/Delivery Night Sample ($B = -.08, p < .05$). When predicting schadenfreude, an interaction between LMX social comparisons and similarity (see Figure 18) was found in the Mother/Baby Sample ($B = .09, p < .01$).

Figure 18 – Similarity Interaction in Mother/Baby Predicting Schadenfreude



For similarity and sympathy, similarity had a positive main effect on sympathy in all three samples: the Mother/Baby Sample ($B = .28, p < .01$), the Labor/Delivery Night Sample ($B = .09, p < .05$), and the Labor/Delivery Day Sample ($B = .10, p < .05$). When predicting

sympathy, no similar forms of the interaction between LMX social comparisons and similarity emerged across samples.

Supplemental Analyses – Alternative Outcomes for β Path

I also conducted supplemental analyses to investigate the role of several other theoretically relevant outcomes of social comparison emotions. Although I made predictions for the specific form of interpersonal discretionary work behavior that individuals were most likely to engage in based on social comparison theory, individuals may engage in multiple forms of interpersonal discretionary work behavior in order to relieve the social comparison tension linked with social comparison emotions (Adams, 1965; Cuddy et al., 2007). As such, I explored the relationships between each social comparison emotion and each interpersonal discretionary work behavior.

Beginning with envy, counterintuitively, envy was positively associated with coworker-reported active OCBI in the Labor/Delivery Day Sample ($r = .11, p < .05$). Similarly, envy was positively associated with coworker-reported passive OCBI in the Labor/Delivery Day Sample ($r = .13, p < .05$). Finally, envy was negatively associated with coworker-reported passive CWBI in two of the three samples: the Mother/Baby Sample ($r = -.06, p < .05$) and the Labor/Delivery Night Sample ($r = -.09, p < .05$).

For inspiration, in addition to positive associations with coworker-reported active OCBI in the Mother/Baby Sample ($r = .31, p < .05$) and the Labor/Delivery Day Sample ($r = .21, p < .05$), several other parallel findings emerged. Specifically, inspiration was positively associated with passive OCBI in two of the three samples: the Mother/Baby Sample ($r = .35, p < .05$) and the Labor/Delivery Day Sample ($r = .20, p < .05$). Moreover, inspiration was negatively associated with active CWBI in all three samples: the Mother/Baby Sample ($r = -.10, p < .05$),

the Labor/Delivery Night Sample ($r = -.08, p < .05$), and the Labor/Delivery Day Sample ($r = -.07, p < .05$).

For schadenfreude, no statistically significant relationships with any interpersonal discretionary work behaviors replicated across multiple samples.

Finally, for sympathy, sympathy was negatively associated with active CWBI in one of the three samples: the Labor/Delivery Night Sample ($r = -.09, p < .05$).

DISCUSSION

Although LMX theory is our only dyadic leadership theory, LMX research to date has almost exclusively taken an individual approach to outcomes of LMX quality and has overlooked the potential impact of the leader-member relationship on the surrounding dyadic relationships that exist within workgroups. Interestingly, however, considering that “the LMX model was originally advanced to account for how leaders' differential treatment of multiple subordinates in a work group influences activity within the group” (Henderson et al., 2009, p. 517), recent reviews of the literature have recommended that researchers take dyadic approaches when studying the effects of LMX (e.g., Gooty, Serban, Thomas, Gavin, & Yammarino, 2012; Tse et al., 2015). In this dissertation, I drew on social comparison theory to answer these calls and address this limitation. Specifically, given that varied LMX relationships are likely to generate subgroups – such that some coworkers are “in” and others are “out” (Dansereau et al., 1975; Graen & Cashman, 1975), I theorized that LMX-based social comparisons are likely to have critical consequences for what employees feel toward each specific referent coworker (i.e., envy, inspiration, schadenfreude, and sympathy) and ultimately how they behave toward each coworker (i.e., active CWBI, active OCBI, passive CWBI, and passive OCBI). To empirically test my hypotheses, I collected dyadic social network data from 3 nursing samples. In the discussion below, I first overview the main findings and then discuss the main implications, limitations, and ideas for future research.

Summary of Findings

As I previously reviewed in the results section, the hypotheses that I proposed in this dissertation received mixed support. The mixed support for my hypotheses may have occurred for theoretical or empirical reasons. With regard to theory, much of the theoretical development

on contrastive and assimilative social comparison reactions and emotions has been tested in laboratory settings where the emotion eliciting event occurs concurrently with the assessment of social comparison emotions. As such, social comparison emotions are likely to fluctuate within person and may be best measured right after a LMX social comparison is engaged in. Indeed, emotions are intense, short-lived, and typically elicited by a specific target, cause, or event (Barsade & Gibson, 2007). My cross-sectional design captured the overall LMX social comparisons made in general toward each referent coworker and the overall social comparison emotions experienced in general toward each referent coworker. Thus, the true theoretical association between LMX social comparisons and social comparison emotions may have been dampened. That said, although my cross-sectional design was a conservative test of my proposed theoretical relationships, several relationships were still supported.

In regard to empirical reasons for the mixed results, one potential difficulty that I faced was replicating a series of interactions across multiple field samples. Indeed, the issues with attempting to replicate interactions in field data is well-documented due to the typically large main effects, the unreliability of product terms, and the typical multivariate distributions of the variables (Aiken & West, 1991; Brunswick, 1947). Another potential empirical reason for mixed results is that my a priori control variables may have masked the true relationships. Indeed, in many cases, significant zero-order relationships dropped out when analyzed with my a priori control model (e.g., see the inspiration correlations with active OBCI and the results of the MRQAP analysis) – even though several of the control variables were unrelated to the dependent variable. As such, following several recent recommendations (e.g., Breugh, 2008; Spector & Brannick, 2011; Spector et al., 2000), I retested my hypotheses using no control variables and reported any discrepancies in results.

Below, I summarize and discuss the specific results in terms of antecedents and outcomes of each social comparison emotion (i.e., envy, inspiration, schadenfreude, and sympathy).

Upward Contrastive Social Comparison Emotions (e.g., Envy). As expected, in the majority of the samples collected, LMX social comparisons toward a referent coworker were negatively associated with envy felt toward that coworker. In other words, employees who perceived their LMX quality to be relatively lower than that of a referent coworker experienced more envy toward that coworker than employees who perceived their LMX quality to be relatively higher than that of a referent coworker. This result is consistent with the idea that individuals engaging in upward LMX social comparisons will experience upward contrastive social comparison emotions (R. H. Smith, 2000).

However, in multiple samples, counter to my predictions, self-other overlap with a referent coworker was positively associated with envy felt toward that coworker. Similar effects were found for social comparison referent, friendship, and similarity. Additionally, LMX social comparisons were only negatively related to envy for coworkers who had high self-other overlap with the focal employee (but not for coworkers who had low self-other overlap with the focal employee). Similar effects were found for social comparison referent and similarity. My original prediction was grounded in the selective accessibility model's (Mussweiler, 2001a, 2003) contention that individuals contrast with referents that they perceive as dissimilar. As such, low self-other overlap (in contrast to high self-other overlap) was argued to trigger upward contrastive social comparison emotions (e.g., envy). Interestingly, Festinger's (1954) original theorizing may provide one potential reason for this opposing result. Specifically, he suggested that individuals are less likely to choose referents that are dissimilar to the self. This is supported in the correlation matrices as self-other overlap had a positive association with social comparison

referent in all three samples. Thus, it may be that some degree of self-other overlap is necessary in order for a target to be chosen as a referent and envy to be experienced.

When considering outcomes of envy, no support was found for my prediction that envy would elicit active CWBI. Rather, supplemental analyses showed that envy was positively associated with coworker-reported active and passive OCBI in one sample and negatively associated with coworker-reported passive CWBI in two samples. My original prediction was rooted in the idea that upward contrastive social comparison emotions would elicit active CWBI because upward comparisons motivate action (Corcoran et al., 2011; Wood, 1989) and contrastive reactions trigger CWBI (Festinger, 1954; Liao et al., 2004; Tajfel, 1982). One potential explanation for this conflicting finding could be that the employees in my sample experienced benign envy as opposed to malicious envy. For example, research suggests that, when envy is benign in nature, envy motivates individuals to improve themselves, and when envy is malicious in nature, envy motivates individuals to pull down the superior other (van de Ven, Zeelenberg, & Pieters, 2011; van de Ven, Zeelenberg, & Pieters, 2012). Considering that all three of my samples consisted of nurses, my participants may have been more inclined to experience benign forms of envy as opposed to malicious forms, resulting in more constructive behavioral reactions to envy. Indeed, O*Net highlights that registered nurses personal characteristics include many altruistic qualities such as concern for others, cooperation, and social orientation (O*NET, 2016).

Upward Assimilative Social Comparison Emotions (e.g., Inspiration). Overall, my predictions for inspiration were largely supported. First off, in several samples, LMX social comparisons toward a referent coworker were negatively associated with inspiration felt toward that coworker. In other words, employees who perceived their LMX quality to be relatively

lower than that of a referent coworker experienced more inspiration toward that coworker than employees who perceived their LMX quality to be relatively higher than that of a referent coworker. This result is consistent with the idea that individuals engaging in upward LMX social comparisons will experience upward assimilative social comparison emotions (R. H. Smith, 2000).

Additionally, in all three samples, self-other overlap was positively associated with inspiration. Similar effects were found for social comparison referent, friendship, and similarity. Similarly, in multiple samples, LMX social comparisons with a referent coworker was negatively related to inspiration for coworkers who had high self-other overlap with the focal employee (but not for those coworkers who had low self-other overlap with the focal employee). These results support the selective accessibility model's (Mussweiler, 2001a, 2003) assertion that individuals assimilate with referents that they perceive as similar. These results were also largely replicated in supplemental analyses using similarity. Importantly, in contrast to the supplemental analyses for envy, these results did not replicate using social comparison referent. Thus, it does not appear that these results are the product of similarity influencing the choice of referent, but are rather the outcome of similarity influencing assimilation.

Finally, in addition to the partial support for the linkage between inspiration and coworker-reported active OCBI, inspiration also showed positive associations with coworker-reported passive OCBI and negative associations with coworker-reported active CWBI in multiple samples. These results are consistent with the idea that upward social comparisons motivate action (Corcoran et al., 2011; Wood, 1989) and assimilative reactions trigger OCBI (Chattopadhyay, 1999; Festinger, 1954; Tajfel, 1982; Tsui et al., 2002). However, they also

support the idea that individuals may engage in other forms of discretionary behavior in order to relieve their social comparison tension.

Downward Contrastive Social Comparison Emotions (e.g., Schadenfreude). No support was found for a positive association between LMX social comparisons toward a referent coworker and schadenfreude felt toward that coworker. Thus, my results did not demonstrate that employees who perceive their LMX quality to be relatively higher than that of a referent coworker experience more schadenfreude toward that coworker than employees who perceive their LMX quality to be relatively lower than that of a referent coworker. Interestingly, some research suggests that schadenfreude is elicited when an upward comparison referent fails (e.g., Leach & Spears, 2009; Leach et al., 2003). Thus, although schadenfreude may be experienced by employees engaging in downward LMX comparisons, the main effect may be mitigated by schadenfreude that is experienced by low LMX employees when an upward comparison referent experiences failure.

Consistent with my prediction, self-other overlap was negatively associated with schadenfreude in one sample. Interestingly, although similar results were found for friendship and similarity, social comparison referent was marginally positively associated with schadenfreude in multiple samples. These results support the selective accessibility model's (Mussweiler, 2001a, 2003) proposition that individuals contrast with referents that they perceive as dissimilar. That said, I failed to find support for the predicted interaction between LMX social comparison and self-other overlap. Specifically, my results did not support the idea that LMX social comparisons with a referent coworker were positively related to schadenfreude for coworkers who had low self-other overlap with the focal employee (but not for coworkers who had high self-other overlap with the focal employee). In line with my above rationale for upward

LMX comparisons eliciting schadenfreude when upward comparison referents fail (e.g., Leach & Spears, 2009; Leach et al., 2003), my primary analysis with self-other overlap and one supplemental analysis with similarity suggested that LMX social comparisons with a referent coworker were *negatively* related to schadenfreude for coworkers who had low self-other overlap with the focal employee (but not for coworkers who had high self-other overlap with the focal employee).

When considering outcomes of schadenfreude, I found support for my prediction that schadenfreude elicits coworker-reported passive CWBI in one sample (although I found marginal support in an additional sample). No additional relationships emerged in supplemental analyses. My original prediction was rooted in the idea that downward contrastive social comparison emotions would elicit passive CWBI because downward comparisons trigger inaction (Corcoran et al., 2011; Wood, 1989) and contrastive reactions elicit CWBI (Festinger, 1954; Liao et al., 2004; Tajfel, 1982). The lack of stronger support for this prediction was surprising because such effects are well-established in the schadenfreude literature (e.g., Cikara et al., 2011; Cuddy et al., 2007; Mitchell et al., 2015). A likely theoretical explanation for this is the passive nature of schadenfreude. Indeed, schadenfreude centers on the premise of passive enjoyment in the failures of a referent rather than the generation of such failures (Leach et al., 2003). A likely empirical explanation for this result is range restriction in the independent and dependent variables. Additionally, range restriction on schadenfreude and interpersonal CWBI was likely exacerbated in my samples due to the altruistic personal characteristics of nurses (O*NET, 2016).

Downward Assimilative Social Comparison Emotions (e.g., Sympathy). I found no support for the idea that individuals will experience downward assimilative social comparison

emotions (e.g., sympathy) when engaging in downward LMX social comparisons. In other words, employees who perceived their LMX quality to be relatively higher than that of a referent coworker did not experience more sympathy toward that coworker than employees who perceived their LMX quality to be relatively lower than that of a referent coworker. One potential reason for this lack of result is that employees engaging in downward LMX social comparisons may attribute their relatively higher LMX quality to the greater inputs they provide to leaders. Indeed, LMX is a two-way exchange relationship that employees also invest valued resources in (Wilson et al., 2010), and research on sympathy suggests that it is only elicited when downward comparisons seem undeserved (e.g., Brigham et al., 1997; Feather & Sherman, 2002; Feather, Wenzel, & McKee, 2013). As such, sympathy may not be a typical emotional experience linked to downward comparisons on LMX quality. Alternatively, sympathy may be eliminated quickly once individuals justify their position (like feelings of guilt following over-reward; Greenberg, 1988). As such, it may be fleeting, and my design may not have picked up on this variation.

Consistent with my predictions, results in the majority of my samples showed that self-other overlap was positively associated with sympathy. Similar effects were found for social comparison referent, friendship, and similarity. These results support the selective accessibility model's (Mussweiler, 2001a, 2003) assertion that individuals assimilate with referents that they perceive as similar. However, I failed to support the predicted interaction between LMX social comparison and self-other overlap. Specifically, no support was found for the notion that LMX social comparisons with a referent coworker are positively related to downward assimilative social comparison emotions (e.g., sympathy) for coworkers who had high self-other overlap with the focal employee (but not for coworkers who had low self-other overlap with the focal

employee). A potential explanation for this lack of result could return to the idea of deservingness (e.g., Brigham et al., 1997; Feather & Sherman, 2002; Feather et al., 2013). Specifically, sympathy may not be a relevant emotion for LMX social comparisons but may rather be driven primarily by self-other overlap, social comparison referent, friendship, and similarity.

When considering outcomes of sympathy, I found support for my prediction that sympathy would elicit coworker-reported passive OCBI in one sample. Results of supplemental analyses also revealed that sympathy was negatively associated with coworker-reported active CWBI in one sample. My original prediction was based on the proposition that downward assimilative social comparison emotions would elicit passive OCBI because downward comparisons trigger inaction (Corcoran et al., 2011; Wood, 1989) and assimilative reactions trigger OCBI (Chattopadhyay, 1999; Festinger, 1954; Tajfel, 1982; Tsui et al., 2002). One potential reason for the negative linkage between sympathy and coworker-reported active CWBI is that sympathy inhibits antisocial action tendencies (Weiner, 1995). Additionally, this finding is consistent with the negative meta-analytic linkage between sympathy and aggressive behavior (Rudolph et al., 2004).

Theoretical Implications of the Results

As discussed in the introduction and literature review, this dissertation contributes to theory on LMX in numerous ways. Indeed, I answer recent calls to: a) apply social comparison processes to the study of LMX (Greenberg et al., 2007), b) integrate contrastive and assimilative reactions into social comparisons research (Greenberg et al., 2007; Moore, 2007), c) integrate emotions into the study of leadership generally (Ashkanasy & Humphrey, 2011; Ashkanasy & Jordan, 2008) and LMX specifically (Dasborough, 2006), and d) examine the influences of LMX

on the broader social network of dyadic coworker ties (Henderson et al., 2008; Sherony & Green, 2002; Sparrowe & Liden, 1997; Tse et al., 2012). In addition to these theoretical contributions, the results of this dissertation also highlight some additional implications for theory that are important to acknowledge.

First, the results of this study highlight that individuals do make social comparisons about LMX relationships with specific coworkers. Moreover, these specific social comparisons have important consequences for how employees feel and behavior toward those coworkers. To date, past approaches to LMX social comparisons have focused on comparisons that employees make with the workgroup in general and behaviors directed at the workgroup in general (e.g., Henderson et al., 2008; Hu & Liden, 2013; Vidayarthi et al., 2010). Considering that social comparison theory was originally advanced to explain how employees will think of, feel about, and behave toward *specific* referent coworkers (Festinger, 1954; for a review, see A. P. Buunk & Gibbons, 2007), a misalignment has existed between the level of analysis in the theory and empirical tests of the theory. This is not surprising as this issue is well-documented in the LMX literature more broadly. For example, Gooty and colleagues' (2012, p. 1080) review of levels of analysis in LMX research found that "With regard to alignment of levels of theory/hypotheses with measurement and with data analyses ... roughly one out of two published studies suffers from misalignment of levels." As such, future research should continue to explore the phenomenon at the dyadic level of analysis and explore the interplay between the individual, dyadic, and group levels of analysis.

My results for upward LMX social comparisons and inspiration also provide another important contribution to the literature. Specifically, recent reviews of the literature have noted that LMX scholars must take a more balanced approach to outcomes of LMX quality by

examining potential dark sides of high LMX and bright sides of low LMX (e.g., Erdogan & Bauer, 2015a; Matta & Van Dyne, 2015). Although scholars have begun to explore potential dark sides of high LMX (e.g., Ballinger, Lehman, & Schoorman, 2010; Pelletier, 2012; Shapiro, Boss, Salas, Tangirala, & Von Glinow, 2011), I am unaware of research that has demonstrated positive outcomes of low LMX quality. My dissertation results provide support for the idea that relatively low LMX quality can generate inspiration in low LMX employees and ultimately facilitate active and passive OCBI as well as reduce active CWBI. Thus, my dissertation takes a first step in providing a more balanced perspective on outcomes of low LMX quality.

My dissertation also provides important implications for the role of contextual factors in LMX-based social comparisons. Although my results were mostly supported for inspiration, they were largely unsupported for *schadenfreude*. Additionally, in terms of self-other overlap and interactions between LMX social comparisons and self-other overlap, the results for envy were found in the opposite direction of my predictions. As I discussed above, a likely reason for these conflicting findings is the nursing context from which my three samples were drawn. Specifically, registered nurses personal characteristics include many altruistic qualities such as concern for others, cooperation, and social orientation (O*NET, 2016). Thus, such contexts may trigger more assimilative types of reactions. Indeed, even my results for envy were consistent with benign forms of envy (as opposed to malicious forms). Thus, future theory development and research should focus on personal characteristics of workers and contextual features of work as potential moderators of assimilation and contrast.

My results also highlight the importance of considering multiple forms of behavior when considering mechanisms to reduce social comparison tension. Although I made predictions for the specific form of interpersonal discretionary work behavior that individuals were most likely

to engage in based on social comparison theory, supplemental analyses suggested that employees are likely to engage in multiple forms of interpersonal discretionary work behavior to relieve their tension. This idea is also supported by the high correlation between active and passive OCBI. Thus, these results highlight that individuals not only have multiple avenues to relieve social comparison tension – as Adam’s (1965) equity theory suggests – but employees in the same situation may engage in multiple different types of behaviors to relieve their tension.

Practical Implications of the Results

My dissertation also has important implications for practitioners. Specifically, my theoretical predictions and results demonstrate that managers not only need to consider how to best utilize their resources via the development of LMX relationships, but they also need to consider how employees may compare those relationships as well as the implications of those comparisons. Indeed, this suggests that leadership is not an easy endeavor and that most leader actions have ripple effects that spread through workgroups. Although my results mainly supported more assimilative types of reactions to LMX social comparisons, they should be interpreted with caution. Indeed, most LMX research has supported more contrastive reactions to low LMX (e.g., Vecchio, 1995), and the assimilative effects demonstrated may have been enhanced due to my context.

My results also highlight the importance of facilitating self-other overlap and similarity in workgroups. When individuals experienced self-other overlap and felt similar to others, they were more likely to experience inspiration, sympathy, and envy (that appeared more benign in nature) as well as less likely to experience schadenfreude. Moreover, in many cases, inspiration, sympathy, and envy were associated with beneficial behavioral outcomes. Thus, managers may consider ways in which to increase self-other overlap and perceptions of similarity in

workgroups. For example, managers may consider facilitating communication amongst coworkers in order to increase perceptions of similarity (Selfhout, Denissen, Branje, & Meeus, 2009).

Finally, when managers notice similarities between a low LMX employee and a high LMX coworker, they may consider pairing them together. Indeed, because leaders have limited resources such as time and energy, leaders must differentiate and target resources selectively toward specific subordinates (Graen & Uhl-Bien, 1995). By pairing a low LMX employee with a similar high LMX coworker, the costs of differentiation for the low LMX employee (Bolino & Turnley, 2009) may be offset by the inspiration that he/she is likely to feel toward the high LMX coworker.

Limitations and Future Directions

Although this dissertation has numerous strengths, such as the collection of dyadic social network data in three samples, coworker-reports of behavior, and the replication of interactions in multiple field samples, it has limitations that should be noted. First, the cross-sectional design did not allow for testing causality. Thus, alternative causal orderings are possible. For example, it could be that interpersonal discretionary work behaviors received from a coworker influence whether an employee views their LMX quality as superior or inferior to that coworker. That said, this concern is somewhat mitigated because the alternative would be inconsistent with social comparison theory.

As with most studies using dyadic social network data, there are potential concerns over generalizability. Indeed, all three samples consisted of registered nurses, and the nursing samples were female, predominantly Caucasian workers. As I have highlighted previously, this may have been an ideal context for studying assimilative reactions to LMX social comparisons. However,

this likely hampered my ability to find variance in contrastive reactions to LMX social comparisons. As such, future research in other contexts would be informative.

In regard to the all-female samples, this provided both strengths and limitations. One strength of the all-female samples was that this sex balance is representative of the health care industry. Indeed, according to the US Bureau of Labor Statistics, 80% of employees in the health care sector are women. That said, due to the absence of males in my health care settings, my findings may not generalize to male employees or other jobs (particularly jobs that are filled with predominantly male employees). Additionally, given that women show greater emotional intensity than men (Brody & Hall, 2008), the relationships proposed in this dissertation may be weaker for men. Finally, gender could also potentially play a moderating on whether assimilative or contrastive emotions are experienced. For example, females are more naturally inclined to experience empathy and sympathy than men (Brody & Hall, 2008), suggesting that females (in comparison to males) may be more likely to assimilate rather than contrast. Although my response rates were all above 70% (specifically, 81.5%, 77.1%, and 79.6%), I was not able to capture all of the relationships in each network. Indeed, many scholars have highlighted the concerns over missing data in social network studies (e.g., Neal, 2008). That said, these issues are largely mitigated because my focus was on dyadic ties only and not on the structural features of the network (e.g., centrality). As noted by Lyons and Scott (2012), it is the structural features of the network that are most heavily influenced by missing data.

Future research may also consider indirect measures of differences in LMX quality rather than direct measures of perceived differences. I focused on perceived LMX social comparisons because this operationalization was most consistent with social comparison theory and was most appropriate for my research design. That said, most LMX research at the group-level (e.g., Liden

et al., 2006), dyadic-level (e.g., Tse et al., 2013), and individual-level (e.g., Henderson et al., 2008) has utilized indirect difference measures. I recommend that researchers test similar models using indirect measures. Alternatively, scholars could tie together both indirect and direct measures in the same study as Vidyarthi et al. (2010) accomplished on the individual-level.

I also recommend research that tests the proposed relationships using other types of research designs. For example, considering the range restriction in many of my substantive variables, researchers could maximize variance in LMX social comparisons and self-other overlap using laboratory experiments. Additionally, experience sampling designs may be able to better capture the substantive fluctuations in social comparison emotions that are elicited when individuals engage in LMX social comparisons in real time.

Other social comparison emotions may also be important to consider as outcomes of LMX social comparisons. I focused on envy, inspiration, schadenfreude, and sympathy because the social comparison emotions framework (R. H. Smith, 2000) positioned these emotions as prototypical emotions for each quadrant (i.e., upward contrastive, upward assimilative, downward contrastive, and downward assimilative). However, Smith also included other emotions in each quadrant. Considering the relative lack of results for schadenfreude and sympathy, future research may consider exploring pride or contempt as alternative downward contrastive social comparison emotions and pity or worry as alternative downward assimilative social comparison emotions.

Finally, future research may consider alternative outcomes of social comparison emotions. I focused on interpersonal discretionary work behaviors because past theory and research has demonstrated that such behaviors rectify social comparison imbalances (Cohen-Charash & Mueller, 2007; Spence et al., 2011). That said, other behaviors may also help relieve

social comparison tension. For example, social comparison theory and equity theory suggest that upward comparisons may lead individuals to improve one's performance. Indeed, one way to improve one's outcomes is to demonstrate higher inputs (Adams, 1965). Thus, performance may be a particularly important mechanism by which individuals attempt to rectify social comparison tension.

Conclusion

Although LMX is inherently a dyadic phenomenon, we typically study LMX as if it is an individual-level construct. With that in mind, one of the primary goals of this dissertation was to reintegrate the dyadic level of analysis back into our only dyadic leadership theory. Interestingly, the results of this dissertation suggested that leader-member relations have important implications for the interactions that occur between coworkers. Moreover, the results provided novel examples in which relatively lower LMX quality (under certain conditions) had beneficial workplace outcomes (in terms of inspiration and OCBI), challenging the implicit assumption in the literature that higher LMX quality always results in superior outcomes. I hope that future research continues to explore LMX relationships at multiple levels of analysis in order to continue to advance our understanding of the phenomenon.

APPENDIX

Table 14 – Complete Social Network Survey

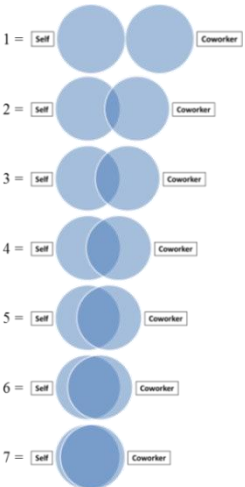
<p>LMX Social Comparison: Instructions – The following is a list of your coworkers. Consider each coworker, and then indicate the extent to which your relationship with your supervisor is better than or worse than the relationship your supervisor has with each coworker. In comparing your relationship with your supervisor versus each of your coworker’s relationship with the same supervisor, please consider the following factors:</p> <ul style="list-style-type: none"> a) whether your supervisor would be more or less likely to ask you (rather than your coworker) to fill in for him/her if he/she was unable to attend an important meeting b) whether you receive more or less support from your supervisor than does your coworker c) whether your working relationship with your supervisor is more or less effective than the working relationship your supervisor has with your coworker d) whether your supervisor is more or less loyal to you than he/she is to your coworker e) whether your supervisor enjoys your company more or less than the company of your coworker. <p>My relationship with my supervisor is <u>better than or worse than</u> the relationship my supervisor has with ...</p> <p><i>List of coworkers</i></p>	<p>Adapted from Vidyarthi et al. (2010)</p> <p>1 = much worse than 2 = somewhat worse than 3 = about the same as 4 = somewhat better than 5 = much better than</p>
<p>Self-Other Overlap: Instructions – The following is a list of your coworkers. Consider each coworker, and select the picture which best describes your relationship. The greater the overlap between yourself and your coworker, the more close the relationship.</p> <p><i>List of coworkers</i></p>	<p>Aron et al. (1992)</p>  <p>1 = Self Coworker 2 = Self Coworker 3 = Self Coworker 4 = Self Coworker 5 = Self Coworker 6 = Self Coworker 7 = Self Coworker</p>

Table 14 (cont'd)

<p>Social Comparison Referent:</p> <p>To what extent do you compare yourself to _____ when assessing your performance?</p> <p><i>List of coworkers</i></p>	<p>Shah (1998)</p> <p>1 = almost never 2 = occasionally 3 = sometimes 4 = often 5 = very often</p>
<p>Friendship:</p> <p>To what extent did you go out with _____ for social activities outside of work such as going out to an informal lunch, dinner, or drinks?</p> <p><i>List of coworkers</i></p>	<p>Oh, Chung, & Labianca (2004)</p> <p>1 = almost never 2 = occasionally 3 = sometimes 4 = often 5 = very often</p>
<p>Similarity:</p> <p>In general, how similar to you is _____?</p> <p><i>List of coworkers</i></p>	<p>Rosenblatt & Greenberg (1988)</p> <p>1 = very dissimilar 2 = moderately dissimilar 3 = slightly dissimilar 4 = neither dissimilar nor similar 5 = slightly similar 6 = moderately similar 7 = very similar</p>

Table 14 (cont'd)

<p>Social Comparison Emotions: INSTRUCTIONS: The following is a list of your coworkers. Consider each coworker, and then indicate the extent to which you feel each emotion when you interact with or are around this coworker.</p> <p>Envy <i>List of coworkers</i></p> <p>Inspiration <i>List of coworkers</i></p> <p>Pleasure at his/her Misfortunes <i>List of coworkers</i></p> <p>Sympathy <i>List of coworkers</i></p>	<p>Drawn from Smith (2000)</p> <p>1 = almost never 2 = occasionally 3 = sometimes 4 = often 5 = very often</p>
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Table 14 (cont'd)

Cover Page:

On the following pages, you will be asked for your agreement on numerous statements. These statements will focus on the interpersonal behaviors that you receive from your coworkers.

These interpersonal behaviors have **two major distinctions**.

The **first distinction** is whether the behavior is **positive** or **negative**. Positive behaviors result in favorable outcomes for you. Negative behaviors result in detrimental outcomes for you.

Examples of **positive behaviors** include *helping you with your job* or *taking the time to listen to your problems*.

Examples of **negative behaviors** include *acting rudely toward you* or *repeating a rumor about you*.

The **second distinction** is whether the behavior is more **active** or **passive**. Active behaviors tend to require more effort, directness, and intensity. Passive behaviors tend to require less effort, directness, and intensity.

Considering the same examples provided above for positive and negative behaviors:

Examples of **active** behaviors include *helping you with your job* or *acting rudely toward you*.

Examples of **passive** behaviors include *taking the time to listen to your problems* or *repeating a rumor about you*.

Please consider the distinctions between **positive** and **negative** behaviors as well as the distinctions between **active** and **passive** behaviors when answering the remaining questions.

Table 14 (cont'd)

<p>Receipt of Active OCBI: INSTRUCTIONS: The following is a list of your coworkers. Consider each coworker, and then indicate the extent to which <u>each coworker treats you well</u> by engaging in the following <u>positive, active</u> behaviors such as:</p> <ul style="list-style-type: none"> a) taking on extra responsibilities in order to help you when things get demanding at work b) helping you with difficult assignments, even when assistance is not directly requested c) assisting you with heavy work-loads even though it is not part of his/her job <p>_____ treats me well by engaging in the above <u>positive, active</u> behaviors.</p> <p><i>List of coworkers</i></p>	<p>Adapted from Settoon and Mossholder (2002)</p> <p>1 = almost never 2 = occasionally 3 = sometimes 4 = often 5 = very often</p>
<p>Receipt of Passive OCBI: INSTRUCTIONS: The following is a list of your coworkers. Consider each coworker, and then indicate the extent to which <u>each coworker treats you well</u> by engaging in the following <u>positive, passive</u> behaviors such as:</p> <ul style="list-style-type: none"> a) listening to you when you have to get something off your chest b) taking time to listen to your problems and worries c) taking a personal interest in you <p>_____ treats me well by engaging in the above <u>positive, passive</u> behaviors.</p> <p><i>List of coworkers</i></p>	<p>Adapted from Settoon and Mossholder (2002)</p> <p>1 = almost never 2 = occasionally 3 = sometimes 4 = often 5 = very often</p>

Table 14 (cont'd)

<p>Receipt of Active CWBI: INSTRUCTIONS: The following is a list of your coworkers. Consider each coworker, and then indicate the extent to which each coworker treats you poorly by engaging in the following <u>negative, active</u> behaviors such as:</p> <ul style="list-style-type: none"> a) acting rudely toward you at work b) publicly embarrassing you at work b) saying something hurtful to you at work <p>_____ treats me poorly by engaging in the above <u>negative, active</u> behaviors.</p> <p><i>List of coworkers</i></p>	<p>Adapted from Bing et al. (2007)</p> <ul style="list-style-type: none"> 1 = almost never 2 = occasionally 3 = sometimes 4 = often 5 = very often
<p>Receipt of Passive CWBI: INSTRUCTIONS: The following is a list of your coworkers. Consider each coworker, and then indicate the extent to which each coworker treats you poorly by engaging in the following <u>negative, passive</u> behaviors such as:</p> <ul style="list-style-type: none"> a) repeating a rumor or gossip about you at work. <p>_____ treats me poorly by engaging in the above <u>negative, passive</u> behaviors.</p> <p><i>List of coworkers</i></p>	<p>Adapted from Bing et al. (2007)</p> <ul style="list-style-type: none"> 1 = almost never 2 = occasionally 3 = sometimes 4 = often 5 = very often

Table 15 – Complete Individual Differences Survey

<p>Personality: INSTRUCTIONS: Please indicate your agreement or disagreement to how well this list of common traits describes yourself. Please be as accurate as possible, describing <u>how you are most of the time</u>, not as you wish to be in the future.</p>		<p>Saucier (1994) 1 = strongly disagree 2 = disagree 3 = neither agree nor disagree 4 = agree 5 = strongly agree (R) = Reverse-coded</p>
<p>Conscientiousness</p> <ol style="list-style-type: none"> 1) Organized 2) Systematic 3) Practical 4) Efficient 5) Sloppy (R) 6) Careless (R) 7) Disorganized (R) 8) Inefficient (R) 	<p>Agreeableness</p> <ol style="list-style-type: none"> 1) Cooperative 2) Warm 3) Kind 4) Sympathetic 5) Harsh (R) 6) Rude (R) 7) Unsympathetic (R) 8) Cold (R) 	
<p>Extraversion</p> <ol style="list-style-type: none"> 1) Energetic 2) Talkative 3) Bold 4) Extraverted 5) Bashful (R) 6) Quiet (R) 7) Shy (R) 8) Withdrawn (R) 	<p>Neuroticism</p> <ol style="list-style-type: none"> 1) Unenvious (R) 2) Relaxed (R) 3) Moody 4) Fretful 5) Temperamental 6) Touchy 7) Envious 8) Jealous 	
<p>Openness to Experience</p> <ol style="list-style-type: none"> 1) Creative 2) Complex 3) Intellectual 4) Deep 5) Philosophical 6) Imaginative 7) Unintellectual (R) 8) Uncreative (R) 		

Table 15 (cont'd)

<p>Job Satisfaction: INSTRUCTIONS: Below are a number of statements with which you may agree or disagree. Using the response scale provided, please indicate your agreement or disagreement with each statement.</p> <ol style="list-style-type: none"> 1) Most days I am enthusiastic about my work. 2) I feel fairly satisfied with my job. 3) I find real enjoyment in my work. 4) Each day of work seems like it will <i>never</i> end. (R) 5) I consider my job rather <i>unpleasant</i>. (R) 	<p>Brayfield and Rothe (1951)</p> <p>1 = strongly disagree 2 = disagree 3 = neither agree nor disagree 4 = agree 5 = strongly agree</p> <p>(R) = Reverse-coded</p>
<p>Leader-Member Exchange: INSTRUCTIONS: Below are a number of statements with which you may agree or disagree. Using the response scale provided, please indicate your agreement or disagreement with each statement.</p> <ol style="list-style-type: none"> 1) I usually know where I stand with my supervisor. 2) My supervisor understands my problems and needs. 3) My supervisor recognizes my potential. 4) Regardless of how much formal authority he/she has built into his/her position, my supervisor would be personally inclined to use his/her power to help me solve problems in my work. 5) I can count on my supervisor to “bail me out,” even at his/her own expense, when I really need it. 6) My supervisor has enough confidence in me that he/she would defend and justify my decisions if I were not present to do so. 7) I would characterize my working relationship with my supervisor as extremely effective. 	<p>Liden, Wayne, & Stilwell (1993)</p> <p>1 = strongly disagree 2 = disagree 3 = neither agree nor disagree 4 = agree 5 = strongly agree</p>
<p>Overall Supervisor Fairness: INSTRUCTIONS: Below are a number of statements with which you may agree or disagree. Using the response scale provided, please indicate your agreement or disagreement with each statement.</p> <ol style="list-style-type: none"> 1) Overall, I’m treated fairly by my supervisor. 2) In general, I can count on my supervisor to be fair. 3) In general, the treatment I receive from my supervisor is fair. 	<p>Ambrose & Schminke (2009)</p> <p>1 = strongly disagree 2 = disagree 3 = neither agree nor disagree 4 = agree 5 = strongly agree</p>

Table 15 (cont'd)

<p>Individual Identity: INSTRUCTIONS: Below are a number of statements with which you may agree or disagree. Using the response scale provided, please indicate your agreement or disagreement with each statement.</p> <ol style="list-style-type: none"> 1) I thrive on opportunities to demonstrate that my abilities or talents are better than those of other people. 2) I have a strong need to know how I stand in comparison to my coworkers. 3) I often compete with my friends. 4) I feel best about myself when I perform better than others. 5) I often find myself pondering over the ways that I am better or worse off than other people around me. 	<p>Selenta & Lord (2005)</p> <p>1 = strongly disagree 2 = disagree 3 = neither agree nor disagree 4 = agree 5 = strongly agree</p>
<p>Relational Identity: INSTRUCTIONS: Below are a number of statements with which you may agree or disagree. Using the response scale provided, please indicate your agreement or disagreement with each statement.</p> <ol style="list-style-type: none"> 1) If a friend was having a personal problem, I would help him/her even if it meant sacrificing my time or money. 2) I value friends who are caring, empathic individuals. 3) It is important to me that I uphold my commitments to significant people in my life. 4) Caring deeply about another person such as a close friend or relative is important to me. 5) Knowing that a close other acknowledges and values the role that I play in their life makes me feel like a worthwhile person. 	<p>Selenta & Lord (2005)</p> <p>1 = strongly disagree 2 = disagree 3 = neither agree nor disagree 4 = agree 5 = strongly agree</p>
<p>Demographics:</p> <p>Tenure Hours/Week Gender Age Race Education level</p>	

REFERENCES

REFERENCES

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 267-299). New York: Academic Press.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage
- Albert, S. (1977). Temporal comparison theory. *Psychological Review*, *84*, 485-503.
- Alicke, M. D., Klotz, M. L., Breitenbecher, D. L., Yurak, T. J., & Vredenburg, D. S. (1995). Personal contact, individuation, and the better-than-average effect. *Journal of Personality and Social Psychology*, *68*, 804-825.
- Ambrose, M. L., & Schminke, M. (2009). The role of overall justice judgments in organizational justice research: A test of mediation. *Journal of Applied Psychology*, *94*, 491-500.
- Aquino, K., & Douglas, S. (2003). Identity threat and antisocial behavior in organizations: The moderating effects of individual differences, aggressive modeling, and hierarchical status. *Organizational Behavior and Human Decision Processes*, *90*, 195-208.
- Aron, A., & Aron, E. N. (1986). *Love as the expansion of self: Understanding attraction and satisfaction*. New York: Hemisphere.
- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, *63*, 596-612.
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology*, *60*, 241-253.
- Aron, A., McLaughlin-Volpe, T., Mashek, D., Lewandowski, G., Wright, S. C., & Aron, E. N. (2004). Including others in the self. *European Review of Social Psychology*, *15*, 101-132.
- Ashkanasy, N. M., & Humphrey, R. H. (2011). A multi-level view of leadership and emotions: Leading with emotional labor. In A. Bryman, D. Collinson, K. Grint, B. Jackson & M. Uhl-Bien (Eds.), *Sage handbook of leadership* (pp. 363-377). London, UK: Sage.
- Ashkanasy, N. M., & Jordan, P. J. (2008). A multi-level view of leadership and emotion. In R. H. Humphrey (Ed.), *Affect and emotion: New directions in management theory and research* (pp. 19-41). Charlotte, NC: Information Age Publishing, Inc.
- Badahdah, A. M. (2005). Attribution and helping behavior: Testing the attribution-affect-help judgment model in a Saudi sample. *Psychological Reports*, *97*, 538-544.

- Ballinger, G. A., Lehman, D. W., & Schoorman, F. D. (2010). Leader-member exchange and turnover before and after succession events. *Organizational Behavior and Human Decision Processes*, *113*, 25-36.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182.
- Barsade, S. G., & Gibson, D. E. (2007). Why does affect matter in organizations? *Academy of Management Perspectives*, *21*, 36-59.
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, *85*, 349-360.
- Berry, C. M., Ones, D. S., & Sackett, P. R. (2007). Interpersonal deviance, organizational deviance, and their common correlates: A review and meta-analysis. *Journal of Applied Psychology*, *92*, 410-424.
- Bing, M. N., Stewart, S. M., Davison, H. K., Green, P. D., McIntyre, M. D., & James, L. R. (2007). Integrative typology of personality assessment for aggression: Implications for predicting counterproductive workplace behavior. *Journal of Applied Psychology*, *92*, 722-744.
- Blader, S. L., Wiesenfeld, B. M., Fortin, M., & Wheeler-Smith, S. L. (2013). Fairness lies in the heart of the beholder: How the social emotions of third parties influence reactions to injustice. *Organizational Behavior and Human Decision Processes*, *121*, 62-80.
- Boies, K., & Howell, J. A. (2006). Leader-member exchange in teams: An examination of the interaction between relationship differentiation and mean lmx in explaining team-level outcomes. *Leadership Quarterly*, *17*, 246-257.
- Bolino, M. C., & Turnley, W. H. (2009). Relative deprivation among employees in lower-quality leader-member exchange relationships. *Leadership Quarterly*, *20*, 276-286.
- Borgatti, S. P., Everett, M. G., & Freeman, L. C. (2002). *Ucinet for windows: Software for social network analysis*. Harvard, MA: Analytic Technologies.
- Bowler, W. M., & Brass, D. J. (2006). Relational correlates of interpersonal citizenship behavior: A social network perspective. *Journal of Applied Psychology*, *91*, 70-82.
- Bowling, N. A., & Beehr, T. A. (2006). Workplace harassment from the victim's perspective: A theoretical model and meta-analysis. *Journal of Applied Psychology*, *91*, 998-1012.
- Breaugh, J. A. (2008). Important considerations in using statistical procedures to control for nuisance variables in non-experimental studies. *Human Resource Management Review*, *18*, 282-293.

- Brickman, P., & Bulman, R. J. (1977). Pleasure and pain in social comparison. In J. Suls & R. L. Miller (Eds.), *Social comparison processes: Theoretical and empirical perspectives* (pp. 149–186). Washington, DC: Hemisphere.
- Brigham, N. L., Kelso, K. A., Jackson, M. A., & Smith, R. H. (1997). The roles of invidious comparisons and deservingness in sympathy and schadenfreude. *Basic and Applied Social Psychology, 19*, 363-380.
- Brody, L. R., & Hall, J. A. (2008). Gender and emotion in context. In M. Lewis, J. M. Haviland-Jones & L. F. Barrett (Eds.), *Handbook of emotions* (pp. 338–349). New York: Guilford.
- Brown, J. D., Novick, N. J., Lord, K. A., & Richards, J. M. (1992). When gulliver travels: Social context, psychological closeness, and self-appraisals. *Journal of Personality and Social Psychology, 62*, 717-727.
- Brunswick, E. (1947). *Systematic and representative design of psychological experiments*. Berkeley: University of California.
- Buss, A. H. (1961). *The psychology of aggression*. New York: Wiley.
- Buunk, A. P., & Gibbons, F. X. (2006). Social comparison orientation: A new perspective on those who do and those who don't compare with others. In S. Guimond (Ed.), *Social comparison and social psychology: Understanding cognition, intergroup relations, and culture*. (pp. 15-32). New York, NY: Cambridge University Press.
- Buunk, A. P., & Gibbons, F. X. (2007). Social comparison: The end of a theory and the emergence of a field. *Organizational Behavior and Human Decision Processes, 102*, 3-21.
- Buunk, A. P., Peiro, J. M., & Griffioen, C. (2007). A positive role model may stimulate career-oriented behavior. *Journal of Applied Social Psychology, 37*, 1489-1500.
- Buunk, B. P. (1995). Comparison direction and comparison dimension among disabled individuals: Toward a refined conceptualization of social comparison under stress. *Personality and Social Psychology Bulletin, 21*, 316-330.
- Buunk, B. P., Collins, R. L., Taylor, S. E., VanYperen, N. W., & Dakof, G. A. (1990). The affective consequences of social comparison: Either direction has its ups and downs. *Journal of Personality and Social Psychology, 59*, 1238-1249.
- Buunk, B. P., Schaufeli, W. B., & Ybema, J. F. (1994). Burnout, uncertainty, and the desire for social comparison among nurses. *Journal of Applied Social Psychology, 24*, 1701-1718.
- Buunk, B. P., VanYperen, N. W., Taylor, S. E., & Collins, R. L. (1991). Social comparison and the drive upward revisited: Affiliation as a response to marital stress. *European Journal of Social Psychology, 21*, 529-546.

- Buunk, B. P., Zurriaga, R., Péiró, J. M., Nauta, A., & Gosalvez, I. (2005). Social comparisons at work as related to a cooperative social climate and to individual differences in social comparison orientation. *Applied Psychology: An International Review*, *54*, 61-80.
- Byrne, D. (1971). *The attraction paradigm*. New York: Academic Press.
- Camps, J., Stouten, J., Tuteleers, C., & van Son, K. (2014). Smells like cooperation? Unpleasant body odor and people's perceptions and helping behaviors. *Journal of Applied Social Psychology*, *44*, 87-93.
- Chattopadhyay, P. (1999). Beyond direct and symmetrical effects: The influence of demographic dissimilarity on organizational citizenship behavior. *Academy of Management Journal*, *42*, 273-287.
- Chen, M. J., Su, K. H., & Tsai, W. P. (2007). Competitive tension: The awareness-motivation-capability perspective. *Academy of Management Journal*, *50*, 101-118.
- Chen, Y., Yu, E., & Son, J. (2014). Beyond leader-member exchange (lmx) differentiation: An indigenous approach to leader-member relationship differentiation. *Leadership Quarterly*, *25*, 611-627.
- Cikara, M., Botvinick, M. M., & Fiske, S. T. (2011). Us versus them: Social identity shapes neural responses to intergroup competition and harm. *Psychological Science*, *22*, 306-313.
- Cohen-Charash, Y. (2009). Episodic envy. *Journal of Applied Social Psychology*, *39*, 2128-2173.
- Cohen-Charash, Y., & Mueller, J. S. (2007). Does perceived unfairness exacerbate or mitigate interpersonal counterproductive work behaviors related to envy? *Journal of Applied Psychology*, *92*, 666-680.
- Collins, R. L. (1996). For better or worse: The impact of upward social comparison on self-evaluations. *Psychological Bulletin*, *119*, 51-69.
- Colquitt, J. A., Baer, M. D., Long, D. M., & Halvorsen-Ganepola, M. D. K. (2014). Scale indicators of social exchange relationships: A comparison of relative content validity. *Journal of Applied Psychology*, *99*, 599-618.
- Corcoran, K., Crusius, J., & Mussweiler, T. (2011). Social comparison: Motives, standards, and mechanisms. In D. Chadee (Ed.), *Theories of social psychology*. Oxford, UK: Wiley-Blackwell.
- Crosby, F. (1976). A model of egoistical relative deprivation. *Psychological Review*, *83*, 85-113.
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2007). The bias map: Behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology*, *92*, 631-648.

- Dalal, R. S. (2005). A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior. *Journal of Applied Psychology, 90*, 1241-1255.
- Dalal, R. S., Lam, H., Weiss, H. M., Welch, E. R., & Hulin, C. L. (2009). A within-person approach to work behavior and performance: Concurrent and lagged citizenship-counterproductivity associations, and dynamic relationships with affect and overall job performance. *Academy of Management Journal, 52*, 1051-1066.
- Dansereau, F., Graen, G. B., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational Behavior and Human Decision Processes, 13*, 46-78.
- Dasborough, M. T. (2006). Cognitive asymmetry in employee emotional reactions to leadership behaviors. *The Leadership Quarterly, 17*, 163-178.
- De Cremer, D., & van Knippenberg, D. (2002). How do leaders promote cooperation? The effects of charisma and procedural fairness. *Journal of Applied Psychology, 87*, 858-866.
- Dias, L., & Lobel, M. (1997). Social comparison in medically high-risk pregnant women. *Journal of Applied Social Psychology, 27*, 1629-1649.
- Dienesch, R. M., & Liden, R. C. (1986). Leader-member exchange model of leadership: A critique and further development. *Academy of Management Review, 11*, 618-634.
- Duchon, D., Green, S. G., & Taber, T. D. (1986). Vertical dyad linkage - a longitudinal assessment of antecedents, measures, and consequences. *Journal of Applied Psychology, 71*, 56-60.
- Duffy, M. K., Ganster, D. C., & Pagon, M. (2002). Social undermining in the workplace. *Academy of Management Journal, 45*, 331-351.
- Duffy, M. K., Scott, K. L., Shaw, J. D., Tepper, B. J., & Aquino, K. (2012). A social context model of envy and social undermining. *Academy of Management Journal, 55*, 643-666.
- Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A meta-analysis of antecedents and consequences of leader-member exchange: Integrating the past with an eye toward the future. *Journal of Management, 38*, 1715-1759.
- Dunn, J. R., & Schweitzer, M. E. (2006). Green and mean: Envy and social undermining in organizations. In A. E. Tenbrunsel (Ed.), *Research on managing groups and teams: Ethics in groups* (Vol. 8, pp. 177-197). London: Elsevier.
- Dvash, J., Gilam, G., Ben-Ze'ev, A., Hendler, T., & Shamay-Tsoory, S. G. (2010). The envious brain: The neural basis of social comparison. *Human Brain Mapping, 31*, 1741-1750.

- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods, 12*, 1-22.
- Eisenberg, N., Fabes, R. A., Miller, P. A., Fultz, J., Shell, R., Mathy, R. M., & Reno, R. R. (1989). Relation of sympathy and personal distress to prosocial behavior: A multimethod study. *Journal of Personality and Social Psychology, 57*, 55-66.
- Eisenberg, N., Miller, P. A., Schaller, M., Fabes, R. A., Fultz, J., Shell, R., & Shea, C. L. (1989). The role of sympathy and altruistic personality traits in helping: A reexamination. *Journal of Personality, 57*, 41-67.
- Ellis, S., & Davidi, I. (2005). After-event reviews: Drawing lessons from successful and failed experience. *Journal of Applied Psychology, 90*, 857-871.
- Epitropaki, O., & Martin, R. (2013). Transformational–transactional leadership and upward influence: The role of relative leader–member exchanges (rlmx) and perceived organizational support (pos). *The Leadership Quarterly, 24*, 299-315.
- Erdogan, B., & Bauer, T. N. (2010). Differentiated leader-member exchanges: The buffering role of justice climate. *Journal of Applied Psychology, 95*, 1104-1120.
- Erdogan, B., & Bauer, T. N. (2015a). Leader-member exchange theory: A glimpse into the future. In T. N. Bauer & B. Erdogan (Eds.), *The oxford handbook of leader-member exchange* (pp. 413-421). New York: Oxford University Press.
- Erdogan, B., & Bauer, T. N. (2015b). *The oxford handbook of leader-member exchange*. New York: Oxford University Press.
- Exline, J. J., & Lobel, M. (2001). Private gain, social strain: Do relationship factors shape responses to outperformance? *European Journal of Social Psychology, 31*, 593-607.
- Feather, N. T., & Sherman, R. (2002). Envy, resentment, schadenfreude, and sympathy: Reactions to deserved and undeserved achievement and subsequent failure. *Personality and Social Psychology Bulletin, 28*, 953-961.
- Feather, N. T., Wenzel, M., & McKee, I. R. (2013). Integrating multiple perspectives on schadenfreude: The role of deservingness and emotions. *Motivation and Emotion, 37*, 574-585.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*, 117-140.
- Fischer, P., Kastenmüller, A., Frey, D., & Peus, C. (2009). Social comparison and information transmission in the work context. *Journal of Applied Social Psychology, 39*, 42-61.
- Ford, L. R., & Seers, A. (2006). Relational leadership and team climates: Pitting differentiation versus agreement. *The Leadership Quarterly, 17*, 258-270.

- Gardner, W. L., Gabriel, S., & Hochschild, L. (2002). When you and i are "we," you are not threatening: The role of self-expansion in social comparison. *Journal of Personality and Social Psychology*, 82, 239-251.
- Gelbrich, K. (2011). I have paid less than you! The emotional and behavioral consequences of advantaged price inequality. *Journal of Retailing*, 87, 207-224.
- Gerard, H. B. (1963). Emotional uncertainty and social comparison. *Journal of Abnormal Psychology*, 66, 568-573.
- Gerard, H. B., & Rabbie, J. M. (1961). Fear and social comparison. *Journal of Abnormal and Social Psychology*, 62, 586-592.
- Gerstner, C. R., & Day, D. V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82, 827-844.
- Gibbons, F. X. (1986). Social comparison and depression - company effect on misery. *Journal of Personality and Social Psychology*, 51, 140-148.
- Gibbons, F. X., & Boney McCoy, S. (1991). Self-esteem, similarity, and reactions to active versus passive downward comparison. *Journal of Personality and Social Psychology*, 60, 414-424.
- Gibbons, F. X., Gerrard, M., Lando, H. A., & McGovern, P. G. (1991). Social comparison and smoking cessation - the role of the typical smoker. *Journal of Experimental Social Psychology*, 27, 239-258.
- Gino, F., & Pierce, L. (2010). Robin hood under the hood: Wealth-based discrimination in illicit customer help. *Organization Science*, 21, 1176-1194.
- Goethals, G. R., & Darley, J. M. (1987). Social comparison theory: Self-evaluation and group life. In B. Mullen & G. R. Goethals (Eds.), *Theories of group behavior* (pp. 21-47): Springer New York.
- Gooty, J., Serban, A., Thomas, J. S., Gavin, M. B., & Yammarino, F. J. (2012). Use and misuse of levels of analysis in leadership research: An illustrative review of leader-member exchange. *The Leadership Quarterly*, 23, 1080-1103.
- Gooty, J., & Yammarino, F. J. (in press). The leader-member exchange relationship: A multisource, cross-level investigation. *Journal of Management*.
- Graen, G. B. (1976). Role-making processes within complex organizations. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1201-1245). Chicago: Rand McNally.
- Graen, G. B., & Cashman, J. (1975). A role-making model of leadership in formal organizations: A developmental approach. In J. G. Hunt & L. L. Larson (Eds.), *Leadership frontiers* (pp. 143-165). Kent, OH: Kent State University Press.

- Graen, G. B., Liden, R. C., & Hoel, W. (1982). Role of leadership in the employee withdrawal process. *Journal of Applied Psychology, 67*, 868-872.
- Graen, G. B., & Scandura, T. A. (1987). Toward a psychology of dyadic organizing. *Research in Organizational Behavior, 9*, 175-208.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (lmx) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *Leadership Quarterly, 6*, 219-247.
- Greenberg, J. (1988). Equity and workplace status: A field experiment. *Journal of Applied Psychology, 73*, 606-613.
- Greenberg, J., Ashton-James, C. E., & Ashkanasy, N. M. (2007). Social comparison processes in organizations. *Organizational Behavior and Human Decision Processes, 102*, 22-41.
- Greitemeyer, T., & Rudolph, U. (2003). Help giving and aggression from an attributional perspective: Why and when we help or retaliate. *Journal of Applied Social Psychology, 33*, 1069-1087.
- Harris, T. B., Li, N., & Kirkman, B. L. (2014). Leader-member exchange (lmx) in context: How lmx differentiation and lmx relational separation attenuate lmx's influence on ocb and turnover intention. *Leadership Quarterly, 25*, 314-328.
- Haynie, J. J., Cullen, K. L., Lester, H. F., Winter, J., & Svyantek, D. J. (2014). Differentiated leader-member exchange, justice climate, and performance: Main and interactive effects. *Leadership Quarterly, 25*, 912-922.
- Helgeson, V. S., & Taylor, S. E. (1993). Social comparisons and adjustment among cardiac patients. *Journal of Applied Social Psychology, 23*, 1171-1195.
- Henderson, D. J., Liden, R. C., Glibkowski, B. C., & Chaudhry, A. (2009). Lmx differentiation: A multilevel review and examination of its antecedents and outcomes. *The Leadership Quarterly, 20*, 517-534.
- Henderson, D. J., Wayne, S. J., Shore, L. A., Bommer, W. H., & Tetrick, L. E. (2008). Leader-member exchange, differentiation, and psychological contract fulfillment: A multilevel examination. *Journal of Applied Psychology, 93*, 1208-1219.
- Holland, P. W., & Leinhardt, S. (1973). The structural implications of measurement error in sociometry. *The Journal of Mathematical Sociology, 3*, 85-111.
- Hooper, D. T., & Martin, R. (2008). Beyond personal leader-member exchange (lmx) quality: The effects of perceived lmx variability on employee reactions. *Leadership Quarterly, 19*, 20-30.

- Hu, J., & Liden, R. C. (2013). Relative leader–member exchange within team contexts: How and when social comparison impacts individual effectiveness. *Personnel Psychology*, *66*, 127-172.
- Ilies, R., Nahrgang, J. D., & Morgeson, F. P. (2007). Leader-member exchange and citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, *92*, 269-277.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, *89*, 755-768.
- Keith, N., & Frese, M. (2008). Effectiveness of error management training: A meta-analysis. *Journal of Applied Psychology*, *93*, 59-69.
- Kemmelmeier, M., & Oyserman, D. (2001). The ups and downs of thinking about a successful other: Self-construals and the consequences of social comparisons. *European Journal of Social Psychology*, *31*, 311-320.
- Kilduff, M., & Krackhardt, D. (1994). Bringing the individual back in: A structural analysis of the internal market for reputation in organizations. *Academy of Management Journal*, *37*, 87.
- Kim, E., & Glomb, T. M. (2014). Victimization of high performers: The roles of envy and work group identification. *Journal of Applied Psychology*, *99*, 619-634.
- Kulik, J. A., & Mahler, H. I. M. (2000). Social comparison, affiliation, and emotional contagion under threat. In J. Suls & L. Wheeler (Eds.), *Handbook of social comparison: Theory and research*. (pp. 295-320). Dordrecht, Netherlands: Kluwer Academic Publishers.
- Lam, C. K., Van der Vegt, G. S., Walter, F., & Huang, X. (2011). Harming high performers: A social comparison perspective on interpersonal harming in work teams. *Journal of Applied Psychology*, *96*, 588-601.
- Larsen, R. J., & Diener, E. (1992). Promises and problems with the circumplex model of emotion. In M. S. Clark (Ed.), *Review of personality and social psychology: Emotion* (pp. 25–59). Newbury Park, CA: Sage.
- 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*, 534-544.
- Leach, C. W., & Spears, R. (2009). Dejection at in-group defeat and schadenfreude toward second- and third-party out-groups. *Emotion*, *9*, 659-665.
- Leach, C. W., Spears, R., Branscombe, N. R., & Doosje, B. (2003). Malicious pleasure: Schadenfreude at the suffering of another group. *Journal of Personality and Social Psychology*, *84*, 932-943.

- LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology, 87*, 52-65.
- Levine, J. M., & Moreland, R. L. (1987). Social comparison and outcome evaluation in group contexts. In J. C. Masters & W. P. Smith (Eds.), *Social comparison, social justice, and relative deprivation: Theoretical, empirical, and policy perspectives*. (pp. 105-127): Lawrence Erlbaum Associates, Inc, Hillsdale, NJ.
- Li, A. N., & Liao, H. (2014). How do leader–member exchange quality and differentiation affect performance in teams? An integrated multilevel dual process model. *Journal of Applied Psychology, 99*, 847-866.
- Li, H., Feng, Z. Y., Liu, C. L., & Cheng, D. J. (2014). The impact of relative leader-member exchange on employees' work behaviors as mediated by psychological contract fulfillment. *Social Behavior and Personality, 42*, 79-88.
- Liao, H., Joshi, A., & Chuang, A. C. (2004). Sticking out like a sore thumb: Employee dissimilarity and deviance at work. *Personnel Psychology, 57*, 969-1000.
- Liao, H., Liu, D., & Loi, R. (2010). Looking at both sides of the social exchange coin: A social cognitive perspective on the joint effects of relationship quality and differentiation on creativity. *Academy of Management Journal, 53*, 1090-1109.
- Liden, R. C., Erdogan, B., Wayne, S. J., & Sparrowe, R. T. (2006). Leader-member exchange, differentiation, and task interdependence: Implications for individual and group performance. *Journal of Organizational Behavior, 27*, 723-746.
- Liden, R. C., & Graen, G. B. (1980). Generalizability of the vertical dyad linkage model of leadership. *Academy of Management Journal, 23*, 451-465.
- Liden, R. C., & Maslyn, J. M. (1998). Multidimensionality of leader-member exchange: An empirical assessment through scale development. *Journal of Management, 24*, 43-72.
- Liden, R. C., Sparrowe, R. T., & Wayne, S. J. (1997). Leader–member exchange theory: The past and potential for the future. In G. R. Ferris (Ed.), *Research in personnel and human resources management* (pp. 47–119). Oxford, England: Elsevier Science.
- Liden, R. C., Wayne, S. J., & Stilwell, D. (1993). A longitudinal study on the early development of leader-member exchanges. *Journal of Applied Psychology, 78*, 662-674.
- Liu, D., Hernandez, M., & Wang, L. (2014). The role of leadership and trust in creating structural patterns of team procedural justice: A social network investigation. *Personnel Psychology, 67*, 801–845.
- Lockwood, P. (2002). Could it happen to you? Predicting the impact of downward comparisons on the self. *Journal of Personality and Social Psychology, 82*, 343-358.

- Lockwood, P., Jordan, C. H., & Kunda, Z. (2002). Motivation by positive or negative role models: Regulatory focus determines who will best inspire us. *Journal of Personality and Social Psychology*, 83, 854-864.
- Lockwood, P., & Kunda, Z. (1997). Superstars and me: Predicting the impact of role models on the self. *Journal of Personality and Social Psychology*, 73, 91-103.
- Lockwood, P., Shaughnessy, S. C., Fortune, J. L., & Tong, M. O. (2012). Social comparisons in novel situations: Finding inspiration during life transitions. *Personality and Social Psychology Bulletin*, 38, 985-996.
- Lott, A. J., & Lott, B. E. (1965). Group cohesiveness as interpersonal attraction: A review of relationships with antecedent and consequent variables. *Psychological Bulletin*, 64, 259-309.
- Lyons, B. J., & Scott, B. A. (2012). Integrating social exchange and affective explanations for the receipt of help and harm: A social network approach. *Organizational Behavior and Human Decision Processes*, 117, 66-79.
- Ma, L., & Qu, Q. (2010). Differentiation in leader-member exchange: A hierarchical linear modeling approach. *Leadership Quarterly*, 21, 733-744.
- Madsen, P. M., & Desai, V. (2010). Failing to learn? The effects of failure and success on organizational learning in the global orbital launch vehicle industry. *Academy of Management Journal*, 53, 451-476.
- Major, B., Testa, M., & Blysm, W. H. (1991). Responses to upward and downward social comparisons: The impact of esteem-relevance and perceived control. In J. S. T. A. Wills (Ed.), *Social comparison: Contemporary theory and research* (pp. 237-260). Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc.
- Marjanovic, Z., Greenglass, E. R., Struthers, C. W., & Faye, C. (2009). Helping following natural disasters: A social-motivational analysis. *Journal of Applied Social Psychology*, 39, 2604-2625.
- Marsden, P. V. (1990). Network data and measurement. In W. R. Scott & J. Blake (Eds.), *Annual review of sociology* (16 ed., pp. 435-463). Palo Alto, CA: Annual Reviews.
- Maslyn, J. M., & Uhl-Bien, M. (2001). Leader-member exchange and its dimensions: Effects of self-effort and other's effort on relationship quality. *Journal of Applied Psychology*, 86, 697-708.
- Masters, J. C., & Keil, L. J. (1987). Generic comparison processes in human judgment and behavior. In J. C. Masters & W. P. Smith (Eds.), *Social comparison, social justice, and relative deprivation: Theoretical, empirical, and policy perspectives*. (pp. 11-54): Lawrence Erlbaum Associates, Inc, Hillsdale, NJ.

- Matta, F. K., & Van Dyne, L. (2015). Leader–member exchange and performance: Where we are and where we go from here. In T. N. Bauer & B. Erdogan (Eds.), *The oxford handbook of leader-member exchange* (pp. 157-174). New York: Oxford University Press.
- McClane, W. E. (1991). Implications of member role differentiation: Analysis of a key concept in the lmx model of leadership. *Group & Organization Management, 16*, 102-113.
- McGinley, M., Carlo, G., Crockett, L. J., Raffaelli, M., Stone, R. A. T., & Iturbide, M. I. (2010). Stressed and helping: The relations among acculturative stress, gender, and prosocial tendencies in mexican americans. *The Journal of Social Psychology, 150*, 34-56.
- Menec, V. H., & Perry, R. P. (1998). Reactions to stigmas among canadian students: Testing an attribution-affect-help judgment model. *The Journal of Social Psychology, 138*, 443-453.
- Mitchell, M. S., Vogel, R. M., & Folger, R. (2015). Third parties' reactions to the abusive supervision of coworkers. *Journal of Applied Psychology, 100*, 1040-1055.
- Moore, D. A. (2007). Not so above average after all: When people believe they are worse than average and its implications for theories of bias in social comparison. *Organizational Behavior and Human Decision Processes, 102*, 42-58.
- Moscattelli, S., Albarello, F., Prati, F., & Rubini, M. (2014). Badly off or better off than them? The impact of relative deprivation and relative gratification on intergroup discrimination. *Journal of Personality and Social Psychology, 107*, 248-264.
- Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. *Journal of Personality and Social Psychology, 89*, 852-863.
- Mussweiler, T. (2001a). Focus of comparison as a determinant of assimilation versus contrast in social comparison. *Personality and Social Psychology Bulletin, 27*, 38-47.
- Mussweiler, T. (2001b). 'Seek and ye shall find': Antecedents of assimilation and contrast in social comparison. *European Journal of Social Psychology, 31*, 499-509.
- Mussweiler, T. (2003). Comparison processes in social judgment: Mechanisms and consequences. *Psychological Review, 110*, 472-489.
- Mussweiler, T., Rüter, K., & Epstude, K. (2004). The ups and downs of social comparison: Mechanisms of assimilation and contrast. *Journal of Personality and Social Psychology, 87*, 832-844.
- Naidoo, L. J., Scherbaum, C. A., Goldstein, H. W., & Graen, G. B. (2011). A longitudinal examination of the effects of lmx, ability, and differentiation on team performance. *Journal of Business and Psychology, 26*, 347-357.
- Neal, J. W. (2008). "Kracking" the missing data problem: Applying krackhardt's cognitive social structures to school-based social networks. *Sociology of Education, 81*, 140-162.

- Nishii, L. H., & Mayer, D. M. (2009). Do inclusive leaders help to reduce turnover in diverse groups? The moderating role of leader-member exchange in the diversity to turnover relationship. *Journal of Applied Psychology, 94*, 1412-1426.
- O*NET. (2016). Registered nurses (o*net report no. 29-1141.00), from <http://www.onetonline.org/link/summary/29-1141.00>
- Oh, H. S., Chung, M. H., & Labianca, G. (2004). Group social capital and group effectiveness: The role of informal socializing ties. *Academy of Management Journal, 47*, 860-875.
- Omilion-Hodges, L. M., & Baker, C. R. (2013). Contextualizing lmx within the workgroup: The effects of lmx and justice on relationship quality and resource sharing among peers. *Leadership Quarterly, 24*, 935-951.
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington books.
- Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology, 48*, 775-802.
- Pelletier, K. L. (2012). Perceptions of and reactions to leader toxicity: Do leader-follower relationships and identification with victim matter? *The Leadership Quarterly, 23*, 412-424.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management, 26*, 513-563.
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional-scaling study. *Academy of Management Journal, 38*, 555-572.
- Rockstuhl, T., Dulebohn, J. H., Ang, S., & Shore, L. M. (2012). Leader-member exchange (lmx) and culture: A meta-analysis of correlates of lmx across 23 countries. *Journal of Applied Psychology, 97*, 1097-1130.
- Rosenblatt, A., & Greenberg, J. (1988). Depression and interpersonal attraction: The role of perceived similarity. *Journal of Personality and Social Psychology, 55*, 112-119.
- Rudolph, U., Roesch, S., Greitemeyer, T., & Weiner, B. (2004). A meta-analytic review of help giving and aggression from an attributional perspective: Contributions to a general theory of motivation. *Cognition and Emotion, 18*, 815-848.
- Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology, 39*, 1161-1178.
- Salovey, P., & Rodin, J. (1984). Some antecedents and consequences of social-comparison jealousy. *Journal of Personality and Social Psychology, 47*, 780-792.

- Saucier, G. (1994). Mini-markers: A brief version of goldberg's unipolar big-five markers. *Journal of Personality Assessment, 63*, 506-516.
- Schachter, S. (1959). *The psychology of affiliation*. Palo Alto, CA: Stanford University Press.
- Schriesheim, C. A., Castro, S. L., & Cogliser, C. C. (1999). Leader-member exchange (lmx) research: A comprehensive review of theory, measurement, and data-analytic practices. *Leadership Quarterly, 10*, 63-113.
- Schwarz, N., & Clore, G. L. (1996). Feelings and phenomenal experiences. In E. Higgins & A. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 433-465). New York: Guilford Press.
- Schwinghammer, S. A., Stapel, D. A., & Blanton, H. (2006). Different selves have different effects: Self-activation and defensive social comparison. *Personality and Social Psychology Bulletin, 32*, 27-39.
- Schyns, B. (2006). Are group consensus in leader-member exchange (lmx) and shared work values related to organizational outcomes? *Small Group Research, 37*, 20-35.
- Seacat, J. D., Hirschman, R., & Mickelson, K. D. (2007). Attributions of hiv onset controllability, emotional reactions, and helping intentions: Implicit effects of victim sexual orientation. *Journal of Applied Social Psychology, 37*, 1442-1461.
- Selenta, C., & Lord, R. G. (2005). *Development of the levels of self-concept scale: Measuring the individual, relational, and collective levels*.
- Selfhout, M., Denissen, J., Branje, S., & Meeus, W. (2009). In the eye of the beholder: Perceived, actual, and peer-rated similarity in personality, communication, and friendship intensity during the acquaintanceship process. *Journal of Personality and Social Psychology, 96*, 1152-1165.
- Settoon, R. P., & Mossholder, K. W. (2002). Relationship quality and relationship context as antecedents of person- and task-focused interpersonal citizenship behavior. *Journal of Applied Psychology, 87*, 255-267.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston: Houghton Mifflin.
- Shah, P. P. (1998). Who are employees' social referents? Using a network perspective to determine referent others. *Academy of Management Journal, 41*, 249-268.
- Shapiro, D. L., Boss, A. D., Salas, S., Tangirala, S., & Von Glinow, M. A. (2011). When are transgressing leaders punitively judged? An empirical test. *Journal of Applied Psychology, 96*, 412-422.

- Sharrock, R., Day, A., Qazi, F., & Brewin, C. R. (1990). Explanations by professional care staff, optimism and helping-behavior - an application of attribution theory. *Psychological Medicine*, 20, 849-855.
- Shaw, J. C., Wild, E., & Colquitt, J. A. (2003). To justify or excuse?: A meta-analytic review of the effects of explanations. *Journal of Applied Psychology*, 88, 444-458.
- Sherony, K. M., & Green, S. G. (2002). Coworker exchange: Relationships between coworkers, leader-member exchange, and work attitudes. *Journal of Applied Psychology*, 87, 542-548.
- Sias, P. M., & Jablin, F. M. (1995). Differential superior-subordinate relations, perceptions of fairness, and coworker communication. *Human Communication Research*, 22, 5-38.
- Sinclair, L., & Fehr, B. (2005). Voice versus loyalty: Self-construals and responses to dissatisfaction in romantic relationships. *Journal of Experimental Social Psychology*, 41, 298-304.
- Sitkin, S. B. (1992). Learning through failure - the strategy of small losses. *Research in Organizational Behavior*, 14, 231-266.
- Smith, H. J., Pettigrew, T. F., Pippin, G. M., & Bialosiewicz, S. (2012). Relative deprivation: A theoretical and meta-analytic review. *Personality and Social Psychology Review*, 16, 203-232.
- Smith, R. H. (2000). Assimilative and contrastive emotional reactions to upward and downward social comparisons. In J. Suls & L. Wheeler (Eds.), *Handbook of social comparison: Theory and research* (pp. 173–200). Dordrecht, Netherlands: Kluwer Academic Publishers.
- Smith, R. H., Parrott, W. G., Ozer, D., & Moniz, A. (1994). Subjective injustice and inferiority as predictors of hostile and depressive feelings in envy. *Personality and Social Psychology Bulletin*, 20, 705-711.
- Sparrowe, R. T., & Liden, R. C. (1997). Process and structure in leader-member exchange. *Academy of Management Review*, 22, 522-552.
- Spector, P. E., & Brannick, M. T. (2011). Methodological urban legends: The misuse of statistical control variables. *Organizational Research Methods*, 14, 287-305.
- Spector, P. E., & Fox, S. (2002). An emotion-centered model of voluntary work behavior: Some parallels between counterproductive work behavior and organizational citizenship behavior. *Human Resource Management Review*, 12, 269-292.
- Spector, P. E., Zapf, D., Chen, P. Y., & Frese, M. (2000). Why negative affectivity should not be controlled in job stress research: Don't throw out the baby with the bath water. *Journal of Organizational Behavior*, 21, 79-95.

- Spence, J. R., Ferris, D. L., Brown, D. J., & Heller, D. (2011). Understanding daily citizenship behaviors: A social comparison perspective. *Journal of Organizational Behavior, 32*, 547-571.
- Stam, W. (2010). Industry event participation and network brokerage among entrepreneurial ventures. *Journal of Management Studies, 47*, 625-653.
- Stapel, D. A., & Koomen, W. (2001). I, we, and the effects of others on me: How self-construal level moderates social comparison effects. *Journal of Personality and Social Psychology, 80*, 766-781.
- Stewart, M. M., & Johnson, O. E. (2009). Leader—member exchange as a moderator of the relationship between work group diversity and team performance. *Group & Organization Management, 34*, 507-535.
- Suls, J., Marco, C. A., & Tobin, S. (1991). The role of temporal comparison, social comparison, and direct appraisal in the elderly's self-evaluations of health. *Journal of Applied Social Psychology, 21*, 1125-1144.
- Tai, K., Narayanan, J., & McAllister, D. J. (2012). Envy as pain: Rethinking the nature of envy and its implications for employees and organizations. *Academy of Management Review, 37*, 107-129.
- Tajfel, H. (1982). *Social identity and inter group behavior*. Cambridge: Cambridge University Press.
- Taylor, S. E., & Lobel, M. (1989). Social-comparison activity under threat - downward evaluation and upward contacts. *Psychological Review, 96*, 569-575.
- Tennen, H., McKee, T. E., & Affleck, G. (2000). Social comparison processes in health and illness. In J. Suls & L. Wheeler (Eds.), *Handbook of social comparison: Theory and research*. (pp. 443-483). Dordrecht, Netherlands: Kluwer Academic Publishers.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In B. Leonard (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 181-227). San Diego, CA: Academic Press.
- Tse, H. H. M., Ashkanasy, N. M., & Dasborough, M. T. (2012). Relative leader–member exchange, negative affectivity and social identification: A moderated-mediation examination. *Leadership Quarterly, 23*, 354-366.
- Tse, H. H. M., Lam, C. K., Lawrence, S. A., & Huang, X. (2013). When my supervisor dislikes you more than me: The effect of dissimilarity in leader-member exchange on coworkers' interpersonal emotion and perceived help. *Journal of Applied Psychology, 98*, 974-988.
- Tse, H. H. M., Troth, A. C., & Ashkanasy, N. M. (2015). Leader-member exchange and emotion in organizations. In T. N. Bauer & B. Erdogan (Eds.), *The oxford handbook of leader-member exchange* (pp. 209-225). New York: Oxford University Press.

- Tsui, A. S., Porter, L. W., & Egan, T. D. (2002). When both similarities and dissimilarities matter: Extending the concept of relational demography. *Human Relations*, *55*, 899-929.
- van Breukelen, W., Konst, D., & van der Vlist, R. (2002). Effects of lmx and differential treatment on work unit commitment. *Psychological Reports*, *91*, 220-230.
- van Breukelen, W., van der Leeden, R., Wesselius, W., & Hoes, M. (2012). Differential treatment within sports teams, leader-member (coach-player) exchange quality, team atmosphere, and team performance. *Journal of Organizational Behavior*, *33*, 43-63.
- van de Ven, N., Zeelenberg, M., & Pieters, R. (2011). Why envy outperforms admiration. *Personality and Social Psychology Bulletin*, *37*, 784-795.
- van de Ven, N., Zeelenberg, M., & Pieters, R. (2012). Appraisal patterns of envy and related emotions. *Motivation and Emotion*, *36*, 195-204.
- Van Zomeren, M., & Lodewijkx, H. F. M. (2005). Motivated responses to 'senseless' violence: Explaining emotional and behavioural responses through person and position identification. *European Journal of Social Psychology*, *35*, 755-766.
- Vecchio, R. P. (1995). It's not easy being green: Jealous and envy in the workplace. In G. R. Ferris (Ed.), *Research in personnel and human resources management* (pp. 201-244). Stamford, CT: JAI Press.
- Venkataramani, V., & Dalal, R. S. (2007). Who helps and harms whom? Relational antecedents of interpersonal helping and harming in organizations. *Journal of Applied Psychology*, *92*, 952-966.
- Vidyardhi, P. R., Liden, R. C., Anand, S., Erdogan, B., & Ghosh, S. (2010). Where do i stand? Examining the effects of leader-member exchange social comparison on employee work behaviors. *Journal of Applied Psychology*, *95*, 849-861.
- Wasserman, S., & Faust, K. (1994). *Social network analysis*. Cambridge: Cambridge University Press.
- Watson, D. (2000). *Mood and temperament*. New York: Guilford.
- Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin*, *98*, 219-235.
- Webster, J. M., Duvall, J., Gaines, L. M., & Smith, R. H. (2003). The roles of praise and social comparison information in the experience of pride. *Journal of Social Psychology*, *143*, 209-232.
- Weiner, B. (1995). *Judgements of responsibility a foundation for a theory of social conduct*. New York: Guilford Press.

- Wills, T. A. (1981). Downward comparison principles in social-psychology. *Psychological Bulletin*, *90*, 245-271.
- Wilson, K. S., Sin, H. P., & Conlon, D. E. (2010). What about the leader in leader-member exchange? The impact of resource exchanges and substitutability on the leader. *Academy of Management Review*, *35*, 358-372.
- Wood, J. V. (1989). Theory and research concerning social comparisons of personal attributes. *Psychological Bulletin*, *106*, 231-248.
- Wood, J. V., & Taylor, K. L. (1991). Serving self-relevant goals through social comparison. *Social comparison: Contemporary theory and research*. (pp. 23-49): Lawrence Erlbaum Associates, Inc, Hillsdale, NJ.
- Wood, J. V., Taylor, S. E., & Lichtman, R. R. (1985). Social comparison in adjustment to breast cancer. *Journal of Personality and Social Psychology*, *49*, 1169-1183.
- Wright, S. C., Aron, A., & Tropp, L. R. (2002). Including others (and groups) in the self. In J. P. Forgas & K. D. Williams (Eds.), *The social self: Cognitive, interpersonal, and intergroup perspectives* (pp. 343-368). New York: Psychology Press.
- Zucker, G. S., & Weiner, B. (1993). Conservatism and perceptions of poverty: An attributional analysis. *Journal of Applied Social Psychology*, *23*, 925-943.