

PSYCHOLOGICAL MECHANISMS LINKING DIRECT AND VICARIOUS
EXPERIENCES OF ABUSIVE SUPERVISION TO EMPLOYEE DEVIANCE

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ABSTRACT

PSYCHOLOGICAL MECHANISMS LINKING DIRECT AND VICARIOUS EXPERIENCES OF ABUSIVE SUPERVISION TO EMPLOYEE DEVIANCE

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This study examines the interactive effect of abusive supervision directed toward oneself (own abusive supervision) and toward work unit peers (coworker abusive supervision) on employee deviant behaviors at work. I propose that distinct combinations of own and coworker abusive supervision are related to particular forms of employees' deviant behaviors, as mediated by distinct justice-related motive states. Specifically, I hypothesize that own and coworker abusive supervision interact in distinct ways to influence each form of employee deviant behavior, including production deviance (i.e., behaviors to purposely reduce one's productivity), supervisor-directed deviance (i.e., behaviors intended to harm the supervisor), and coworker-directed deviance (behaviors intended to harm the coworkers). These predicted interactions are separately mediated by reward expectancy (i.e., the perceived contingency between performance and rewards), moral disapproval of leader (i.e., perceiving one's leader violates moral principles), and social exclusion by unit peers. In sum, this study examines mediational pathways through which abusive supervision influences employee deviant behaviors by 1) accounting for the influence of the vicarious experience of abusive supervision in addition to directly experienced abusive supervision, 2) examining distinct joint influences of own and coworker abusive supervision on different forms of employee deviance, and 3) drawing from the justice literature to identify three complementary mechanisms through which a

leader's abusive behavior may promote retributive behaviors. I tested this model using a sample of 275 workers from 55 work units in two organizations located in China. The study used a three-wave time-lagged design and obtained responses from individual employees and their unit peers. The results overall did not support to the proposed mediation processes that I had hypothesized to explain the joint influences of own and coworker abusive supervision on employee deviant behaviors. Weak associations between the justice-related motive states and their corresponding deviant behaviors contributed to this lack of empirical support for my theoretical model. Nevertheless, with the exception of reward expectancy, I found distinct interactive effects of own \times coworker abusive supervision on the justice motive states. Whereas own abusive supervision was more strongly associated with reports of social exclusion by peers when coworker abusive supervision was low (vs. high), personal abuse by the leader had a stronger positive association with moral disapproval of leader when coworker abusive supervision was high. Taken together, the findings demonstrate the importance of taking coworkers' mistreatment by the leader into account when examining the consequences of one's own abusive supervision. Although the patterns of these interactions deviate from the hypotheses, this study indicates that there are distinct justice motive states associated with different combinations of levels of direct and vicarious experience of abusive supervision. I discuss the study's implications for theory development concerning abusive supervision and for future research opportunities which may build on the current findings, as well as practical implications.

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CHAPTER 1

INTRODUCTION

Recent research on leadership processes has highlighted the importance of recognizing that employees do not rely solely on their own treatment by their leader to evaluate the leader and qualities of their relationship with him or her in ways that influence their behavior. For example, while previously the literature on leader-member exchange (LMX) focused on how followers evaluated the quality of their relationship with the leader in absolute terms, Henderson, Wayne, Shore, Bommer, and Tetrick (2008) introduced the construct of relative LMX, which concerns how one's relationship qualities compared to those experienced by their peers reporting to the same leader. Similarly, Vidyarathi, Liden, Anand, Erdogan, and Ghosh (2010) developed a measure of perceived differences in exchange quality. These studies demonstrated that social comparisons concerning leader relationship qualities contribute to important outcomes above and beyond the assessments of one's own relationship with the leader in isolation from the broader social context. This work parallels an emerging research stream on third party injustice (Folger, Cropanzano, & Goldman, 2005; Spencer & Rupp, 2009) which suggests that workers do not only respond adversely to injustices they experience firsthand; their reactions to their own experience of injustice is often conditional on how they perceive that other parties are treated by the same authority figures. Thus the literatures on leadership and employee justice are beginning to converge around a new way of understanding how followers are impacted by their leaders' behaviors. Scholars now recognize that social comparisons are critical in how followers evaluate their own

relationship with the leader, and that employees are often concerned when others are treated unjustly even when they personally are treated well.

Tepper (2000) first introduced the construct of abusive supervision to the management literature. He defined abusive supervision as “subordinates’ perceptions of the extent to which supervisors engage in the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact” (Tepper, 2000: 178). Some examples of leader abusive behaviors are acting rude to the subordinate, making negative remarks on the subordinate in public, and invading the subordinate’s privacy. Because these behaviors violate the principles of treating people with respect and sensitivity to their personal needs, abusive supervision can be viewed as a source of interpersonal injustice (Bies & Moag, 1986). On-going abuse by the leader may also lead the subordinates to infer that they receive fewer benefits than they deserve and question the fairness of organizational procedures (Tepper, 2000; Zellars, Tepper, & Duffy, 2002). Since Tepper’s seminal *Academy of Management Journal* article, 66 empirical research articles investigating abusive supervision have been published in peer reviewed journals, and 31 of these were published in consensus top-tier management journals that publish micro-OB articles (i.e., *Academy of Management Journal*, *Journal of Applied Psychology*, *Organizational Behavior and Human Decision Processes*, *Personnel Psychology*). To date, however, this broader view that followers evaluate their leaders based not only on their own experiences but also on the experiences of their unit peers has not taken root in the abusive supervision literature. Given the scope of scholars’ interest in abusive supervision, it is surprising that only few published articles examined both peers’ and the individual members’ own mistreatment by the leader (Duffy, Ganster, Shaw, Johnson, &

Pagon, 2006; Hannah, Schaubroeck, Peng, Lord, Treviño, Kozlowski et al., in press, Harris, Harvey, Harris, & Cast, 2013; Huo, Lam, & Chen, 2012). Huo et al.'s (2012) study focused on a separate construct of supervisor aggressive humor, which refers to disrespectful and mean-spirited humor that is intended to humiliate subordinates. The studies presented by Duffy and colleagues (2006) focused on supervisor social undermining, which is also seen as similar to abusive supervision (see Tepper, 2007).

I use the justice motives framework of Skitka (2003) as an organizing theoretical framework, and within this framework I draw from social comparison theory (Arrowood, 1978; Festinger, 1954), the group-value model of procedural justice (Lind & Tyler, 1988; Tyler & Lind, 1992), and the emerging research stream on third-party justice (Folger et al., 2005; Rupp & Bell, 2010). I specify and test how the vicarious experience of abusive supervision, that is, the extent to which coworkers are being abused by the same leader, may be an important cognitive referent that influences how individuals interpret and react to their own levels of mistreatment by the leader. Integrating coworkers' experiences of mistreatment into the examination of the consequences of abusive supervision can significantly broaden researchers' perspectives on how abusive supervision affects subordinate behavior in the workplace and promote a deeper understanding of psychological and social processes that are precipitated by abusive supervision.

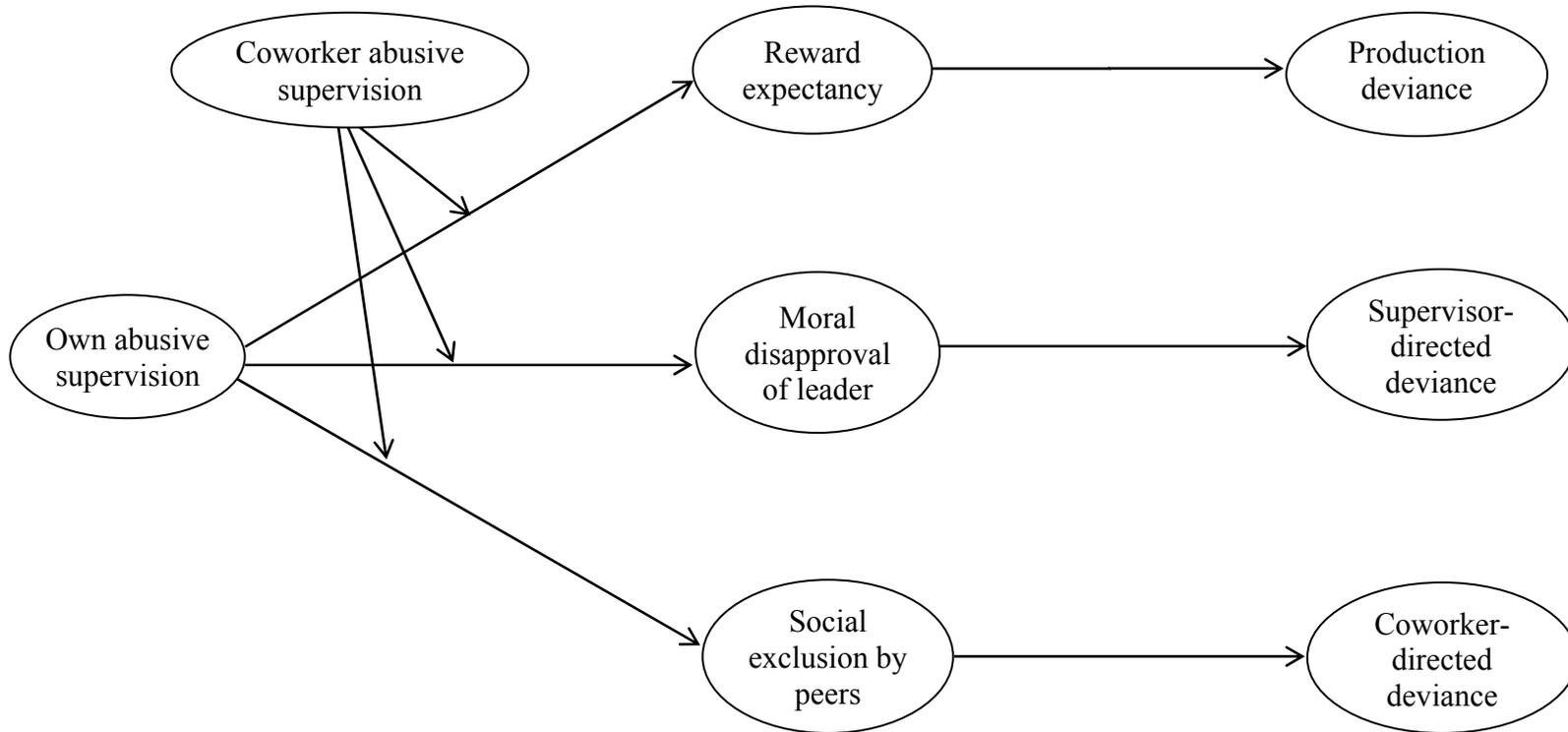
Although studies have established a positive relationship between individuals' direct experiences of abusive supervision and a range of negative work behaviors (e.g., Mitchell & Ambrose, 2007; Tepper, Henle, Lambert, Giacalone, & Duffy, 2008), the underlying mechanisms for these relationships are not well understood. The extant literature has thus far focused on different types of injustice perceptions (e.g.,

interactional injustice, procedural injustice), but the findings do not provide a satisfying explanation for the relationships because relationships between abusive supervision and such global injustice perceptions merely represent the extent to which followers find abusive supervision unjust or abusive. Moreover, studies have tended to find that different justice variables explain the same relationships (see Tepper, 2007: 277). In this study, I examine how own and coworker abusive supervision jointly affect employees' engaging in deviant behaviors, or volitional behaviors that violate organizational norms and have negative impact on the organization or its members (Robinson & Bennett, 1995). I argue that the connections of abusive supervision with various forms of employee deviance can be understood by considering how leader abuse activates distinct justice-related motive states that together are seen to drive individuals' pursuit of justice (Cropanzano, Byrne, Bobocel, & Rupp, 2001; Cropanzano, Goldman, & Folger, 2003; Skitka, 2003; Zhu, Martens, & Aquino, 2012). Based on Skitka's (2003) accessible identity model of justice reasoning (AIM), I propose that these three distinct justice motives concern material acquisition, moral integrity, and social connection, and that the thwarting of these motives explains how combinations of own abusive supervision and coworkers' abusive supervision elicit distinct deviant behaviors that represent attempts to restore a sense of justice.

Specifically, I examine how own and coworker abusive supervision interact in distinct ways to predict production deviance, supervisor-directed deviance, and coworker directed-deviance. The intervening motive states are derived from the justice literature which has identified the core reasons people respond adversely to perceived injustice. Importantly, these core reasons are not conceptually related to the forms of injustice

which have been the focus of much justice research, such as distributive injustice, procedural injustice, and interactional injustice. I propose that employees' different justice-related motives, including the perception that the rewards they receive will be commensurate with their performance, that one has remained true to one's core moral values, and that one has a sense of belonging in one's work group, represent the extent to which core justice motives are satisfied or thwarted. Together, these constructs may explain how one's own abusive supervision and coworkers' abusive supervision interact in influencing deviant behaviors. I predicted that (a) the influences of abusive supervision carried through reward expectancy would be related to production deviance (i.e., intentionally reducing productivity at work), (b) moral disapproval of leader mediates the interactive influence of own and coworker abusive supervision on supervisor-directed deviant behavior (i.e., aggressive or passive-aggressive behaviors directed toward the supervisor either in or away from his or her presence), and (c) social exclusion by peers mediates the influence of the interaction of these variables on coworker-directed deviant behavior (i.e., aggressive or passive-aggressive behaviors directed toward coworkers either in or away from their presence). The theoretical model is presented in Figure 1.

FIGURE 1
Theoretical Model



Note. Abusive supervision is measured at Time 1, the three mediators are measured at Time 2, and the deviant behaviors are measured at Time 3.

This study contributes to the literature in at least two different ways. First, this study incorporates the three core theoretical perspectives concerning justice (i.e., the instrumental, relational, and moral perspectives). I argue that these perspectives reflect distinct motives behind individuals' desire for justice, and I unpack these motives into constructs which represent the extent to which these motives are or are not fulfilled (i.e., reward expectancy, social exclusion, and moral disapproval of leader). Identifying genuinely distinct motive states which explain the interactive relationships between own and coworker abusive supervision and distinct forms of deviant behaviors (i.e., production deviance, coworker-directed deviance, and supervisor-directed deviance) would provide a more comprehensive understanding of the mechanisms underlying the influence of abusive supervision on employee deviant behavior. I predict that the patterns of these abusive supervision interactions differ in theoretically predictable ways across the justice-related motive variables, resulting in distinct patterns of moderated mediation across the different forms of deviant behavior. Specifically, when one is abused more often than one's peers (own abusive supervision is substantially higher than coworker abusive supervision), perceived relative deprivation (Crosby, 1976) is salient, leading to concerns about one's instrumental goals. Perceiving that one's efforts to acquire material gains are impeded in turn precipitates production deviance in which individuals "violate the formally proscribed norms delineating the minimal quality and quantity of work to be accomplished" (Hollinger & Clark, 1982: 333). In contrast, I expect that being less abused by the supervisor than others in the group precipitates relational dynamics that lead to being socially excluded by one's peers. Social exclusion hinders individuals' needs for belonging and thereby motivates them to direct deviant behaviors against their

unit peers. A substantial level of either own or coworker abusive supervision may threaten individuals' need for moral integrity, an "intrinsic propensity for caring about and acting on conceptions of morality" (Skitka, 2009: 103), which in turn leads to retributive behaviors directed toward the supervisor in the form of supervisor-directed deviance. Existing studies of the abusive supervision-deviant behavior relationship have examined only the direct experience of abusive supervision (see an exception by Harris et al., 2013) and have proffered the intuitive view that all such deviant behavior is retaliation against the supervisor or the organization for the supervisor's abusive behavior. My study directly tests the spectrum of psychological pathways that are suggested by the broader literature on justice motives.

Second, this study highlights the intra-unit dynamics that arise when workers are treated differently by the same leader, or what is known as "differentiated leadership" (Dansereau, Graen, & Haga, 1975; Sparrowe & Liden, 1997). Prior research on differential leadership styles such as abusive supervision or leader-member exchange (LMX) has largely focused on the dyadic exchange between the leader and the focal employee (see the review by Xu, Huang, Lam, & Miao, 2011). Similarly, the relational and group-value models of justice have highlighted how injustices directed by the leader toward the member harm the member's perception of his or her relationships with the work group as a whole (Lind & Tyler, 1988; Tyler & Lind, 1992). Within these perspectives, deviant behavior represents the individuals' acting out against others in defiance of a belief that he or she is not a valued member of the group, which ironically confirms what may have been a distorted belief. I also argue that the potential for differential abusive supervision to create bases for social comparisons and status

differentiation that often leads to dysfunctional interactions with one's peers. Thus this study extends the traditional focus of the relational model of justice by providing a new lens to understanding how differential treatment one receives from the leader can influence his or her social interactions with other members. I propose that when the leader treats a member abusively this can lead the member to perceive diminished respect from his or her peers in the group and it can also produce pernicious upward social comparisons. Together, these processes may precipitate dynamics that ultimately lead the focal member to be socially excluded by his or her peers.

The following chapter provides a review of abusive supervision research, with a focus on the relationship between abusive supervision and deviant work behaviors. It then introduces the three theoretical perspectives on justice from which I derive the mediators in my model. In Chapter 3, I develop the specific hypotheses. The first set of hypotheses proposes the interactive effect of own and coworker abusive supervision on employee production deviance as mediated by reward expectancy. The second set of hypotheses predicts a different pattern of interaction between own and coworker abusive supervision in predicting moral disapproval of leader which in turn leads to supervisor-directed deviance. Finally, I hypothesize another pattern of interactive effect in predicting social exclusion by peers, leading to coworker-directed deviance. In Chapter 4, I describe my methodological approach to examining my research questions, including the sample, study procedures, and measures used in the study. Chapter 5 presents the analytical results testing each hypothesis and Chapter 6 presents supplementary analyses that were conducted to address potential concerns with my findings and to explore other relationships outside of my theoretical model. I discuss the theoretical and practical

implications, as well as study limitations and future research implications, in Chapter 7. I also draw conclusions in Chapter 7.

CHAPTER 2

REVIEW OF THE THEORIES AND LITERATURE

In this study, I examine the joint influence of one's direct and indirect experiences of abusive supervision on employee deviant behaviors. I predict distinct interaction patterns of own and coworker abusive supervision in relation to each form of employee deviance, including production deviance, supervisor-directed deviance, and coworker-directed deviance. To explain the distinct linkages between abusive supervision and different forms of deviant behavior, I draw from the three general perspectives on justice that each emphasize a fundamental human motive underlying the pursuit of justice (see the reviews by Cropanzano et al., 2003; Skitka, 2009). Within these perspectives, justice is viewed as a means either to safeguard personal material interest (the instrumental perspective), to satisfy needs for belonging (the relational perspective), or to uphold moral standards. Folger and others (Cropanzano et al., 2003; Folger, 2001; Folger & Skarlicki, 2008; Rupp & Bell, 2010) have referred to the latter as the "deontic perspective," but hereafter we refer to it as the "moral perspective," to be consistent with Skitka's accessible identity model (AIM) which is the framework I use in developing the mediators in my research model. In this chapter, I first review the existing research on abusive supervision. I then provide a review of the three different theoretical perspectives on justice and the AIM (Skitka, 2003) from which I derive the mediating justice motive variables in my model. Finally, I provide a summary of empirical evidence relevant to the interaction hypotheses of own and coworker abusive supervision.

Research on Abusive Supervision

Research has consistently demonstrated the negative consequences of abusive supervision on important organizational outcomes. Not surprisingly, being abused by the leader can create significant amount of psychological strain among followers (Bamberger & Bacharach, 2006; Harvey, Stoner, Hochwarter, & Kacmar, 2007; Hobman, Restubog, Bordia, & Tang, 2009; Penhaligon, Lousi, & Restubog, 2009; Tepper, 2000; Tepper, Moss, Lockhart, & Carr, 2007). Studies have also found that abusive supervision is negatively related to employees' state self-esteem (Burton & Hoobler, 2006; Hobman et al., 2009). In addition, employees who experienced higher levels of leader abuse reported lower levels of affective commitment to the organization (Aryee, Chen, Sun, & Debrah, 2007; Duffy, Ganster, & Pagon, 2002; Tepper, 2000; Tepper et al., 2008) and stronger intentions to quit their jobs (Duffy et al., 2006; Harvey et al., 2007; Tepper, 2000).

Several recent studies observed a negative relationship between abusive supervision and subordinate task performance (Harris, Kacamar, & Zivuska, 2007; Xu et al., 2011) and employee creativity (D. Liu, Liao, & Loi, 2012). Abused employees may also refrain from organizational citizenship behavior (OCB; Organ, 1988), which involves exerting extra effort to help the organization or other coworkers that is not required by their role descriptions (Aryee et al., 2007; Xu et al., 2011; Zellars et al., 2002).

Among the putative behavioral outcomes of abusive supervision that have been examined to date, the mostly extensively explored are counterproductive work behaviors (CWBs) and work deviance. CWB is defined as volitional behaviors that harm or intend to harm the goals of the organization or its stakeholders (e.g., client, customers, or

coworkers; Spector & Fox, 2005). Work deviance refers to any volitional behaviors that violate organizational norms and have a harmful influence on the organization or its members (Robinson & Bennett, 1995). Given that both constructs commonly emphasize the voluntary and harmful nature of those same types of behaviors, researchers have often referred to them inter-changeably despite subtle differences in the scope of behavioral targets. In this review of the literature, I use the term “employee deviance” or “deviant work behaviors” to refer to both CWBs and work deviance.

Abusive Supervision and Deviant Work Behaviors

Deviant behavior directed against the supervisor. Following the logic of negative reciprocity (Gouldner, 1960) and the equity principle underlying a social exchange relationship (Adam, 1965; Blau, 1964), individuals who have been abused by their leaders would return negative treatment to the leaders by directly retaliating against them. Direct retaliation is seen to harm the perpetrator and in turn help the victims of abusive supervision to restore the sense of balance in their social exchange relationships with their supervisors (Bies & Tripp, 1998; Bradfield & Aquino, 1999). Consistent with this argument for direct retaliation, studies have found a positive association between abusive supervision and supervisor-directed deviant behavior (Liu, Kwan, Wu, & Wu, 2010; Mitchell & Ambrose, 2007; Tepper, Carr, Breaux, Geider, Hu, & Hua, 2009; Thau & Mitchell, 2010). For example, Mitchell and Ambrose (2007) found that employees who perceived a higher level of abusive supervision engaged in more deviant behaviors directed toward their supervisors (e.g., gossiping about the supervisor, refusing to follow the supervisor’s instructions). Examining a sample from China, J. Liu and colleagues (2010) found that abusive supervision was related to supervisor-directed deviant behavior

through the mediation of revenge-related cognitions, defined as thoughts of the victim to impose harm or injuries on and revenge against the perpetrator (Bradfield & Aquino, 1999).

Studies have also examined factors that moderate the relationship between abusive supervision and supervisor-directed deviance. Drawing on the power-dependence perspective (Emerson, 1972), Tepper and colleagues (2009) found that victims of abusive supervision were more likely to engage in deviant behaviors against the supervisor when they had stronger intentions to quit their jobs. They suggested that those who intended to quit their jobs perceived less dependence on the supervisor and thus more power to enact revenge against him or her. J. Liu et al. (2010) found that the relationship between abusive supervision and supervisor-directed deviance was weaker among participants with higher traditionality, which referred in this case to the extent to which the individual sought to uphold traditional Chinese values (e.g., submitting to hierarchical relationships, promoting harmony). Across two studies they found that employees with more traditional personal values did not exhibit a relationship between deviant behaviors against the supervisor and abusive supervision. Thau and Mitchell (2010) found that the perceived levels of distributive justice in the organization as a whole exacerbated the influence of abusive supervision on employee deviance against the supervisor. They found that self-regulation impairment, as indexed by self-report measures of ego depletion and intrusive thoughts (Bushman & Baumeister, 1998), explained this interactive effect of abusive supervision and organizational distributive justice on a global measure of deviant behavior.

In addition to these studies of deviant behaviors, other studies have found that abusive supervision precipitates subordinates' aggressive actions against the supervisor (Burton & Hoobler, 2011; Dupre, Inness, Connelly, Barling, & Hopton, 2006; Inness, Barling, & Turner, 2005). Inness et al. (2005), for example, showed that within-individual variation in abusive supervision accounted for more variance in individuals' self-reports of supervisor-directed aggression (e.g., swear at the supervisor, argue with the supervisor, push/grab the supervisor) than between-individual differences in history of aggression and alcohol consumption. Subordinates who are mistreated by the leader are also suggested to engage in dysfunctional communications with the leader such as talking superficially with the supervisor and distorting information in their work reports to the supervisor (Tepper et al., 2007).

Deviant behavior directed against coworkers. Direct retaliation against an abusive leader may not be feasible when the victim is afraid of greater harm arising from such retaliatory behavior (Aquino, Tripp, & Bies, 2001; Tepper, 2007). Scholars suggest that victims often displace their aggression toward targets rather than the perpetrator of harm or unfairness (Dollard, Doob, Miller, Mowrer, & Sears, 1939; see Miller, Pederson, Earleywine, & Pollock, 2003, for a review). One possible target of displaced aggression is coworkers (Mitchell & Ambrose, 2007). Consistent with this rationale, Mitchell and Ambrose found that employees who were mistreated by the leader tended to socially undermine their coworkers and behaved aggressively toward them. Similarly, Schaubhut, Adams, and Jex (2004) found a positive association between abusive supervision and coworker-directed deviance; abused employees with higher self-esteem displayed more deviant behaviors direct against their coworkers. Although not hypothesized in their

study, Shao, Resick, and Hargis (2011) reported a positive correlation between abusive supervision and work deviance directed toward coworkers. They also found that a high social dominance orientation, which reflects an individual's preference for social hierarchy and inequality in status (Sidanius & Pratto, 1999), strengthened the effect of abusive supervision on coworker-directed deviance. In a recent study, Lian, Ferris, and Brown (2012) examined the relationship between abusive supervision and interpersonal deviance, which largely refers to deviant behaviors directed toward coworkers (Bennett & Robinson, 2000). They found that abusive supervision was positively related to interpersonal deviance across three separate samples. They further found that power distance values (i.e., the extent to which individuals accept an unequal distribution of power and status hierarchy in an institution or the society; Hofstede, 1980) augmented the association between abusive supervision and interpersonal deviance.

Overall, however, compared to supervisor-directed deviance, there have been relatively fewer empirical studies examining the relationship between abusive supervision and coworker-directed deviance. The influence of abusive supervision on coworker-directed deviance also appears to be weaker than its influence on supervisor-directed deviance. In the study by Mitchell and Ambrose (2007), for example, the correlation between abusive supervision and coworker-directed deviance was about half the size of the correlation between abusive supervision and supervisor-directed deviance.

Deviant behavior directed against the organization. Studies also find that victims of abusive supervision engage in deviant behaviors against the organization (Mitchell & Ambrose, 2007; Schaubhut et al., 2004; Tepper et al., 2008; Tepper et al., 2009). Mitchell and Ambrose suggested that displaced aggression accounted for such a finding; victims

displaced the anger they felt toward their supervisor by seeking to harm the organization. A different mechanism was examined by Tepper and colleagues (2008), who found that organizational commitment explained the relationship between abusive supervision and organizational deviance. The authors suggested that because the leader is often viewed as a representative of the organization (Levinson, 1965; Schein, 1992), victims of abusive supervision may infer that they are unfairly treated by the organization and thus engage in behaviors that seek to harm the organization's interests.

Tepper et al. (2009) found that, in addition to the effects on supervisor-directed deviance as discussed above, individuals with strong intention to quit exhibited more organizational deviance when they perceived the supervisor mistreated them. Among individuals who most strongly intended to quit their jobs, abusive supervision was more strongly associated with supervisor-directed deviance compared to organizational deviance. Studies have also found that abusive supervision is more strongly associated with supervisor-directed deviance than with organizational deviance (Mitchell & Ambrose, 2007; Schaubhut et al., 2004). Unlike supervisor- or coworker-directed deviance, which both concern interpersonally aggressive actions, organizational deviance measure involves a range of distinct behaviors that can potentially serve different purposes (Bennett & Robinson, 2000). For example, “putting in little effort at work” may be due to a lack of motivation, which is different from “littering the work environment” that may reflect insensitivity to social norms, and it is also different from “falsifying a receipt to get reimbursed for more money,” a more severe dishonest behavior. Similarly, “neglecting to follow the boss’s instruction” is quite different from “discussing confidential company information with an unauthorized person.” Thus, I chose to focus

my measure of organizational deviant behaviors on the subset of these behaviors, which concerns intentionally withdrawing effort from work, which is also known as *production deviance* (Robinson & Bennett, 1995).

Mediators of Abusive Supervision Effects

Organizational justice perspectives have often been used to account for linkages between abusive supervision and employee outcomes (e.g., Aryee et al., 2007; Tepper, 2000). Some studies have directly examined how justice perceptions mediate the influence of abusive supervision on employee attitudes and behavior (Aryee et al., 2007; Burton & Hoobler, 2011; Tepper, 2000; Wang, Mao, Wu, & Liu, 2012; Zellars et al., 2002). In his seminal article, Tepper (2000) found that abusive supervision was negatively related to all three types of justice (distributive, procedural, and interactional) and that these justice variables were further linked to job satisfaction, organizational commitment, and psychological strain. In a recent study, Aryee et al. (2007) found that interactional justice, but not procedural justice, carried the influence of abusive supervision on employee affective commitment and OCBs directed toward the organization and its members. The remaining two studies only examined interactional justice and both found a significant indirect effect of abusive supervision on employee outcomes through interactional justice (Burton & Hoobler, 2011; Wang et al., 2012). Overall, the empirical evidence suggests that interactional justice may be a stronger mediator of the effects of abusive supervision on employee outcomes, compared to procedural or distributive justice. What is learned by examining such indirect effects is rather questionable, however. Although interactional justice (Bies & Moag, 1986) also includes the element of informational justice, which was formerly considered to be part

of procedural justice (Leventhal, 1980; Lind & Tyler, 1988), a separate aspect of interactional justice is *interpersonal justice*, which is “the degree to which people are treated with politeness, dignity, and respect by authorities or third parties involved in executing procedures or determining outcomes” (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). Given that abusive supervision also represents disrespectful treatment, essentially these tests of mediation are examining how abusive supervision promotes feelings of being abused. By focusing on such variables as potential mediators, investigating mediators of abusive supervision might be seen as caught in the “triviality trap” of inferring meaningful causality from covariation between measures of conceptually overlapping constructs (Kasl, 1978).

Despite the large volume of studies linking abusive supervision to employee deviant behaviors, my review summarized above found that there has been little research directly examining the intervening processes that may provide an explanatory framework for such linkages. Scholars have typically reasoned that abused subordinates engage in deviant behaviors against the supervisor as a means to restore a sense of justice and to maintain a balanced social exchange relationship. A different mechanism was tested by Thau and Mitchell (2010), who proposed that abusive supervision undermines individuals’ self-regulation and thereby promotes deviant behaviors. Regarding the influences of abusive supervision on coworker- and organization-directed deviance, researchers have often attributed these relationships to displaced aggression (e.g., Mitchell & Ambrose, 2007). Tepper et al. (2008) argued that the abusive supervision-organization deviance linkage can also be understood from a social exchange perspective because the leader is seen as representing the organization.

Although displaced aggression seems to be a logical explanation for the linkages between abusive supervision and coworker- or organization-directed deviant behaviors, why and when individuals choose the organization or their coworkers as the particular targets to vent their frustrations remains an unanswered question. This is further complicated as there are also possible targets out of the workplace toward which individuals can displace their frustration. For example, Hoobler and Bass (2006) showed that abusive supervision could lead to subordinates' engaging in family undermining; that is, behaviors that diminish a family member's positive self-regard and well-being. I argue below that abusive supervision may not automatically induce individuals to act against their unit peers, but rather being abused in a manner that is different from one's unit peers may create a distrustful social exchange relationship with other peers, leading to deviant behaviors directed against them. Similarly, subordinates may not seek revenge against the supervisor if they attribute their mistreatment as due to their own faults or perceive the supervisor's abusive behavior is legitimate in that it arises from good intentions to promote their higher performance (D. Liu et al. 2012; Tepper, 2000). Thus I argue the extent to which subordinates will take revenge against an abusive supervisor may depend on the extent to which they perceived the supervisor violates their internalized moral values and norms; and thus his or her abusive behavior, directed at oneself or others, can be a threat to one's moral integrity. To aid a nuanced understanding of the mechanisms underlying the influences of abusive supervision on various forms of employee deviance, I derive three mediators representing distinct motives based on the three perspectives on justice in the next section.

Theories of Justice

Justice taxonomies have evolved since the initial research interest in distributive justice (e.g., Adams, 1965). This work was followed by scholarly work which distinguished procedural justice from distributive justice (Lind & Tyler, 1988; Thibaut & Walker, 1975). Subsequent work elaborated on what were formerly considered to be aspects of procedural justice, establishing new dimensions of justice, notably interpersonal and informational justice (Bies & Moag, 1986; Greenberg, 1993). As noted above, scholars now conceptualize interpersonal and informational justice together under the common construct label of interactional justice, which is distinct from procedural and distributive justice (Colquitt et al., 2001). All of these types of justice perceptions have been consistently linked to a range of important organizational attitudes and behavioral outcomes (see the meta-analytic reviews by Cohen-Charash & Spector, 2001; Colquitt et al., 2001). Scholars have suggested alternative frameworks of justice that are based on different underlying motives to pursue justice. These motives include desires for material gains, social affiliation, and moral integrity (e.g., Cropanzano et al., 2003; Skitka, 2009). I review these perspectives below.

The Instrumental Perspective on Justice

The instrumental perspective of justice assumes that maximizing material gain is the ultimate motive to pursue justice. It proposes that people rationally pursue material self-interest in their social exchanges with others. Research on distributive justice and the initial work on procedural justice represent this perspective. Distributive justice refers to fairness of the outcomes one receives; for example, an individual's outcome (e.g., salary) should be proportional to his or her input or contributions (e.g., productivity). The

concept of distributive justice is described in various versions of equity theory (Adam, 1965; Lane & Messe, 1972; Walster & Walster, 1975), social exchange theory (Blau, 1964; Emerson, 1976; Thibaut & Kelley, 1958), and relative deprivation theory (Crosby, 1976; Martin, 1981). These theories commonly emphasize that people make social comparisons in evaluating outcome/input ratios. In other words, one tends to consider personal outcomes as fair if his or her outcome/input ratio is compatible to that of the referent others (e.g., coworkers). Individuals would develop a sense of distributive injustice either when they are over-benefited or under-benefited because they view such favorable or unfavorable outcomes as undeserved, although under-benefits tend to be more prominent in these assessments.

Besides the fairness of the actual outcomes, people are also seen to be concerned as to whether the decision making processes (e.g., rules, procedures) leading to the outcomes is fair. This concern is reflected in the construct of procedural justice. Research on procedural justice dates back to studies of legal dispute resolution in the 1970s (e.g., Lind, Erickson, Friedland, & Dickenberger, 1978; Thibaut & Walker, 1975; 1978). This stream of research demonstrated that the distribution of control over the resolution process between disputants and a third-party decision maker (e.g., adjudicator) is an important antecedent of fairness judgments. Although a fair process does not directly imply favorable outcomes, a higher amount of control over the resolution process or the actual decision tends to be preferred by the disputants who see it as a means to achieve more favorable personal outcomes (Thibaut & Walker, 1975). Thus Thibaut and Walker's seminal work concerning procedural justice is consistent with the instrumental model of justice.

Whereas the amount of control over the decision making process is deemed the most salient feature of procedural justice (see the review by Lind & Tyler, 1988), other important qualities of procedural fairness have been identified. Leventhal (1980) summarized six important rules underlying procedural justice. These rules include consistency (i.e., applying rules consistently across individuals and over time), information accuracy (i.e., making decision based on good and accurate information), unbiasedness (i.e., avoiding self-interest and being neutral in decision making), correctability (i.e., having opportunities to modify the procedures or to override the decision), representativeness (i.e., considering the needs and values of all parties that are affected by the decision making), and ethicality (i.e., upholding basic moral and ethical standards).

It is important to note that Leventhal's elements of procedural fairness included ethicality. This view appears to overlap with the moral perspective of justice that I will describe later in this chapter. The ethicality rule emphasized by Leventhal, however, is instrumental in the sense that individuals care about themselves being treated in an ethical manner because that could be important for them to achieve their personal goals. In contrast, the ethicality emphasized in the moral perspective of justice is considered as an "ought," that is, complying with moral and ethical principles is perceived as a moral obligation (Folger & Skarlicki, 2008; Skitka, 2003; 2009). In sum, the instrumental model of justice focuses on the utility of fair distribution or procedures to attain material benefits. Fairness is perceived as a means to maximize the individual's material interests.

The Relational Perspective on Justice

A considerable amount of subsequent research showed that the opportunity to voice one's opinions can enhance perceptions of fairness even when this opportunity has no instrumental implications for the individual (Earley & Lind, 1987; Tyler, 1987; Tyler, Rasinski, & Spodick, 1985). Based on these empirical observations, Lind and Tyler (1988) developed the group-value model of procedural justice. The central proposition of this model is that individuals are concerned about belonging to a social group and they view fair procedures as affirming them as valued members of the group. The group-value model thus assumes that fair group processes have nonmaterial value to individuals because they enable them to participate in group life and affirm their status as valued group members. In Lind and Tyler's theorizing, procedures are judged as being fair when they are in accord with the values of the group and the individual. Although individuals can have idiosyncratic values, they are socialized to share the fundamental values promoted by most social entities. Among these fundamental values are group solidarity and authority relations, and being treated with respect and dignity (Lind & Tyler, 1988).

Bies and Moag (1986) introduced the construct of interactional justice, which focuses on the characteristics of the interpersonal treatment and communication between authority figures and employees. Interactional justice emphasizes the quality of the interactions such as politeness, respect, and honest. A slightly different conceptualization of interactional justice was later proposed by Greenberg (1993) who suggested that interactional justice involves two different facets; informational justice (i.e., communicating information and knowledge regarding the procedures) and interpersonal justice (i.e., showing humanity and interpersonal concerns). As I noted above, the initial

conceptualizations of procedural justice (e.g., Leventhal, 1980; Lind & Tyler, 1988) included the extent to which people are treated with respect and dignity (Lind & Tyler, 1988; Tyler & Bies, 1990), and this is now considered to be a component of interactional justice. The fair procedures to which the group-value model refers also consider the quality of one's interpersonal treatment.

Building on the group-value model, Tyler and Lind (1992) introduced the relational model, which proposes that procedural fairness has implications for individuals' relationship with authorities and/or the institutions the authorities govern. Fair procedures convey that an individual is valued and respected as a member of a social group and that the group is functioning properly. Conversely, unfair procedures signal to individuals that they are not valued by the authority figure or institution and have a low standing in the group. Characteristics of one's relationship with the authority figure in turn affect one's attitudes and behaviors toward the authority and/or the institution.

The group-value model and the relational model both propose that procedural fairness meets an individual's need to belong to a valued social group and to maintain a positive social identity. Fair procedures also signal to an individual that he or she maintains a quality relationship with the authority that affirms his or her good standing in the group. Given their common focus on the relational implications of procedural fairness, I use the label of "relational perspective" to refer to both models and related perspectives that emphasize individuals' motives to be respected by and connected to others (Skitka, 2003). In contrast to the instrumental perspective, the relational perspective emphasizes the non-instrumental values (e.g., status recognition, belongingness) derived from fair procedures of the group. It highlights the social connotations of being treated fairly or

unfairly and the individual's need to establish quality social connections with the authority figure and the group.

The Moral Perspective on Justice

More recently, the issue of morality and ethics in justice reasoning has received increasing attention in management and social psychology research. In the management literature, the moral aspect of justice has been termed “deontic justice” (Folger, 2001), referring to the fairness perceptions that are based on whether a target upholds or violates basic moral principles (Cropanzano et al., 2003; Folger & Skarlicki, 2008). The term deonance is derived from the Greek word “deon” that refers to one's obligation or duty. “[D]eonance theory might describe the motivational consequences instigated when people react to others who violate or attempt to violate, willingly and with presumed impunity, the moral norms of interpersonal conduct that observers feel should not be violated” (Folger, 2001: 6).

In the social psychological literature, Skitka and colleagues led a research program to examine the role of moral ideology in justice reasoning (e.g., Bauman & Skitka, 2009; Mullen & Skitka, 2006; Skitka & Houston, 2001; Skitka & Mullen, 2002). Their research supports the notion that moral values and principles guide individuals in assessing fairness (see Skitka, 2009). Both literatures converge in pointing out that upholding moral standards is an important motive to seek justice, leading to a third perspective of justice that I label as the moral perspective. Unlike the instrumental or relational perspectives of justice, which assume people pursue justice to achieve tangible personal benefits or to satisfy affiliation needs, the moral perspective emphasizes the

preference for justice. This preference derives at least in part from concerns about morality as an end by itself (Cropanzano et al., 2003; Skitka, 2003).

The accumulated research on third-party justice provides the basis for the moral perspective. Studies have shown that individuals experience negative emotions when they witness unethical conduct that violates moral and social norms, even if their own interests are not affected (Kray & Lind, 2002; Lind, Kray, & Thompson, 1998; Skarlicki & Rupp, 2010; Spencer & Rupp, 2009). Studies further show that witnessing unethical conduct that harms others motivates people to engage in retributive actions to punish the wrongdoers (Cremer & van Hiel, 2006; Kahneman, Knetsch, & Thaler, 1986; Turillo, Folger, Lavelle, Umphress, & Gee, 2002). For example, Lind et al. (1998) found that individuals who are not personally mistreated by their supervisor nevertheless lowered their ratings of leader fairness after learning that other group members were unfairly treated by the same supervisor. Kahneman and colleagues (1986) reported on an experimental study in which individuals sacrificed their own economic gains to punish wrongdoers. Turillo et al. (2002) further demonstrated that individuals exhibited retributive tendencies even when they themselves experienced no personal harm and when they were not socially connected to the victims.

To summarize, the three perspectives on justice highlight three basic human motives and needs in pursuing justice, including needs for material benefits, belongingness, and morality.

The Accessible Identity Model of Justice

To integrate these different perspectives, I refer to the accessible identity model (AIM) proposed by Skitka (2003). This model links different aspects of self, including

material identity, social identity, and personal identity, to justice reasoning. According to the AIM, how individuals evaluate fairness or unfairness depends on which aspect of their identity is activated or threatened. When material identity, which refers to the material extensions of the self (e.g., property, wealth), is threatened, the identity becomes salient and the individual is concerned about material gains as a criterion in his or her evaluations of justice. When social identity (i.e., the aspect of self that is defined by the social groups one belongs to and one's social standing in these groups) is threatened, this identity becomes salient and the individual is prone to focus on the social connotations (e.g., respect, dignity) in her justice reasoning. Threats to personal identity, which is defined by "achievement, mastery, and moral authenticity" (Skitka, 2003: 288) are seen to lead individuals to follow their internalized norms and standards in judging fairness.

In short, the AIM model suggests that individuals are mostly likely to process specific features of justice-related events, with abusive supervision representing one class of such events, when a certain identity (material, social, or personal) is threatened, and as a result they are especially motivated to reinforce this identity and restore a sense of justice. This model thus suggests the three justice motives (instrumental, social, and moral) are not "either-or" propositions but rather they co-exist in determining how individuals perceive justice. Drawing on the AIM, I derive the three intervening variables that depict the extent to which the different aspects of identity are maintained. How each aspect of identity is maintained reflects the extent to which each justice motive is fulfilled. These mediators include reward expectancy, social exclusion by peers, and moral disapproval of leader, which correspond to the instrumental, social, and moral motives to pursue justice. Moral disapproval of leader refers to the perception that one's leader does

not have a good moral standing. Perceiving the leader is unethical (i.e., a high level of moral disapproval of leader) reflects the extent to which one believes the leader transgresses against important moral values. This can further lead to a threat to one's moral integrity because individuals recognize that their commitment to core moral values is weak if they do not strive to uphold them in the world; putting up with an abusive leader can thus potentially be a threat to one's positive moral identity.

Based on the justice literature, one may infer that reported levels of these perceptions represent the extent to which a motive that drives justice judgment is concerned, and this may in turn influence individual behaviors. Lower levels of reward expectancy and higher levels of moral disapproval of leader and social exclusion represent higher levels of concerns about particular justice motives. Thus, I propose that the combination of one's own experience of leader abuse and one's awareness of others' mistreatment activates employees' concerns related to their own acquisitive desires (reward expectancy), influences their perceptions of social exclusion by their peers (social exclusion), and precipitates a negative perception of the leader's moral integrity (moral disapproval of leader). These perceptions induce distinct retributive action tendencies, including deviant behaviors designed to restore a feeling of just acquisition (production deviance), harm coworkers (coworker-directed deviance) who have alienated them socially, and harm the supervisor (supervisor-directed deviance) for his perceived immoral behavior.

Interaction of Own Justice and Other Justice: Previous Research

In this section I review a few experimental studies that have manipulated hypothetical experiences of justice and injustice directed to oneself or another party,

examining the interactive effect of these variables in predicting fairness judgments. This review is relevant to my study because I examine the interaction of own abusive supervision and coworker abusive supervision in predicting employee outcomes. Abusive supervision can be seen as an injustice that is either directed against oneself (own abusive supervision) and/or others (coworker abusive supervision). I also review a few field studies on abusive supervision that are directly related to my hypotheses.

Experimental Studies on Others' Justice Experience

As I reviewed earlier, a stream of research on third-party justice has examined the direct influence of others' justice experience on an individual's own justice reasoning and behavior (e.g., Jones & Skarlicki, 2005; Kray & Lind, 2002; Lind et al., 1998; Skarlicki & Rupp, 2010). The experimental study done by Jones and Skarlicki (2005) suggests that justice experienced by others may moderate how individuals react to their own justice experiences. The authors showed that being aware of the unfair treatment of one's peers (other participants of the experiment) by an authority figure (i.e., the experimenter) influenced individuals' subsequent interpretation of and reaction to their own unfair treatment by the authority. Compared to those who were told that the experimenter treated other participants fairly, participants who were told that the experimenter was unfair to other participants rated him or her lower on interactional justice. They also exhibited the strongest retaliation tendency toward the experimenter. Although Jones and Skarlicki did not manipulate participants' own treatment (i.e., participants were treated unfairly in all conditions), their findings indicate that other's unfair treatment can influence how one responds behaviorally to experiencing injustice oneself.

A few studies examined the interaction between individual's actual justice experiences (*own justice*, for short) and the justice experiences of others (*other justice*, for short; Ambrose, Harland, & Kulik, 1991; Ambrose & Kulik, 1989; Colquitt, 2004; Grienberger, Rutte, & van Knippenberg, 1997; Spencer & Rupp, 2009; van den Bos & Lind, 2001) in predicting a variety of dependent variables. Two of these studies failed to find a significant interactive effect on fairness perceptions and satisfaction with the procedures and outcomes (Ambrose et al., 1991; Ambrose & Kulik, 1989). The remaining four studies detected a significant interaction in predicting individual's evaluations of procedural fairness and other outcomes. van den Bos and Lind (2001) manipulated the accuracy of information on which the decision was made and the sanction or denial of opportunity for participants to voice their opinions. They found that own and other justice interacted in predicting participants' perceived procedural fairness, such that individuals' own experience of fair procedures (i.e., decision making based on accurate information and having the opportunity to voice) led to higher procedural fairness judgments only when others were also granted fair procedures. People reported high procedural fairness only when they perceived that both they and others were fairly treated. Spencer and Rupp (2009) observed a similar interaction pattern. They found that participants experience high emotional labor either when they were personally treated unfairly by a customer or when he or she witnessed other coworkers being mistreated by the customer.

Findings from Grienberger and colleagues (1997) revealed a slightly different pattern of interaction, such that the lowest level of fairness was observed in the condition of low own justice and high other justice. The other three conditions did not differ

significantly from each other. Colquitt (2004) found that participants performed best when both own and other justice was high, whereas they performed worst when own justice was low and other justice was high.

Despite the difference in the shape of these interaction effects (Ambrose et al., 1991; Ambrose & Kulik, 1989; Colquitt, 2004; Greenberger et al., 1997; Spencer & Rupp, 2009; van den Bos & Lind, 2001), these studies all showed that own justice has a stronger positive influence on individual perceived fairness and related employee outcomes when other justice was high. Colquitt (2004) and Greenberger et al. (1997) interpret these findings from the perspective of social comparison theory; lower levels of own justice are associated more relative deprivation when other justice is high, as compared to when other justice is low. This perceived relative deprivation leads to negative consequences. In the following subsection, I review field studies that provided some evidence regarding the predicted interactive effect of own by coworker abusive supervision on a range of employee outcomes.

Field Studies on Coworker Abusive Supervision

Duffy and colleagues (2006) examined how supervisor social undermining behavior experienced by other coworkers in the same work unit may shape how individuals respond to their own undermining by the supervisor. They defined supervisor social undermining as “behavior intended to hinder, over time, the ability to establish and maintain positive interpersonal relationships, work-related success, and favorable reputation” (Duffy, Ganster, & Pagon, 2002: 332). The authors tested a cross-level model in which the unit mean levels of supervisor undermining moderate the individual level relationships between supervisor undermining and employee outcomes. Across two

studies, they found significant interactive effects predicting employee job satisfaction, job involvement, depression, trust in supervisor, intention to quit, and deviant behaviors. The influence of supervisor undermining on these employee outcomes was stronger when unit mean levels of supervisor social undermining were low. Duffy et al. attributed their findings to the social comparison effect of being singled out for unfair treatment.

Following Duffy et al.'s approach, Hannah and colleagues examined how squad mean levels of abusive supervision moderate the influences of individuals' own levels of abusive supervision on their moral courage and identification with prosocial organizational values (Hannah et al., in press). They found that squad mean levels of abusive supervision interacted with own abusive supervision such that individuals reported low levels of moral courage and identification with organizational values when either own abusive supervision or unit mean levels of abusive supervision was high. Similar to the findings reported by Duffy and colleagues, Hannah et al. found that own abusive supervision had a stronger negative impact on one's moral courage and identification with organizational values among squads with relatively low mean levels of abusive supervision.

In another study with a sample of 233 individuals from a range of organizations and industries, Harris et al. conceptualized vicarious abuse as including "hearing rumors of abusive supervision from coworkers, reading about such behavior in an email, or actually witnessing the abuse of a coworker" (2013: 41). They asked the participants to report the extent to which they heard about or witnessed others' mistreatment by their leaders (e.g., "I have heard about or witnessed supervisors at work making negative comments about one or more of those below them to others."). They found that vicarious

abuse had a negative relationship with desirable employee outcomes over and beyond individuals' direct experience of leader abuse. In addition, they reported that a high level of vicarious abuse was associated with a weaker positive relationship between own abusive supervision and coworker-directed deviance. In contrast, vicarious leader abuse was found to intensify a negative relationship between own abusive supervision and employee perceived organization support.

Building on the prior research, Peng, Schaubroeck, and Li (2013) adopted a social exchange perspective to examine how coworker abusive supervision (defined as the extent to which other unit coworkers on average are abused by the same leader) and own abusive supervision interact in influencing workers' social exchange relationships with their leaders and, separately, their work unit peers. These social exchange relationships were in turn linked to individuals' task performance and helping behavior directed toward unit peers. Peng et al. found that individuals only exhibited high levels of task performance and helping behavior directed toward their coworkers when neither they nor their coworkers were abused by the leader. Part of this interactive effect between own abusive supervision and coworker abusive supervision was jointly mediated by participants' perceived relationship quality with the leader (i.e., LMX) and their affect-based trust in unit peers. Notably, the aforementioned studies (Duffy et al., 2006; Hannah et al., in press; Harris et al., 2013; Peng et al., 2013) converge in finding that high coworker abusive supervision is associated with a weaker influence of own abusive supervision on employee psychological and behavioral outcomes. These studies are distinguished from other abusive supervision studies in that they show that the

perceptions of how other coworkers are treated play an important role in determining individuals' reactions toward their own experience of abusive supervision.

CHAPTER 3

DEVELOPMENT OF HYPOTHESES

This chapter describes each of the hypotheses in my model and develops predictions based on the theories and empirical findings. As noted in Chapter 1, I am developing a model in which justice-related motive states mediate the relationship between abusive supervision and employee deviance. In my model abusive supervision encompasses both own abusive supervision, which is the traditional focus of abusive supervision research, and coworker abusive supervision. This is a moderated mediation model in which the interaction of own and coworker abusive supervision influences different employee deviance variables through the influences of different justice-related motive states. I first develop hypotheses concerning the joint influence of own and coworker abusive supervision on production deviance as mediated by the justice motive state of reward expectancy. I then hypothesize the interactive effects between own and coworker abusive supervision on supervisor-directed deviant behaviors as mediated by moral disapproval of leader. Finally, I develop hypotheses related to how the own and coworker abusive supervision interaction predicts coworker-directed deviance through perceived social exclusion. In particular, I predict own and coworker abusive supervision interact in distinct ways in predicting the three distinct forms of employee deviance, and that each justice motive variable uniquely explains a particular employee deviance outcome.

My review of the literature on abusive supervision (Chapter 2) indicated that the extant research has largely ignored the social influences in the work settings that can shape individuals' interpretations and reactions to abusive supervision. One source of

such social influence is from the coworkers with whom the individual interacts on a daily base (Duffy et al., 2006; Harris et al., 2013). Coworkers' experiences and opinions can determine, for example, how individuals make inferences about organizational justice (Degoey, 2000; Lamertz, 2002). Coworkers who are abused by the leader are likely to share their negative experiences and opinions with other employees in the work unit (Harris et al., 2013). This intra-unit communication about the leader's abusive behavior may activate beliefs related to personal justice motives and, when motives are thwarted, this precipitates a tendency to restore a sense of justice by engaging in particular forms of work deviance that correspond to the levels to which particular justice motives are not satisfied.

In this paper I propose that coworker abusive supervision can provide a social context that influences how an individual interprets and experiences his or her own mistreatment by the leader. According to social comparison theory (Festinger, 1954), people frequently compare their own situation (i.e., outcomes, experiences) to that of similar others in order to evaluate their own attributes (e.g., intelligence) and outcomes (e.g. pay). Victims of abusive supervision may tend to gather information from their coworkers when assessing their own mistreatment by the leader. Perceived differences in leader mistreatment would then influence individual attitudes and behaviors, just as LMX social comparison has been found to explain marginal variance in individual outcomes beyond the effect of absolute relationship quality as measured using standard LMX instruments (Vidyardhi et al., 2010).

Abusive Supervision and Production Deviance

One way in which social comparisons with coworkers in terms of abusive supervision may influence behavior is because they may lead the individual to the conclusion that his relative lack of favor with the supervisor reduces the likelihood he will receive rewards commensurate with his contributions. Because high quality exchange relationships with leaders, and the resources that accompany such relationships, are desirable to most subordinates (Graen & Uhl-Bien, 1995), individuals who feel mistreated by their leaders to a greater extent than their coworkers are likely to perceive relative deprivation. Relative deprivation is an aversive psychological state resulting from the perceptions that one's outcome is less desirable than what he or she deserves (Crosby, 1976). This is especially true because leaders have a limited capacity to attend to the needs of individuals, and they must administer rewards such as pay raises and plum assignments to some subordinates and not others. Instrumental motives are frequently activated among employees because they often perceive they are competing with their coworkers for work benefits such as promotion or pay raises (Cohen-Charash & Mueller, 2007). Being more abused by the leader than one's coworkers indicates a lower quality exchange relationship with the supervisor (Peng et al., 2013), and this may be perceived by the employee as reducing the likelihood that he or she can obtain rewards by performing at higher levels. Thus owing to the important resources possessed by the leader, individuals who was mistreated to a degree that is much higher than their unit coworkers (i.e., high own abusive supervision and low coworker abusive supervision) feel disadvantaged in terms of obtaining tangible benefits and rewards through having an unfavorable relationship with the leader.

In this paper, I propose that this perception of having little opportunity for material benefits based on their contributions is reflected in their *reward expectancy*, which is the linkage between performance and rewards (or *instrumentality*; Vroom, 1964). Reward expectancy is distinct from distributive justice in that reward expectancy is a more motivational construct because it concerns about the specific connection between changes in productivity and corresponding changes in rewards. Based on the rationale outlined in the above paragraph, I expect that receiving abusive supervision will have a strong negative influence on reward expectancy when coworker abusive supervision is low. Conversely, when an individual observes that the leader abuses other coworkers to the same or even a larger extent, he or she is less likely to perceive a negative psychological gap relative to coworkers that can reduce reward expectancy. As a result, own abusive supervision will not have as strong negative influence on reward expectancy as compared to when coworker abusive supervision is low.

Reward expectancy, in turn, influences employee motivation and performance at work. Expectancy theory (Vroom, 1964) states that expected contingency between effort and performance (expectancy I, or E1) and that between performance and rewards (expectancy II, or E2) determine the amount of effort an individual invests in a task. The expectancy theory research stream that dates back to 1960s (e.g., Porter & Lawler, 1968; Toppen, 1965) has consistently demonstrated a significant positive association between reward expectancy and effort/performance (see Sims, 1977; Sims & Szilagyi, 1975, for reviews). Subsequent leadership research and theory has also highlighted the key role of leader reward behaviors that are contingent on follower performance (i.e., leader contingent reward behavior) in influencing follower attitudes and performance. Path-goal

theory (House, 1971; House & Mitchell, 1974), for example, specifies that a leader should establish a strong connection between performance and rewards to motivate followers to perform at high levels. As summarized by two recent meta-analyses (Bono & Judge, 2004; Podsakoff et al., 2006), leader contingent reward behavior is positively related to subordinate work effort, task performance, motivation, and job satisfaction.

The fact that individuals with low reward expectancy often reduce their work effort and performance would be reflected in a negative relationship between reward expectancy and production deviance (Robinson & Bennett, 1995). This relationship can be understood from the perspective of the equity principle (Adams, 1965) which states that individuals prefer that their outcomes (rewards) to be proportional to their inputs (productivity). A low performance-reward contingency violates this equity principle. It tends to precipitate perceptions of being under-rewarded, particularly among individuals who are performing well. One way to avoid being under-rewarded and to regain a sense of equity is doing little or nothing at work. Workers with low reward expectancy expect that increasing or lowering their performance will not affect their rewards to an appreciable extent. Therefore, individuals are likely to cope with low reward expectancy by engaging in production deviance.

Based on the reasoning above, I predict an interactive relationship between own and coworker abusive supervision in predicting employees' production deviance as mediated by reward expectancy. This interaction has two important features: 1) there is a stronger positive relationship between own abusive supervision and production deviance when coworkers are perceived to be less (vs. more) abused, and 2) individuals who perceive high own abusive supervision *and* low coworker abusive supervision will have

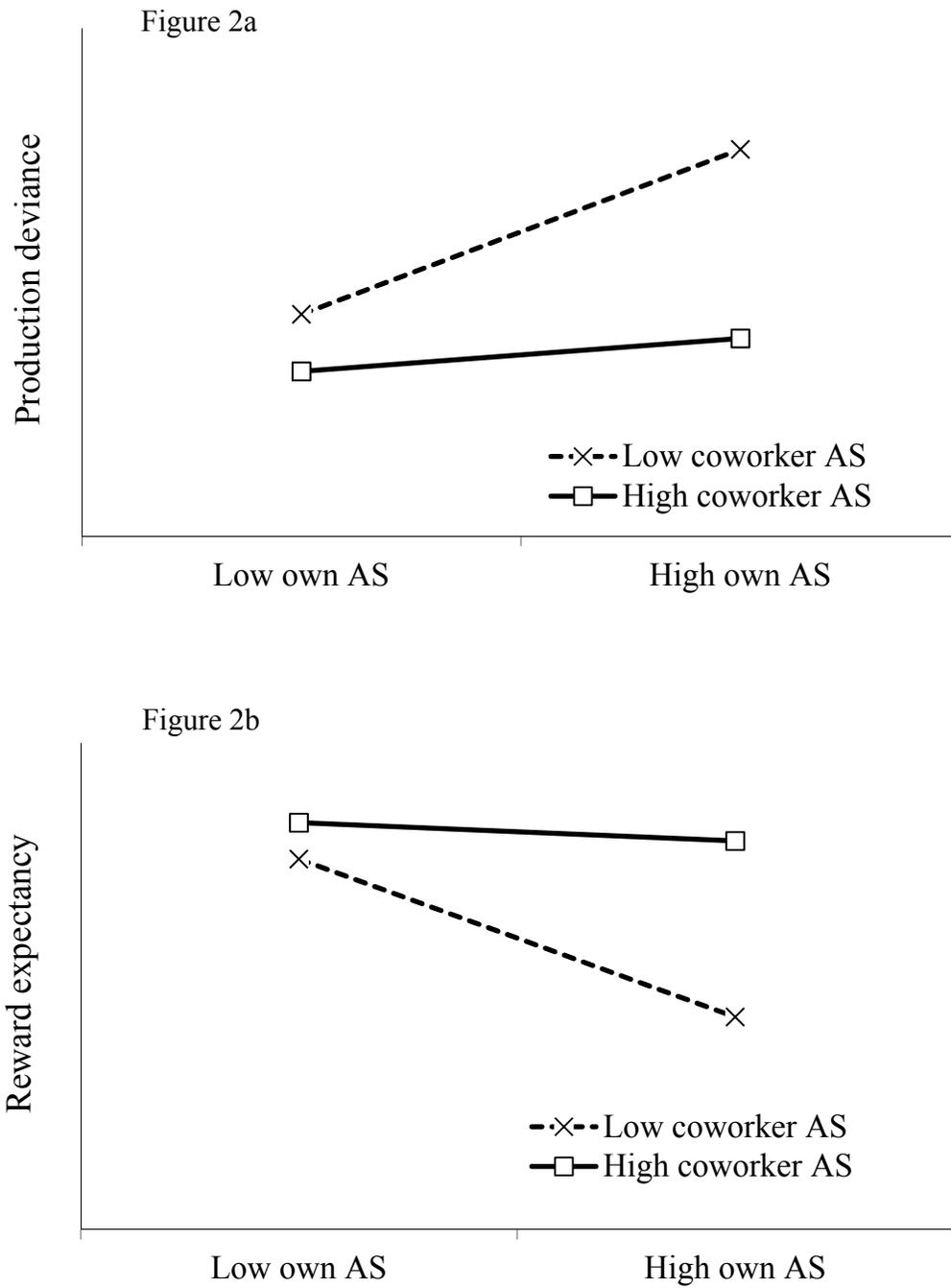
the highest levels of production deviance. The expected pattern of this interaction is illustrated in Figure 2. Because reward expectancy mediates this interactive effect, I expect the same pattern of interactive effect of abusive supervision in predicting reward expectancy. My first two hypotheses are as follows:

Hypothesis 1: Own and coworker abusive supervision interact in predicting production deviance such that own abusive supervision is more positively associated with production deviance when coworker abusive supervision is lower, and that production is lowest when own abusive supervision is high and coworker abusive supervision is low.

Hypothesis 2: Reward expectancy mediates the interactive effect of own and coworker abusive supervision on production deviance.

FIGURE 2

Hypothesized Interaction Patterns for Hypotheses 1-2



Abusive Supervision and Supervisor-directed Deviance

To this point I have argued that being abused to a greater extent than unit peers elicits upward social comparisons which lead such individuals to perceive limited opportunities to obtain instrumental benefits, which in turn encourages them to intentionally withdraw their efforts (i.e., production deviance). As reviewed earlier, being personally abused by the leader can also lead individuals to engage in deviant behaviors to sabotage their supervisor (e.g., J. Liu et al., 2010; Mitchell & Ambrose, 2007). Previous studies suggest that leader abusive behaviors may have less negative impact on employee behaviors if such behaviors are deemed culturally acceptable (J. Liu et al., 2010) or effective in producing favorable outcomes legitimate (D. Liu et al., 2012). Building on this idea, I argue that perceiving the leader as violating one's internalized ethical principles (i.e., moral disapproval of leader) is important to explaining the linkage between abusive supervision and supervisor-directed deviance.

When individuals are personally abused, they often report low levels of interactional justice of the leader (e.g., Aryee et al., 2007; Burton & Hoobler, 2011; Tepper, 2000). The victim of abusive supervision thus often perceives that the leader violates important interpersonal norms such as treating people with respect and dignity, one of the fundamental rules of ethicality (Brown, Harrison, & Treviño, 2005; Tyler & Lind, 1992). Moreover, the moral perspective of justice suggests that individuals care about the justice and welfare of others in addition to that of their own when judging the morality of the authorities' behaviors (Cropanzano et al., 2003). When people observe an injustice experienced by another person, they tend to perceive this as a moral transgression, and this promotes restorative actions to punish the wrongdoers (e.g.,

Batson, Kennedy, Nord, Stocks, Fleming, Marzette et al., 2007; Turillo et al., 2002). Thus, individuals who are either personally abused by the leader or who observe other coworkers being abused are likely to perceive the leader's behavior as being unethical. Consistent with this prediction, research has shown that fairness perceptions are higher when both own and other justice are high, compared to when own justice is high but other justice is low (Colquitt, 2004; van den Bos & Lind, 2001). If individuals were purely instrumental and concerned only about their own material gains, such an interaction would not be observed. Specifically, one's coworkers' abuse by the leader is not expected to hinder one's own opportunity to be rewarded at work. When levels of abuse are comparable to one's coworkers, there is no advantage or disadvantage relative to one's peers. However, the moral perspective of justice provides an explanation for this finding.

I use the term moral disapproval of leader to indicate the subordinates' perceptions that their leader violates ethical norms. Perceiving that the leader has violated important moral principles produces a psychological state that has important motivational consequences on individual attitudes and behaviors (Folger, 2001; Skitka, 2003). According to the AIM, different aspects of self (i.e., material, social, and personal and moral identity) define an individual's self-view. Individuals are more sensitive to a particular type of justice judgment when a particular identity is activated in the working self-concept. Although personal identity involves aspects (e.g., achievement, mastery) beyond the content of moral identity, as the aspect of the self-concept that is defined by important moral norms and goals, moral identity is deemed most relevant in justice reasoning (Skitka, 2009). A coherent and firm sense of moral identity is perhaps the most

critical aspect for an individual to define “who I am.” A moral identity can be challenged when individuals perceive that important people in their lives do not behave in a manner that is consistent with societal ethical norms. The belief that the leader violates important ethical principles, together with the fact that one has not taken any action to confront the transgressor, may threaten one’s need for moral integrity and create dissonance in one’s moral identity.

The psychological discomfort associated with a threatened moral identity motivates individuals to initiate actions to maintain consistency between their moral identity and behavior. One way to restore a balance in one’s moral identity is to engage in retributive actions against the perpetrator of a moral violation. By punishing the wrongdoer, individuals perceive that the wrongdoers have paid a penalty for their moral transgressions, thus restoring their own beliefs of justice (Dalbert, 1999) and reaffirming their positive moral identity by acting on their core moral values. Following this logic, when an individual perceives the supervisor violates core moral principles, such as by engaging in abusive supervision, he or she is likely to engage in punitive behaviors directed against the supervisor (Skitka, 2009). Employees may make a derisive remark about their supervisor, gossip about him or her, or refuse to follow the supervisor’s instructions. Because these behaviors are against the norms of the organization, they are labeled *supervisor-directed deviant behavior* (Mitchell & Ambrose, 2007). Such deviant behaviors seek to produce harmful effects on the welfare of the supervisor and thus serve the retributive purpose of the individual who perceives that his or her leader has engaged in immoral, harmful behaviors.

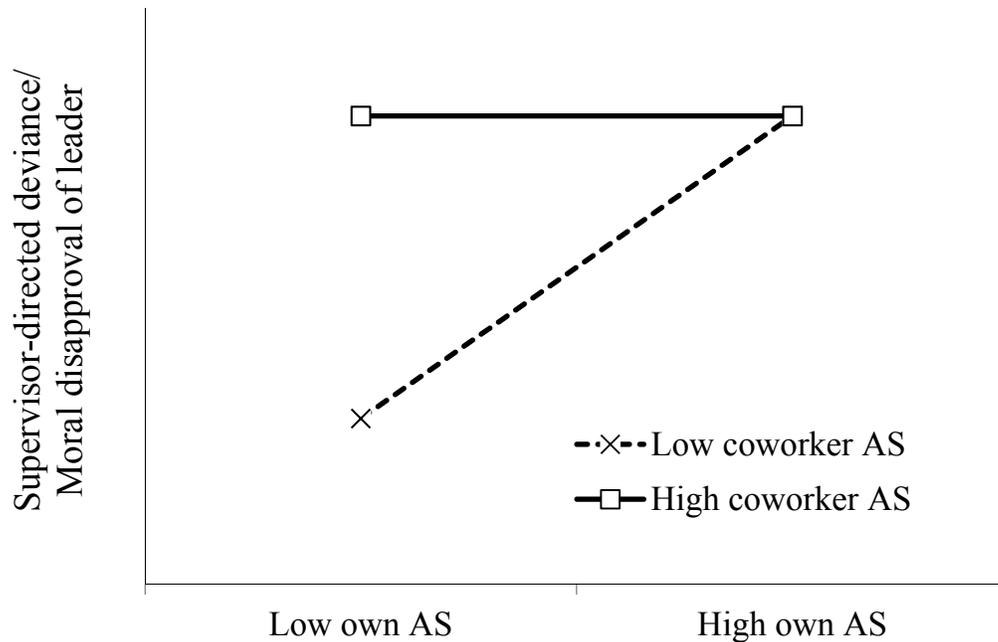
Based on the rationale above, I predict that the level of moral disapproval of leader explains the interactive effect of own and coworker abusive supervision on deviant behaviors directed against the supervisor. A high level of abusive supervision, either experienced by oneself or by one's coworkers, enhances supervisor-directed deviant behavior through influencing one's moral disapproval of the leader. The pattern of the interaction between own and coworker abusive supervision in predicting supervisor-directed deviance is illustrated in Figure 3.

Hypothesis 3: Own and coworker abusive supervision interact in predicting supervisor-directed deviance such that own abusive supervision is more positively associated with production deviance when coworker abusive supervision is lower, and that supervisor-directed deviance is high when either own or coworker abusive supervision is high.

Hypothesis 4: Moral disapproval of leader mediates the interactive effect of own and coworker abusive supervision on supervisor-directed deviance.

FIGURE 3

Hypothesized Interaction Patterns for Hypotheses 3-4



Abusive Supervision and Coworker-directed Deviance

Research has also suggested that victims of abusive supervision may engage in deviant behaviors to harm their coworkers (Lian et al., 2012; Mitchell & Ambrose, 2007; Schaubhut et al., 2004). Drawing from the relational perspective of justice, I argue that being abused by the leader to an extent that is different (more or less) from other unit peers may lead individuals to be socially excluded by their unit peers and as a result they may tend to engage in coworker-directed deviant behaviors. Thus I argue that social exclusion, which refers to the perceptions of being prevented from engaging in social interactions with other members in a group (Westphal & Khanna, 2003; Williams, 2001), explains the relationship between abusive supervision and deviant behaviors directed against coworkers.

Disrespect from an authority figure directed toward any member(s) of the group can pose a group identity threat. Group identity threat refers to a potential damage to the positive image and social status of the group as a whole (e.g., Berger, Cohen, & Zelditch, 1972; Driskell, Radke, & Salas, 2003; Lauderdale, Smith-Cunniën, & Inverarity, 1984). In order to protect and maintain a favorable group identity, groups may engage in behaviors that confer low status to the abused members and socially distance themselves from the victims (Branscombe, Wann, Noel, & Coleman, 1993; Lauderdale et al., 1984). By distancing themselves from the source of an identity threat (i.e., the victimized members), members protect their group identity from being discredited (Branscombe et al., 1993; Westphal & Khanna, 2003). Following the argument of group identity threat, the victim who is much more abused in the group may tend to be excluded by his/her peers. For example, they may perceive “being ignored by other peers at work,” “being shut out from a conversation,” or that “others avoiding talking to me” (see Ferris, Brown, Berry, & Lian, 2008).

The relational perspective of justice provides a separate perspective about the role of mistreatment in promoting exclusionary behavior among peers. This model argues that being treated fairly has implications for an individual’s perceived social standing in the group (Lind & Tyler, 1988; Tyler & Lind, 1992). Being abused by the authority figure leads the victim to perceive she has lost social status among his or her unit peers, and this, in turn, leads her to subsequently withdraw from group activities. Mistreatment by an authority figure may also signal to other group members that one has relatively low social status in the group; in other words, there may be an objective basis for the victim’s perception of diminished social status among peers. Such diminished social status can be

particularly salient to the victim when one or a minority group of individuals are much more abused by the leader than their peers (Duffy et al., 2006; Peng et al., 2013). If members indeed perceive that the victim of abusive supervision has lower status in the group, this may encourage them to exclude the victim from providing input to group concerns.

From the perspective of the victims, receiving more than a unit average level of abuse by the supervisor encourages individuals to engage in upward social comparisons, that is, comparing oneself to more favored referent others in self-relevant domains (Gilbert, Giesler, & Morris, 1995; Wood, 1996). Such upward social comparisons give rise to feelings of relative psychological deprivation which lead them to dislike the referent others (Salovey & Rodin, 1984; Schaubroeck & Lam, 2004), or have lower affect-based trust in them (Dunn, Ruedy, & Schweitzer, 2012). Affect-based trust refers to the form of trust “grounded in reciprocal interpersonal care and concern” (McAllister, 1995: 25). Upward social comparisons may even motivate individuals to engage in deviant work behaviors to harm the comparison others (Cohen-Charash & Mueller, 2007; Duffy, Scott, Shaw, Tepper, & Aquino, 2012; Lam, Van der Vegt, Walter, & Huang, 2010). These unfriendly and even malicious behaviors of the victim in turn lead to a negative interpersonal exchange between the victim and his or her coworkers. As a result, individuals who are much more abused by the leader are likely to feel disliked and socially excluded by their unit peers. To summarize, perspectives about how other group members manage group identity threat arising from the presence of a relatively abused member(s) and how that member(s) may engage in upward social comparisons together

suggest that individuals who are relatively more abused by the leader will experience high levels of social exclusion by their peers.

Conversely, when individuals are rarely abused by the leader but other coworkers receive considerably more abuse, they tend to make downward social comparisons. Downward social comparisons may lead individuals to perceive their coworkers as being incompetent and to lower their cognition-based trust in their peers (Dunn et al., 2012). Such perceptions may motivate the less abused individuals to distance themselves from their peers that are more abused by the leader. Individuals who are less abused than their peers may also believe that they are envied by their coworkers, and this makes them feel that the envious others will seek to undermine their personal goals (Exline & Lobel, 1999). Being less abused by the leader makes one an upward social comparison target of coworkers, which can lead one to be disliked and even derogated by peers (Cohen-Charash & Muller, 2007; Duffy et al., 2012; Exline & Lobel, 1999). Coworkers who are victims of leader mistreatment are less likely to initiate constructive social exchange with the better-off individuals (Gino & Pierce, 2010; Kim, O'Neill, & Cho, 2010). Consequently, their worse-off coworkers socially exclude the minority of individuals who are better treated by the leader.

Being excluded by a valued social group is considered to be one of the most adverse human experiences (e.g., Nezlek, Kowalski, Leary, Blevins, & Holgate, 1997; Williams, 2001; Williams, Cheung, & Choi, 2000). This is because being excluded by other group members thwarts an individual's need to belong to a valued social group and threatens his or her social identity (Baumeister & Leary, 1995; Lind & Tyler, 1988). To maintain a positive social image, individuals who are excluded by the group may be

motivated to rebuild the social bonds with other members and regain respect and status within the group. However, little empirical evidence supports such a tendency for social reconnection (see the review by Maner, DeWall, Schaller, & Baumeister, 2007). This is likely because being socially excluded produces significant amount of psychological pain (Eisenberger, Lieberman, & Williams, 2003) that can prevent an individual from initiating better social exchange relationships with the perpetrator. Instead, people are often motivated to return the injuries to the members who excluded them, a pattern of interaction consistent with the negative reciprocity norm (Gouldner, 1960). Thus individuals who perceive that they are being excluded by their unit peers are more likely to engage in retaliatory behaviors against them. Consistent with my prediction, research has observed various types of antisocial responses to being socially excluded (e.g., Buckley, Winkel, & Leary, 2004; Twenge, Baumeister, Tice, & Stucke, 2001; Twenge & Campbell, 2003). For example, Buckley et al. demonstrated that being socially excluded or rejected precipitates aggressive behaviors directed toward the source of social exclusion (e.g., ignoring, humiliating the perpetrator).

For the various reasons outlined above, I expect that individuals who are substantially less abused than their coworkers will tend to be socially excluded by their peers and in turn engage in coworker-directed deviance, as will persons who receive a substantial higher level of abusive supervision than their coworkers. Social exclusion by peers, in turn, motivates individuals to engage in coworker-directed deviant behavior.

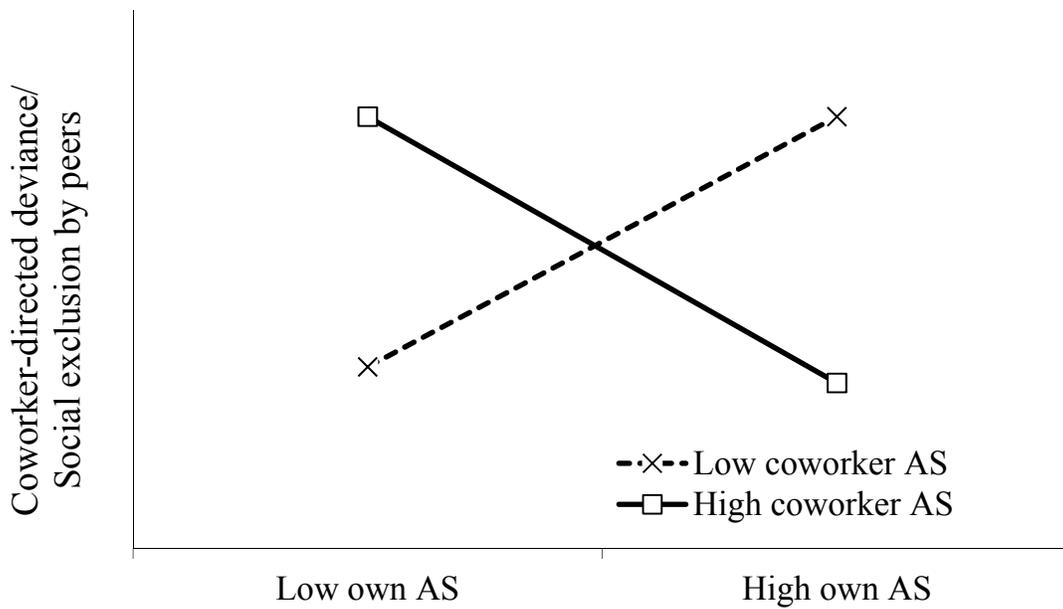
Hypothesis 5: Own and coworker abusive supervision interact in predicting coworker-directed deviance, such that coworker-directed deviance will be high

when levels of own abusive supervision are inconsistent with levels of coworker abusive supervision (i.e., high own and low coworker abusive supervision or low own and high coworker abusive supervision).

Hypothesis 6: Social exclusion by peers mediates the interactive effect of own and coworker abusive supervision on coworker-directed deviant behavior.

FIGURE 4

Hypothesized Interaction Patterns for Hypotheses 5-6



To summarize, I have developed in the above section how one's own abusive supervision and abuse of coworkers interact in distinct ways in predicting three justice-related motive states associated with material gains, moral integrity, and positive social relationships. These justice-related motive states, in turn, lead to different forms of employee deviance, including production deviance, supervisor- and coworker-directed deviance. I also predict that these interactive effects in predicting each deviant behavior will exhibit distinct patterns (see Figures 2-4).

CHAPTER 4

METHOD

Participants and Procedures

Workers from a large website services company and a medium-size consultancy company in China were invited to participate in this study. I sampled the participants by work groups or departments (“work unit” hereafter). A total of 74 work units were recruited. I invited all the members in the work unit to participate in the study except for two units with over 60 members. For these two work units, I randomly sampled 12 of them. Both unit members and the leader were informed about the research purposes and procedures. They were guaranteed confidentiality and the voluntary nature of their participation. The study was approved by the Institutional Review Board of Michigan State University. Surveys administered online via a secured web-survey system across three different periods over a course of 3.5 months. The first survey was administered in mid-September, 2012, the second survey was administered in early November, and the third and last survey was administered in late December, 2012.

A total of 337 employees from the 74 work units were recruited for this study. Among these employees, 285 unit members from a total of 61 work units completed the first survey. Of these, 264 completed the second survey, and 233 completed all three surveys. The overall response rate was 69%. In terms of unit size, sixty-seven percent (67%) of the work units had 4 to 8 members and the vast majority (94%) had between 3 to 11 members. Units that had less than 3 members were excluded from the analyses because a minimum of two peer ratings was required when computing the deviant behavior variables. I also excluded groups from the analyses when there were concerns

about under-representation (less than 50%) of the unit. Ample unit representation is important in deriving the variable of coworker abusive supervision (Allen, Stanley, Williams, & Ross, 2007). I excluded six groups that did not meet these two criteria, yielding a total of 275 members from 55 work units. Forty-two units were from the website services company and 13 units were from the consultancy company. The final analyses involved a total of 241 respondents from these 55 units who had completed the first two surveys and were also rated on deviant behavior by two or more unit peers at Time 3.

I followed conventional procedures (Brislin, Lonner, & Thorndike, 1973) in translating the survey items from English to Chinese. A bilingual expert who was blind to the research questions translated the Chinese translations of the items back to English. I discussed the few minor discrepancies with this person and adjusted the Chinese items accordingly. I arranged for the items to be pretested among five working adults in China to make sure the items were clear and free of ambiguity. Based on their feedback I made a few minor adjustments.

Measures

Abusive supervision. Nine items from the instrument developed by Tepper (2000) were used to measure *own abusive supervision*. While studies consistently find only one factor in the complete 15-item scale, Mitchell and Ambrose (2007) observed that the conceptual content of abusive supervision includes two types of acts: active-aggressive and passive-aggressive. I selected five items to represent the active-aggressive dimension and four items to represent the passive-aggressive dimension based on their categorization. It should be noted, however, that whereas scholars have distinguished

different types of abusive supervision items conceptually, Tepper (2000) conceptualized abusive supervision as a uni-dimensional construct and there is no evidence that his abusive supervision items factor into different dimensions. A sample active-aggressive item is “my supervisor puts me down in front of others,” and a sample passive-aggressive item is “My supervisor breaks promises he/she makes to me.” At Time 1, participants rated their work unit leader on this scale from 1 [never] to 5 [almost always]. The alpha reliability for this scale was .90.

I computed *coworker abusive supervision* as the mean of each individual’s unit peers’ self-reports of abusive supervision. This measure thus captured the average extent to which the same leader abused each individual’s unit peers. As noted above, I therefore excluded work groups that had less than 50% of the unit peers who provided self-ratings of abusive supervision. The possibility of a low response rate within particular groups could bias estimates of coworker abusive supervision, as it might be associated with more extreme distributions of individuals’ ratings on abusive supervision in low response rate units compared to those with a high response rate. Notably, 45% of the work groups had a full response rate at Time 1 and the majority (73%) of these groups had a response rate of 75% and above.

Reward expectancy. I used a six-item scale to measure the perceived connections between performance and rewards at work. These items were adapted from existing measures. Specifically, I used three items from the measure of performance-reward expectancy developed by House and Dessler (1974) and subsequently refined by Sims, Szilagyi, and McKemey (1976). These items emphasize the connections between performance and pay increase, promotion, and job security. In addition, I adapted three

items from a measure of *job conditions* (Eisenberger, Cummings, Armeli, & Lynch 1997) to include these work benefits: “training opportunities,” “fringe benefits,” and “opportunity for advancement.” Two sample items are “As my performance increases my chance for higher pay increases” and “Doing a better job results in my opportunities for advancement.” This measure was administered at Time 2. Participants indicated their agreement on a 7-point Likert-type scale ranging from 1 [strongly disagree] to 7 [strongly agree]. The alpha reliability estimate for this measure was .95.

Moral disapproval of leader. This measure was developed for this study. It was based on items included in a measure of deontic justice (Porath, MacInnis, & Folkes, 2011) and ethical leadership items which referenced the leader’s own ethical behavior (Brown et al., 2005; De Hoogh & Den Hartog, 2008; Mahsud, Yukl, & Prussia, 2010). Seven items were included in the Time 1 survey to measure participants’ perceptions of the morality of their supervisors. Sample items are “My supervisor makes sure that his/her actions are always ethical (reverse coded),” “My supervisor acts in a manner that is ethically inappropriate,” and “My supervisor does things that are morally wrong.” Participants indicated their agreement on a 7-point Likert-type scale ranging from 1 [strongly disagree] to 7 [strongly agree]. Because the psychometric properties of these items have not yet been established, I administered this instrument at both Time 1 and Time 2, using the Time 1 data to assess the factorial integrity of the items to make adjustments as necessary at Time 2. The alpha reliability of this scale was .79 at Time 1. I conducted an exploratory factor analysis to determine the factor structure of these items. I used maximum likelihood as the factor analysis extraction method and Promax for the rotation (Fabrigar, Wegener, MacCallum, and Strahan, 1999). Only one factor was

supported. As shown in Table 1, however, one item, “My supervisor treats people in a way that violates basic moral principles,” had a low factor loading ($\lambda = .30$). Based on the conventional cut-off value of .40 for factor loadings (Floyd & Widaman, 1995; Hair, Anderson, Tatham, & Black, 1998), I did not include this item in the Time 2 measure of moral disapproval of leader. The refined 6-item measure of moral disapproval of leader had a reliability of .85 (Time 1) and .83 (Time 2).

TABLE 1

Exploratory Factor Analyses of Moral Disapproval of Leader Items (Time 1)

	Factor 1 (factor loadings)
Item 1: My supervisor does things that are morally wrong.	.81
Item 2: My supervisor acts in a manner that is ethically appropriate. (reverse coded)	.71
Item 3: My supervisor shows little concern for ethical and moral values.	.77
Item 4: My supervisor uses unethical means to obtain goals.	.73
Item 5: My supervisor makes sure that his/her actions are always ethical. (reverse coded)	-.79
Item 6: My supervisor conducts his/her personal life in an ethical manner. (reverse coded)	-.80
Item 7: My supervisor treats people in a way that violates basic moral principles.	.33
Eigenvalues	3.66
% of Variance extracted	52.29

Note. The alpha reliability for the original 7-item moral disapproval measure was $=.79$ and it was $.85$ for a 6-item measure in which the 7th item was removed from the scale.

Social exclusion by peers. I used seven items from the work ostracism measure introduced by Ferris et al. (2008) to measure participants’ perceptions of being socially

excluded by their coworkers in the work unit. Sample items are “My unit coworkers ignored me at work,” and “My unit coworkers shut me out of the conversation.”

Participants rated the frequency of these items on a 7-point Likert-type scale from 1 [never] to 7 [always]. This measure was administered at Time 2, and its alpha reliability was .88.

Production deviance. I used four items from the production deviance subscale developed by Bennett and Robinson (2000) to measure the extent to which respondents engage in behaviors that reflect an intention to reduce their work effort. These behaviors are labeled production deviance because they adversely influence work unit productivity objectives and ultimately the productivity of the organization (Robinson & Bennett, 1995). Each participant was rated by his/her unit peers on four items, including “take an additional or longer break than is acceptable at your workplace,” “come in late to work without permission,” “intentionally work slower than he/she could have worked,” and “put little effort into his/her work.” I obtained peer ratings of production deviance at Time 3 on a 5-point scale ranging from 1 [not at all] to 5 [almost always]. The alpha reliability for this measure was .85. As multiple peers rated this and the other deviance measures, I examined inter-rater agreement ($r_{wg(j)}$). The average inter-rater agreement ($r_{wg(j)}$) is .95 (median $r_{wg(j)} = .97$). Based on the adequate r_{wg} values, I aggregated the ratings on production deviance across the multiple peer-raters for each participant. The very high inter-rater agreement may be at least partially attributable to the fact that many of the participants were rated by their peers as having never engaged in any behaviors that represented production deviance.

Coworker-directed and supervisor-directed deviant behavior. Following the approach by Mitchell and Ambrose (2007), I used the items of interpersonal deviant behavior developed by Bennett and Robinson (2000) to measure deviant behavior directed against coworkers. Two items were excluded from this measure because they do not fit the study context well (i.e., “made an ethnic, religious, or racial remark against his/her supervisor,” and “played a mean prank on a coworker at work”). I also adapted one item (i.e., “gossiped about a coworker”) from the supervisor-directed deviance measure by Mitchell and Ambrose (2007). Sample items for coworker-directed deviant behavior are “acted rudely toward a coworker” and “said something hurtful to a coworker at work.” This five-item measure had an alpha reliability of .96. I adapted the same five items to measure supervisor-directed deviant behavior (also see Mitchell & Ambrose, 2007). Sample items are “acted rudely toward his/her supervisor,” and “said something hurtful to his/her supervisor at work.” The alpha reliability for the supervisor-directed deviance measure was .94. Unit coworkers rated the participants on these two deviant behavior measures at Time 3. For supervisor-directed deviant behavior, the average inter-rater agreement ($r_{wg(j)}$) was .97 (median $r_{wg(j)} = 1.00$). The average $r_{wg(j)}$ was .96 (median $r_{wg} = 1.00$) for coworker-directed deviance. Again, the high inter-rater agreement values may at least partially reflect the low frequency of these deviant behaviors as reportedly observed by peers. As with production deviance, based on the high mean $r_{wg(j)}$ value I aggregated the peer ratings on the interpersonal deviant behaviors for each participant.

Control variables. Gender, education level, and group tenure (i.e., the length of time that the respondents had worked for the work unit by the time they completed the first survey) were obtained at Time 1 and initially controlled for in the analyses.

Individuals also reported on a 10-item trait measure of *negative affectivity* developed by Watson, Clark, and Tellegen (1988) ($\alpha = .91$). I controlled for negative affectivity as a means to rule out a potential victim precipitation effect (i.e., employees with high negative affectivity may precipitate abuse from their supervisors) (Tepper et al., 2006). Sample items are: “hostile”, “upset”, “distressed”, and “ashamed”. Individuals indicated how they generally felt in terms of these emotional states in their daily life using a 5-point scale ranging from 1 (very slightly or not at all) to 5 (extremely).

Supplementary variables related to moral disapproval of leader. At Time 1, I also measured procedural justice and distributive justice to demonstrate that the new measure of moral disapproval of leader was distinct from the justice measures. I measured *procedural justice* using the 7-item measure reported by Colquitt (2001). Sample items are, “Have those procedures been applied consistently,” and “Have you been able to express your views and feelings during those procedures.” ($\alpha = .79$). I measured *distributive justice* using 4 items from Leventhal (1976). Sample items are, “Does your (outcome) reflect the effort you have put into your work,” and “Does your (outcome) reflect what you have contributed to the organization” ($\alpha = .96$). Participants rated these two measures using a 7-point scale ranging from “1=strongly disagree” to “7=strongly agree.” In addition, at Time 1 I measured *ethical leadership* using the instrument introduced by Brown et al. (2005). I excluded one item that I had used to measure moral disapproval of leader (i.e., “My supervisor conducts his/her personal life in an ethical manner”). This 9-item ethical leadership measure had a reliability of .95.

CHAPTER 5

RESULTS

Discriminant Validity of Moral Disapproval of Leader Measure

To test if the new measure of moral disapproval of leader is distinct from the existing related measures that include procedural justice, distributive justice, and ethical leadership, I first examined the zero-order correlations between moral disapproval and these related measures. I expect that moral disapproval of leader to be moderately negatively correlated with the measures of justice and ethical leadership. As expected, moral disapproval of leader was negatively related to both procedural justice ($r = -.25, p < .01$) and distributive justice ($r = -.26, p < .01$). The magnitudes of these correlations were rather moderate, indicating that moral disapproval of leader was distinct from these two justice measures. The correlation between ethical leadership measure and the measure of moral disapproval of leader was .57. This correlation is moderately strong but it is not so high as to suggest a lack of discriminant validity between these two constructs.

I further conducted confirmatory factor analyses to examine if the measure of moral disapproval of leader was distinct from the aforementioned theoretically relevant constructs, including procedural justice, distributive justice, and moral disapproval of leader. The hypothesized four-factor model fit to the data well, $\chi^2 = 797.80, d.f. = 290, p < .01; NFI = .96; CFI = .97; RMSEA = .08; SRMR = .05$. The fit indices also exceeded the conventional cut-off values for a good fitting model (Hu & Bentler, 1999; Vandenberg & Lance, 2000). In addition, this model had significantly better fit than any alternative 3- or 2-factor models with all nine different combinations of two and three constructs. I also conducted another set of CFAs in which I constrained the correlation between moral

disapproval of leader and each corresponding construct (e.g., ethical leadership) to equal the value of 1. Results showed that adding this constraint significantly reduced the model fit. This indicates that moral disapproval is empirically distinct from the other related constructs.

Confirmatory Factor Analyses of Focal Construct Measures

I performed confirmatory factor analyses (CFA) which tested the measurement model for the Time 2 measures of employee justice-related motive states (i.e., reward expectancy, moral disapproval of leader, and social exclusion by peers) and, separately, the Time 3 deviant behavior outcome measures (i.e., production deviance, supervisor-directed deviance, and coworker-directed deviance). The CFA results for the justice-related motive variables are presented in Table 2a. The results show that the hypothesized three-factor model fits the data well, $\chi^2 = 347.52$, $d.f. = 149$, $p < .01$; $NFI = .94$; $CFI = .97$; $RMSEA = .07$; $RMSR = .05$. As expected, the three-factor model fits the data better than any alternative model, including three alternative two-factor models and the one-factor solution (see Table 2a). As with the analyses reported in the last chapter to examine whether moral disapproval is distinct from other related constructs, I conducted a different set of CFAs in which I constrained the correlation between any two constructs (e.g., reward expectancy and moral disapproval of leader) to equal the value of 1. Adding this constraint significantly reduced the model fit, suggesting that the two latent factors are distinct.

TABLE 2a**Confirmatory Factor Analyses Testing Alternative Measurement Models for Time 2 Mediators**

	χ^2	<i>df.</i>	<i>RMSEA</i>	<i>SRMR</i>	<i>CFI</i>	<i>NFI</i>	$\Delta\chi^2$
M0: Hypothesized three-factor model ^a	347.52	149	.07	.05	.97	.94	
M1: Two-factor model by combining reward expectancy and moral disapproval of leader into one factor	694.41	151	.12	.09	.92	.90	346.89**
M2: Two-factor model by combining moral disapproval of leader and social exclusion by peers into one factor	923.72	151	.14	.14	.90	.89	576.20**
M3: Two-factor model by combining reward expectancy and social exclusion by peers into one factor	2126.06	151	.22	.18	.80	.77	1778.54**
M4: One factor solution	2469.63	152	.24	.19	.76	.73	2122.11**

N=265. * $p < .05$, ** $p < .01$.

^a The three factors include moral disapproval of leader, reward expectancy, and social exclusion by peers. $\Delta\chi^2$ was computed by subtracting the χ^2 value of the hypothesized model (M0) from the alternative model (e.g., M1, M2).

^b In the modified hypothesized model (M5), the error variances of the three reverse coded items for disapproval were allowed to covary.

TABLE 2b**Confirmatory Factor Analyses Testing Alternative Measurement Models for Time 3 Outcomes**

	χ^2	<i>d.f.</i>	<i>RMSEA</i>	<i>SRMR</i>	<i>CFI</i>	<i>NFI</i>	$\Delta\chi^2$
M0: Hypothesized three-factor model ^a	1334.37	74	.12	.04	.97	.96	
M1: Two-factor model by combining production deviance and supervisor-directed deviance into one factor	4344.51	76	.22	.12	.91	.90	3010.14**
M2: Two-factor model by combining production deviance and coworker-directed deviance into one factor	3632.86	76	.20	.09	.92	.92	2298.49**
M3: Two-factor model by combining supervisor-directed deviance and coworker-directed deviance into one factor	5785.75	76	.26	.10	.89	.89	4451.38**
M4: One factor solution	7877.89	77	.30	.13	.84	.81	6543.52**

N=1159. * $p < .05$, * $p < .01$. $\Delta\chi^2$ was computed by subtracting the χ^2 value of the hypothesized model (M0) from the alternative model (e.g., M1, M2).

^a The three factors include production deviance, supervisor-directed deviant behavior, and coworker-directed deviant behavior.

In testing CFA models of the Time 3 dependent variables (production deviance, supervisor-directed deviance, and coworker-directed deviance; see Table 2b), the hypothesized three-factor model fits the data better than other possible measurement structures. As with the three mediators, I also tested if these deviant behavior measures were distinct from each other by specifying constraints of unity factor correlations. The results supported the discriminant validity of the deviance measures.

Table 3 presents the zero-order correlations and descriptive statistics for the studied variables. Like other studies on abusive supervision, the sample mean of abusive supervision was relatively low (Mean = 1.27 out of a 5-point Likert scale). As expected, however, participants' self-reports on abusive supervision at Time 1 were positively associated with levels of deviant behavior directed toward the supervisors as rated by unit peers at Time 3 ($r = .19, p < .01$). In line with my predictions, moral disapproval of leader was positively associated with supervisor-directed deviance ($r = .13, p < .05$) and the correlation between social exclusion by peers and coworker-directed deviant behavior was marginally significant ($r = .11, p < .10$). Consistent with the victim precipitation perspective (Aquino & Bradfield, 2000; Tepper, Duffy, Henle, & Lambert, 2006), negative affectivity was positively related to individuals' perceptions of being abused by the leader ($r = .45, p < .01$). Own abusive supervision and coworker abusive supervision were moderately positively correlated ($r = .37, p < .01$).

TABLE 3

Means, Standard Deviation, and Correlations among the Study Variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Own abusive supervision (T1)	1.27	.59	<u>.90</u>										
2. Coworker abusive supervision (T1)	1.27	.38	.37	---									
3. Reward expectancy (T2)	5.59	1.24	-.28	-.17	<u>.95</u>								
4. Moral disapproval of leader (T2)	1.80	.94	.51	.28	-.42	<u>.83</u>							
5. Social exclusion by peers (T2)	1.28	.41	.30	.01	-.31	.18	<u>.88</u>						
6. Production deviance (T3)	1.22	.30	.11	.18	-.03	.01	.08	<u>.85</u>					
7. Supervisor-directed deviant behavior (T3)	1.09	.19	.19	.29	-.04	.13	.05	.47	<u>.94</u>				
8. Coworker-directed deviant behavior (T3)	1.12	.28	.01	.05	-.03	-.07	.11	.66	.56	<u>.96</u>			
9. Negative affectivity (T1)	2.40	.94	.45	.26	-.26	.34	.37	.13	.07	.07	<u>.91</u>		
10. Education (T1)	2.49	.65	.06	.07	-.14	-.10	.18	.09	.05	.11	.08		
11. Group tenure (T1)	16.19	13.96	.09	-.04	-.09	.03	-.03	-.08	-.02	-.05	.01	-.05	
12. Gender (T1)	1.58	.50	.04	.02	-.10	.07	.00	.06	.10	.13	.13	-.04	.03

N=241; Listwise deletion. $|r| > .13, p < .05$ and $|r| > .16, p < .01$. Gender was coded as 1=male and 2=female. Coworker abusive supervision is the mean of unit peers' self-reports of abusive supervision (excluding the focal individual). Values reported at diagonal are alpha reliability estimates.

Hypotheses Testing

Hierarchical linear modeling (HLM 6; Raudenbush, Bryk, Cheong, Congdon, & du Toit, 2004) was used to test all the hypotheses. Compared to regular regression analysis (i.e., OLS regression), HLM provides a more accurate assessment on the standard error terms when the data have a nested structure. Before testing the hypotheses in HLM, I first examined the levels of within- and between-unit variance for the mediating and dependent variables in the theoretical model (see Figure 1) by computing intra-class correlation (ICC) indexes. Results indicate that there was relatively trivial variation due to group membership for reward expectancy ($ICC_{(1)} = .04$, $ICC_{(2)} = .15$) and social exclusion by peers ($ICC_{(1)} = .04$, $ICC_{(2)} = .16$), and there is a moderate amount of between-group variance (in relation to the total variance) for moral disapproval of leader ($ICC_{(1)} = .18$, $ICC_{(2)} = .49$). However, the ICC values were pretty substantial for all the deviant behavioral outcomes; ranging from an $ICC_{(1)}$ of .21 for coworker-directed deviance ($ICC_{(2)} = .56$) to $ICC_{(1)}$ of .56 for supervisor-directed deviance ($ICC_{(2)} = .85$). The presence of substantial between-unit (i.e., level 2) variance led me to use HLM to test the hypotheses.

In all the analyses, I controlled for trait negative affectivity and the demographic variables (i.e., gender, education) that were related to any mediator or dependent variable in the theoretical model. I did not control for group tenure in the final analyses because it was not significantly correlated with any variable in the model. The results also did not differ depending on whether group tenure was controlled. I entered all the control

variables and predictors (own and coworker abusive supervision) at level 1 in the HLM models. I tested mixed effects models because the number of predictors at the lower level of the model exceeded the maximum number of random slopes that can be estimated provided the small group size in the data set. Specifically, I examined if the predictors had significant variation across work units in relation to the dependent variables (i.e., test of variance in slopes). Because of the limited degree of freedom within units, I fixed those slopes to be invariant at level 2 when their slope variances were not significant. The majority of slopes did not show significant variation across level 2 units (work groups) and that the results did not differ substantially depending on whether they were fixed or allowed to vary across level 2 units. Therefore, I included random intercepts when estimating the models, but I fixed the slopes to be constant at level 2 when the slope variance test was not significant.

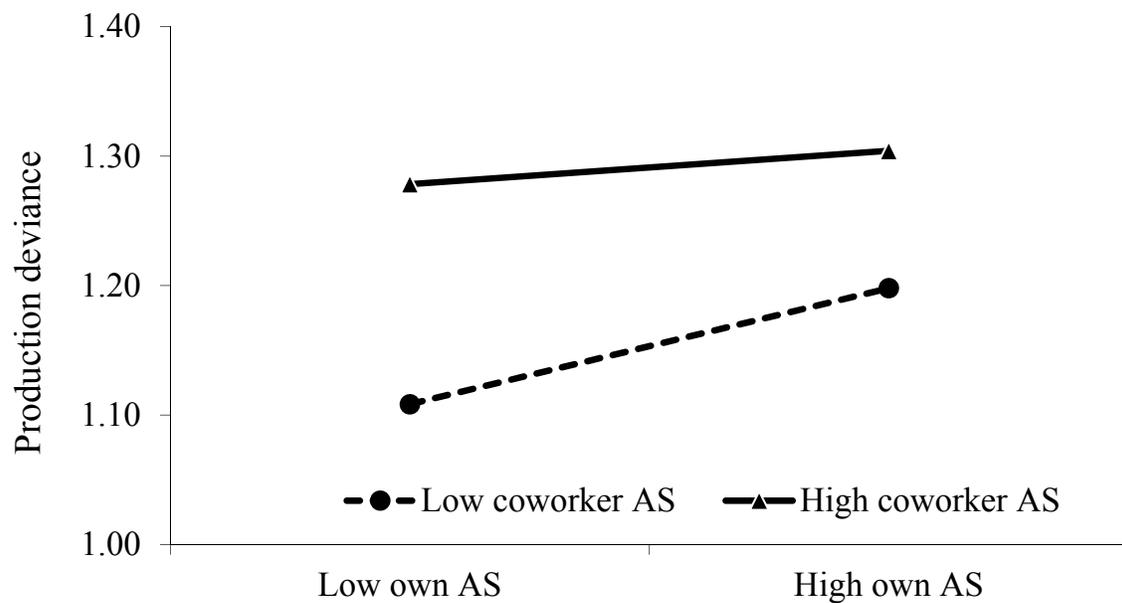
Table 4 presents the HLM results testing the interactive effects of own and coworker abusive supervision on employee deviance outcomes (Hypotheses 1, 3, 5). The interaction of own and coworker abusive supervision in predicting production deviance was significant ($\gamma = .07, p < .01$). The plot for this interaction is shown in Figure 5. Consistent with Hypothesis 1, own abusive supervision is more strongly related to production deviance when coworker abusive supervision is low. Regardless of their own levels of leader abuse, individuals tended to engage in high levels of production deviance when coworkers reported a high mean level of abusive supervision. This is contrary to my prediction that employees would display the most production deviance when they are more abused by the leader than their coworkers (i.e., high own abusive supervision and low coworker abusive supervision). Hypothesis 1 was therefore only partially supported.

The interaction, however, was not significant in predicting either coworker-directed deviance ($\gamma = -.02, ns.$) or supervisor-directed deviance ($\gamma = -.04, ns.$). Hypotheses 3 and 5 were therefore not supported.

FIGURE 5

Interaction of Own and Coworker Abusive Supervision Predicting Production

Deviance



Note. Simple slope t-statistics using the approach introduced by Preacher, Curran, and Bauer (2006) are $t = 2.06$ ($p < .05$) for the low coworker AS condition, and $t = .63$ (ns) for the high coworker AS condition.

TABLE 4

Hierarchical Linear Modeling Results Testing the Interactive Effect of Own and Coworker Abusive Supervision

	Production deviance				Supervisor-directed deviance				Coworker-directed deviance			
	M1		M2		M1		M2		M1		M2	
	Gamma	s.e.	Gamma	s.e.	Gamma	s.e.	Gamma	s.e.	Gamma	s.e.	Gamma	s.e.
<i>Level 1 predictors</i>												
Intercept	1.23**	.03	1.23**	.03	1.08**	.02	1.08**	.02	1.09**	.02	1.09**	.02
Gender	.04!	.02	.04!	.02	.04**	.01	.04**	.01	.09*	.04	.09*	.04
Education	.04	.04	.04	.04	.00	.01	-.00	.01	.03	.03	.03	.03
Negative affectivity	.01	.02	.01	.02	-.01	.01	-.01	.01	.02	.03	.02	.03
Own AS	.02	.02	.04	.02	.06**	.02	.06*	.03	-.00	.02	.01	.02
Coworker AS	.14**	.04	.18**	.05	.17*	.08	.17*	.08	.08!	.04	.09!	.05
<i>Level 1 interaction</i>												
Own AS × Coworker AS			-.07**	.03			-.02	.02			-.04	.04
ΔR^2 -pseudo	<u>.03</u>		<u>.01</u>		<u>.09</u>		<u>.00</u>		<u>.02</u>		<u>.00</u>	

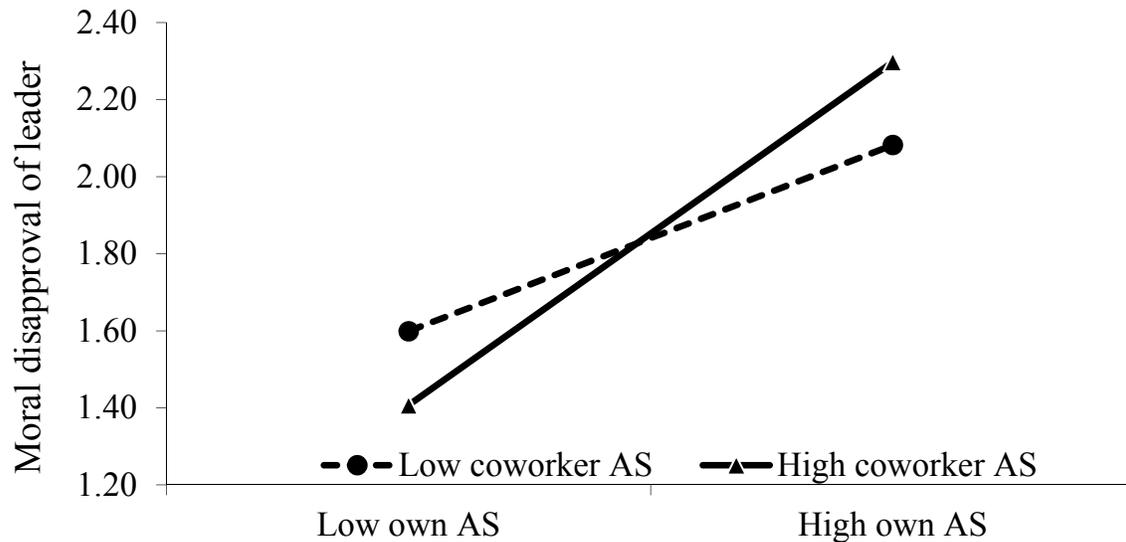
N (level 2) = 55, and N (level 1) = 265. ! $p < .10$, * $p < .05$, and ** $p < .01$. AS = abusive supervision.

Before testing a first-stage moderated mediation model as proposed in Hypotheses 2, 4, and 6, I first tested whether own abusive supervision interacted with coworker abusive supervision in influencing the three hypothesized mediators (i.e., reward expectancy, moral disapproval of leader, and social exclusion by peers). Table 5 summarizes the results. The interaction of own and coworker abusive supervision was not significant in predicting reward expectancy ($\gamma = -.03$, *ns.*), lending no support to Hypothesis 2. Consistent with Hypothesis 4, which states that moral disapproval of leader mediates the joint influence of own and coworker abusive supervision on supervisor-directed deviance, the abusive supervision interaction predicting moral disapproval of leader was significant ($\gamma = .48$, $p < .01$). Plotting this interaction shows that own abusive supervision is more strongly related to moral disapproval of leader when coworker abusive supervision is high (see Figure 6). When coworker abusive supervision is high and own abusive supervision is low, moral disapproval of leader is low. This latter finding is not consistent with my prediction that moral disapproval of leader will be high when either own abusive supervision or coworker abusive supervision is high. Provided the unexpected pattern of interaction and the nonsignificant association between moral disapproval of leader and supervisor-directed deviance ($\gamma = -.01$, *ns.*), Hypothesis 4 was not supported.

FIGURE 6

Interaction of Own and Coworker Abusive Supervision Predicting Moral

Disapproval of Leader



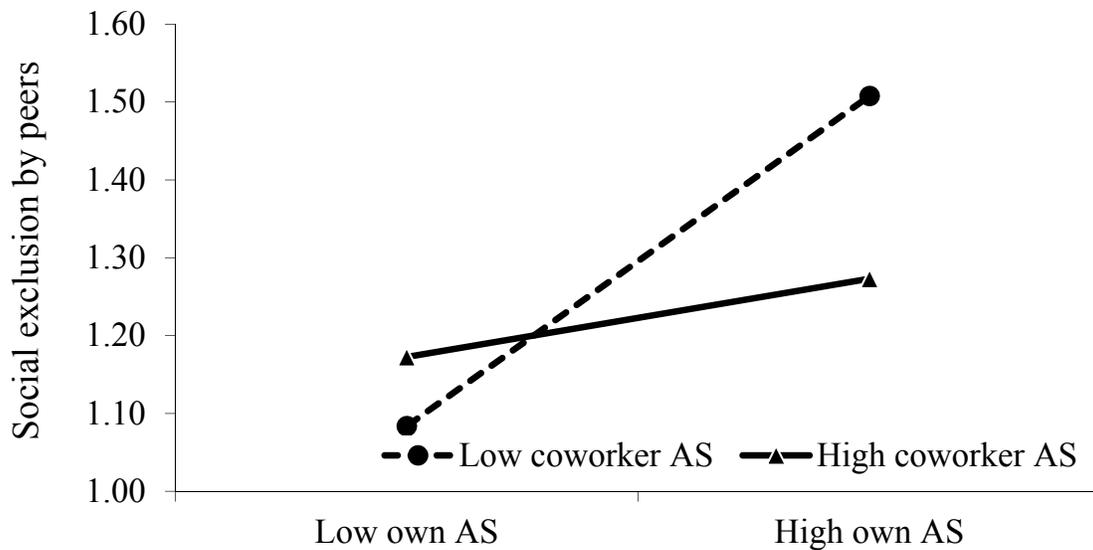
Note. Simple slope *t*-statistics using the approach introduced by Preacher et al. (2006) are $t = 3.27$ ($p < .01$) for the low coworker AS condition, and $t = 5.90$ ($p < .01$) for the high coworker AS condition.

Hypothesis 6 proposes that social exclusion by peers explains the abusive supervision interactive effect in predicting coworker-directed deviance. As shown in Table 5, the interaction of own \times coworker abusive supervision was significant in predicting social exclusion by peers ($\gamma = -.46, p < .05$). The pattern of this interaction (see Figure 7) shows that individuals were most likely to perceive being socially excluded by their peers when own abusive supervision was high and coworker abusive supervision was low. The personal experience of leader abuse was more strongly related to perceptions of social exclusion by peers when the individual's coworkers personally experienced little abusive supervision on average. This finding provided partial support to

Hypothesis 6, as being more abused than the average of one's unit coworkers is associated with social exclusion by unit coworkers. Contrary to my prediction, however, being substantially less abused by the leader than one's coworkers (i.e., low own abusive supervision and high coworker abusive supervision) was not associated with more exclusion by peers, as compared with persons who experienced a high level of own abusive supervision and there was also a high mean level reported by their peers. In fact, a lower level of own abusive supervision was not associated with social exclusion among individuals whose unit coworkers reported higher levels of abusive supervision (*simple slope t-test* = .89, *ns*).

FIGURE 7

Interaction of Own and Coworker Abusive Supervision Predicting Social Exclusion by Peers



Note. Simple slope t-statistics using the approach introduced by Preacher et al. (2006) are $t = 3.44$ ($p < .01$) for the low coworker AS condition, and $t = .85$ (*ns.*) for the high coworker AS condition.

TABLE 5

Hierarchical Linear Modeling Results Testing the Mediation of Justice-related Motive States

	Reward expectancy		Production deviance		Moral disapproval of leader		Supervisor-directed deviance	
	Gamma	s.e.	Gamma	s.e.	Gamma	s.e.	Gamma	s.e.
<i>Level 1 predictors</i>								
Intercept	5.59**	.08	1.23	.03	1.85**	.05	1.07**	.02
Gender	-.20	.16	.04	.03	.03	.10	.03*	.01
Education	-.21**	.08	.04	.04	-.13	.08	.01	.01
Negative affectivity	-.19*	.08	.02	.02	.16	.06	-.01	.02
Own AS	-.38*	.16	.04	.03	.50**	.09	.04	.03
Coworker AS	-.17	.21	.17**	.05	.01	.11	.16*	.08
Own AS × Coworker AS	-.03	.16	-.07*	.03	.48**	.15	-.18	.15
<i>Level 1 interaction term</i>								
Reward expectancy			.01	.01				
Moral disapproval of leader							-.01	.01
Social exclusion by peers								
<u>Change in R²-pseudo</u>	<u>.14</u>		<u>.00</u>		<u>.33</u>		<u>.02</u>	

TABLE 5 (Cont'd)

	Social exclusions by peers		Coworker-directed deviance	
	Gamma	s.e.	Gamma	s.e.
<i>Level 1 predictors</i>				
Intercept	1.26**	.03	1.12	.02
Gender	-.00	.05	.09*	.04
Education	.09**	.03	.04	.03
Negative affectivity	.14**	.04	.02	.02
Own AS	.25**	.09	-.04!	.02
Coworker AS	-.11	.07	.08*	.04
Own AS × Coworker AS	-.46*	.21	.00	.03
<i>Level 1 interaction term</i>				
Reward expectancy				
Moral disapproval of leader				
Social exclusion by peers			.05	.08
<u>Change in R²-pseudo</u>	.24		.01	

N (level 2) = 55, and N (level 1) = 241. * $p < .05$, ** $p < .01$. AS = abusive supervision.

As reported above, the results provided limited support for the hypothesized first-stage moderation effects (Hypotheses 2, 4, & 6). In order to draw more definitive conclusions by conducting an integrated test of the hypothesized moderated mediation effects (Edwards & Lambert, 2007), I examined the predicted conditional indirect effects of own abusive supervision on employee deviance outcomes through each of the postulated mediators using a bootstrapping approach (PROCESS, Hayes, 2012). As summarized in Table 6, none of the simple indirect effects was significant; the 95% confidence intervals of the indirect effects included zero in all cases.

TABLE 6

Analyses of Conditional Indirect Effects

Dependent variable	Mediator	Coworker Abusive supervision	Direct effects (P_{YX})	s.e.	Indirect effects ($P_{YM}P_{MX}$)	s.e.	95% Bootstrap CI of Indirect effect
Production deviance	Reward expectancy	Low	.06	.05	-.00	.01	(-.02, .01)
		High	.01	.21	-.00	-.01	(-.02, .01)
		Difference	.05		.00		
Supervisor-directed deviance	Moral disapproval of leader	Low	-.01	.05	.02	.02	(-.01, .08)
		High	-.03	.04	.01	.01	(-.00, .04)
		Difference	.02		.01		
Coworker-directed deviance	Social exclusion by peers	Low	.03	.03	.01	.01	(-.01, .03)
		High	.02	.03	.00	.01	(-.01, .02)
		Difference	.01		.01		

Note. * $p < .05$ and ** $p < .01$. P_{MX} refers to paths from own abusive supervision to the mediators (i.e., three employee justice-related motive states), P_{YM} refers to paths from each mediator to the corresponding outcome variable (i.e., different forms of employee deviance). High and low levels of coworker abusive supervision are distinguished by +/-1 SD.

Consistent with the earlier analyses, own abusive supervision did not have a significant indirect effect on any deviant behavioral outcomes through a justice-related motive variable, regardless of the level of coworker abusive supervision. Neither were the indirect effects of own abusive supervision on employee deviant behaviors significantly different between high and low levels of coworker abusive supervision. Overall, the results do not support the hypothesized moderated mediation model. In the following chapter, I reported results of a few supplementary analyses that are relevant to my hypothesized model.

CHAPTER 6

SUPPLEMENTARY ANALYSES

As my overall model was not supported by the data, I examined potential reasons for the non-findings, including low frequency of abusive supervision variable and low frequencies of employee deviance variables. The low frequencies of the study variables may also create skewness that violates the normal distribution assumption that is required for HLM analyses. I therefore conducted supplementary analyses to determine the extent of the problems and to mitigate them. In addition, I explored the time-lagged influences of justice-related motive states on employees' job satisfaction, turnover intention, and well-being.

Transformations of Abusive Supervision Variable

Although the low frequency of abusive supervision variable tends to produce more conservative tests of my hypotheses due to range restrictions in the variance of the study variable, it may raise concerns about the robustness of these findings due to the violation of the normality assumption. To address this latter concern, I applied the Box-Cox transformation to the own abusive supervision variable in my data set. As the coworker abusive supervision variable is the mean of each person's peers own abusive supervision, these transformations are applied to that variable as well. The Box-Cox transformation is a specific type of power transformation that aims to change the distribution to better approximate normality. Following the procedure suggested by Osborne (2010), I first divided the distribution of abusive supervision variable into 10 consecutive regions and calculated the mean and standard deviation for each region. I then plotted the log base 10 of the standard deviation against the log base 10 of the mean

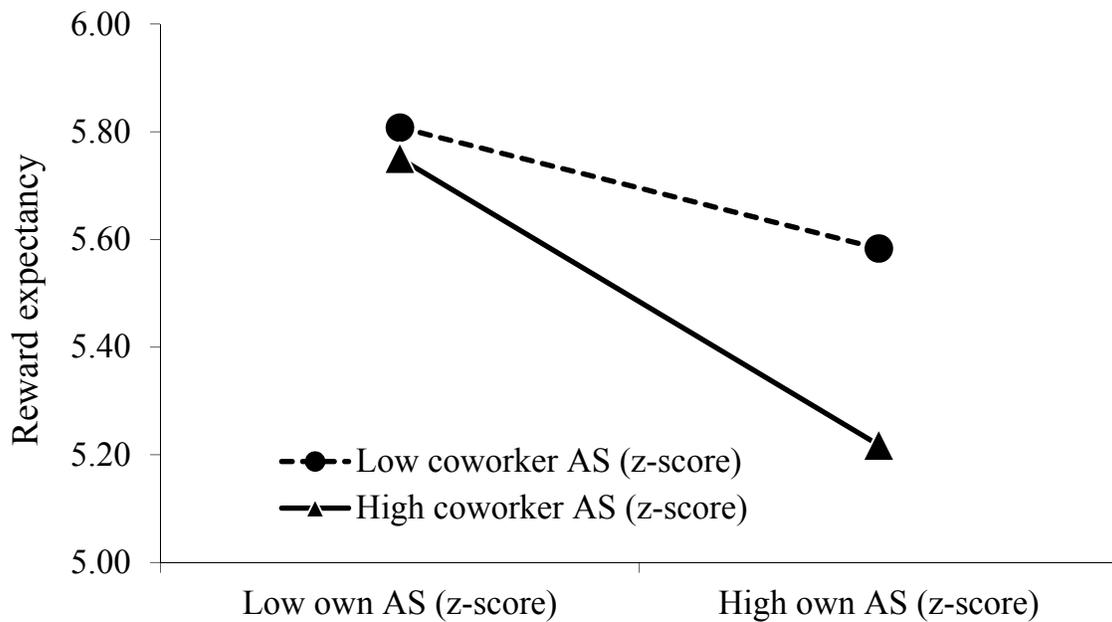
for the 10 regions to estimate the average slope for the plot. To obtain the average slope for the plot, I first computed the slopes of lines for each of the 10 regions and then calculated the mean of these ten slopes. This yielded a slope estimate of .07 and thus a λ coefficient of .93 ($\lambda = 1 - \text{slope}$). This coefficient λ is the exponent in the data transformation, following the formula $y_i^\lambda = \log_e(y_i)$. Using HLM software, I tested the interaction between own and coworker abusive supervision in predicting the justice-related motive states and the deviant behavioral outcomes. Notably, I observed the same significant interactive effects in predicting moral disapproval of leader ($\gamma = 1.86, p < .05$), social exclusion by peers ($\gamma = -1.69, p < .05$), and production deviance ($\gamma = -.24, p < .01$). Consistent with the results reported in the previous chapter, the own \times coworker abusive supervision interaction was not significant in predicting reward expectancy and the other two deviant outcomes.

I also obtained standardized scores (i.e., z-score) for the own abusive supervision variable. Similarly, I computed the coworker abusive supervision variable using the z-score of own abusive supervision. The HLM results testing the interactive effect of the standardized abusive supervision variables revealed the same pattern of findings with one exception. Specifically, the interaction remained significant in predicting moral disapproval of leader ($\gamma = .16, p < .01$), social exclusion by peers ($\gamma = -.11, p < .01$), and production deviance ($\gamma = -.02, p < .01$). The exception was that I also observed a significant interactive effect in predicting reward expectancy ($\gamma = -.12, p < .05$). The plot of this interaction (see Figure 8) shows that employees report lowest levels of reward expectancy when both they and their coworkers are abused by the leader. A stronger negative time-lagged influence of own abusive supervision on reward expectancy exists

when coworker abusive supervision is high. The pattern of this interaction is the opposite of my original hypothesis (see Figure 1).

FIGURE 8

Interaction of Own and Coworker Abusive Supervision (z-score) Predicting Reward Expectancy



Moderating Effects of Within Unit Variation in Abusive Supervision

I computed coworker abusive supervision by aggregating all of the self-reports of abusive supervision reported by each individual's coworkers. This approach may oversimplify the influence of coworkers' experiences by ignoring potential different distributions of abusive supervision within the unit. The same mean level of coworker abusive supervision (e.g., a value of 2) can be due to different combinations of levels of abuse experienced by each coworker (e.g., 2-2-2, vs. 1-4-1, in a four-person group). To

examine if the distribution of abusive supervision within the unit may influence the findings, I computed the standard deviation of abusive supervision within each unit (*S.D. of abusive supervision*, hereafter) and tested if the within unit variation may moderate the influences of abusive supervision interaction on justice-related motive states. In the HLM models, S.D. of abusive supervision was entered at Level 2 (i.e., work unit level) to predict the level 1 intercepts and slopes. The three-way interaction of own abusive supervision, coworker abusive supervision, and S.D. of abusive supervision was significant in predicting moral disapproval of leader ($\gamma = 1.52, p < .01$) but not for the other two justice motive variables. A careful examination of the pattern of the interaction and the parameter estimates in the HLM models suggests a spurious effect that is likely due to multicollinearity. Specifically, S.D. of abusive supervision had a correlation of .79 with coworker abusive supervision. Including both variables and their interaction term into the model reversed the signs for the estimates as compared to a model in which only one of these variables was included. For example, the interactive effect of own \times coworker in predicting moral disapproval of leader changed from .41 in the original hypothesized model (Table 5) to -.63 in the model testing a three-way interaction of own abusive supervision \times coworker abusive supervision \times S.D. of abusive supervision. Similarly, the interactive effect of own abusive supervision and S.D. of abusive supervision in a model in which coworker AS was absent was .68, whereas the estimate of for this coefficient was -.72 when the three-way interaction was incorporated. Overall, results suggest that S.D. of abusive supervision does not moderate the interactive effect of own and coworker abusive supervision.

Main Effects of Being the Sole Victim of Leader Abuse

In testing my hypotheses, I examined the interactive influence of own and coworker abusive supervision in predicting employees' justice-related motive states. I found that individuals with high own abusive supervision and low coworker abusive supervision reported the highest levels of social exclusion by peers. Although this result concerns more general situations in which individuals are much more abused than one's coworkers, it is also interesting to examine a unique situation in which an individual is *the sole victim of abusive supervision* in the work unit. In other words, he or she is *singled out for leader abuse*. Prior research has described a stronger influence of own mistreatment that is associated with lower levels of coworkers' mistreatment as an effect of being "singled out" for leader mistreatment (Duffy et al., 2006, p. 105; Huo et al., 2012, p. 878), but these studies did not examine the condition in which individuals were the sole abuse victims in their units. To more accurately test the influence of being singled out for supervisory abuse, I derived a dummy variable by assigning a value of 1 to an individual who was the only person in the unit that reported being abused by the leader and assigning a value of 0 to everyone else in the sample. This dummy variable of being singled out for leader abuse was entered at the level 1 equation in the HLM models to predict the three justice-related motive states. I also controlled for own abusive supervision, negative affectivity, gender, and education in these models. Results (see in Table 7, "Full Sample") show a significant influence of being singled for abuse on perceived social exclusion by peers ($\gamma = .28, p < .05$). This indicates an additional influence of being singled for abuse beyond that of one's actual levels abuse by the leader. The influence of being singled out for abuse was, however, not significant in predicting

either reward expectancy ($\gamma = -.18, p = .64$) or moral disapproval of leader ($\gamma = -.27, p = .23$) after accounting for the influence of one's own experience of leader abuse.

It is also important to note that these results are based on a sample of respondents from the 55 work units. Therefore the coding for being singled out for leader abuse may not be completely accurate. Specifically, the assessment of being singled out for leader abuse may be biased in units that did not have a full response rate because some of those who did not participate in this study may have experienced abusive supervision. As a result, those who were coded as being the only victim of abusive supervision in the units without a full response rate may be miscoded, leading to biased results. To address this concern, I conducted another set of analyses using a subset of 25 units that had a full response rate. As presented in Table 7 ("Sub-Sample"), the results were comparable to those found with the total sample of 55 units. The influence of being singled out for abuse on social exclusion by peers, however, became marginally significant ($\gamma = .29, p = .07$) when the subset of units was analyzed as compared to a significant result in the larger sample. This is because that reduced sample produces larger standard errors and thus limits the statistical power to detect the effects.

I also tested the abusive supervision interaction effect (i.e., own \times coworker abusive supervision) and the effect of being singled out for abuse together on employee justice-related motive states together in the same model. These tests sought to determine if being singled out for abuse accounts for the interactive influences of own and coworker abusive supervision. When predicting moral disapproval of leader, the abusive supervision interaction effect remained the same ($\gamma = .48, p < .05$), and the dummy variable of being singled out for abuse had little influence ($\gamma = -.01, p = .95$). Similarly,

when social exclusion by peers was dependent, the coefficient for the interaction remained significant ($\gamma = -.43, p < .05$), and the effect of being singled out for abuse was not significant ($\gamma = .11, p = .37$). These results indicate that the interactive influence of own and coworker abusive supervision is not explained by the “singled out” effect. The weakened relationship between being singled out for abuse and social exclusion by peers when I entered the interaction term in the model suggests that the interactive influence may accounts for the influence of being singled out, and that the interaction contains more useful information about the hypothesized interactions.

Overall, the results indicate mixed support for an influence of being for the sole victim of leader abuse in one’s work unit on employ justice-related motive states. Of the two justice-related motive states that were significantly related to the own AS x coworker AS interaction, being singled out for leader abuse also did not explain the interactive effect predicting social exclusion by peers, and it was unrelated to moral disapproval of the leader. The significant positive influence of being singled out for leader abuse on social exclusion by peers was also consistent with the interaction effect of own and coworker abusive supervision predicting social exclusion (see Figure 7).

TABLE 7

HLM Results Testing the Effect of Being Singled Out for Leader Abuse

	Reward expectancy		Social exclusion by peers		Moral disapproval of leader	
	Gamma	s.e.	Gamma	s.e.	Gamma	s.e.
Full Sample (N (level 2) = 55, and n (level 1) = 265)						
<i>Level 1 predictors</i>						
Intercept	5.59**	.07	1.28**	.03	1.84**	.06
Gender	-.19	.16	-.02	.05	.02	.10
Education	-.22**	.08	.10**	.03	-.17*	.08
Negative affectivity	-.19*	.08	.13**	.04	.13*	.05
Own AS	-.41**	.11	.10	.09	.72**	.19
Being singled out for AS	-.18	.39	.28*	.14	-.27	.23
Sub-Sample (N (level 2) = 25, and n (level 1) = 133)						
<i>Level 1 predictors</i>						
Intercept	5.55**	.09	1.27**	.04	1.84**	.06
Gender	.06	.22	-.03	.07	.06	.22
Education	-.08	.11	.03	.06	-.23!	.14
Negative affectivity	-.16!	.09	.17**	.04	.22*	.10
Own AS	-.45**	.10	.06	.07	.74**	.16
Being singled out for AS	.29	.38	.29!	.16	-.35	.37

Note. AS = abusive supervision. ! $p < .10$, * $p < .05$, and ** $p < .01$

Justice-related Motive States and Self-reported Employee Outcomes

Contrary to my predictions, none of the justice-related motive states was related to any of the employee deviant behaviors. One important reason could be due to the very low frequencies of the employee deviance outcomes. I further sought to determine if these justice-related motive states may have significant influences on other commonly

studied employee outcomes that I measured in the Time 3 survey. Specifically, I examined how the three justice-related motive states were related to subsequent employee self-reports of turnover intention, job satisfaction, and employee well-being. *Turnover intention* was measured by three items (e.g., “I often think of leaving the organization;” “It is very possible that I will look for a new job next year;” “If I could choose again, I would choose to work for the current organization (reverse coded)”), using the instrument developed by Camman, Fichman, Jenkis, and Klesh (1979). This measure had an alpha reliability of .73. I measured *job satisfaction* using a three-item instrument from Camman et al. (1979). These items included, “All in all I am satisfied with my job;” “In general, I don’t like my job (reverse coded);” “In general, I like working here.” ($\alpha = .81$). Participants were asked to rate these two measures on a 7-point scale from 1 [strongly disagree] to 7 [strongly agree]. I measured *employee well-being* using the General Health Questionnaire (Goldberg, 1972). The alpha reliability of this 11-item measure was .83. Two sample items are “Have you felt that you are playing a useful part in things;” and “Did you feel constantly under strain (reverse coded)?”

Table 8 presents the descriptive statistics of these self-reported outcomes, the correlations between these outcomes, and their time-lagged correlations with abusive supervision variables and justice-related motive states. Notably, there is a significant time-lagged correlation between each of these additional outcomes and all three of the justice-related motive states.

TABLE 8**Correlations between Abusive Supervision Variables, Justice-related Motive States,
and Self-reported Employee Outcomes**

	Mean	SD	1	2	3	4	5	6	7
1. Own AS (T1)	1.26	.59							
2. Coworker AS (T1)	1.26	.39	.38						
3. Reward expectancy (T2)	5.63	1.20	-.33	-.17					
4. Moral disapproval of leader (T2)	1.80	.95	.54	.27	-.35				
5. Social exclusion by peers (T2)	1.27	.41	.28	-.02	-.29	.14			
6. Job satisfaction (T3)	6.13	.96	-.31	-.23	.35	-.28	-.37		
7. Turnover intention (T3)	2.30	.83	.22	.17	-.32	.14	.21	-.60	
8. Employee well-being (T3)	3.15	.46	-.27	-.11	.22	-.26	-.24	.58	-.47

N =210, Listwise deletion; $|r| \geq .14, p < .05$ and $|r| \geq .18, p < .01$.

As presented in Table 9, when all of the three justice-related motive states were entered into the HLM equation, only reward expectancy had a significant negative influence in predicting employee turnover intention ($\gamma = -.18, p < .05$). All of three motive states had a significant influence on job satisfaction ($p < .05$), with social exclusion exhibiting the strongest influence ($\gamma = -.60, p < .01$). When employee well-being was the dependent variable, the time-lagged relationship was significant for moral disapproval of leader ($\gamma = -.10, p < .05$) and social exclusion by peers ($\gamma = -.20, p < .05$), but not for reward expectancy ($\gamma = .03, p = .31$).

TABLE 9

HLM Results Testing the Relationships between Justice-related Motive States and Self-reported Employee Outcomes

	Turnover intention		Job satisfaction		Employee well-being	
	Gamma	s.e.	Gamma	s.e.	Gamma	s.e.
<i>Level 1 predictors</i>						
Intercept	2.33**	.06	6.11**	.08	3.15**	.03
Reward expectancy	-.18*	.07	.15*	.07	.03	.03
Moral disapproval of leader	.02	.08	-.18*	.09	-.10*	.05
Social exclusion by peers	.26	.17	-.60**	.21	-.20*	.09

N (level 2) = 55, and N (level 1) = 231. ! $p < .10$, * $p < .05$, and ** $p < .01$

Self-Reported and Leader-Rated Production Deviance Variables

Because peers may not always be aware of individuals’ production deviant behaviors as perpetrators strive to keep them secret, in the Time 3 Survey I also asked participants to self-report their levels of production deviance, using same 4-item measure as with peer-rated production deviance. The reliability for the self-reported production deviance measure (e.g., “I intentionally worked slower than I could have worked”) was .70, and the reliability for the supervisor-rated production deviance (e.g., “This person intentionally worked slower than he/she could have worked”) was .80. Consistent with the observations of Berry and colleagues (Berry, Carpenter, & Barratt, 2012), individuals’ self-reports of production deviance had a higher sample mean than peer ratings of production deviance (1.39 vs. 1.22, *paired t-test* = 5.25, $p < .01$). In addition, this self-reported score of production deviance had a negative relationship with reward expectancy measured at Time 2 ($r = -.18$, $p < .01$), as predicted by Hypothesis 2. Yet, the

interaction of own abusive supervision and coworker abusive supervision was not significant in predicting the self-reported measure of production deviance.

Due to my concern that individuals might intentionally underreport their own production deviance, I further obtained ratings from the supervisors on participants' production deviance at Time 3. The leader-rated production deviance variable had a higher sample mean compared to either self-reports or peer ratings of production deviance (Mean = 1.67, S.D. = .65). Reward expectancy was also positively correlated with the leader ratings of production deviance ($r = .20, p < .01$). When the leader-rated production deviance variable was the dependent variable, I observed a significant interaction between own abusive supervision and coworker abusive supervision ($\gamma = .23, p < .01$). The pattern of this interaction, however, is different from that of the interaction in predicting peer ratings of production deviance. As shown in Figure 9, own abusive supervision is more strongly associated with production deviance rated by the leader when coworker abusive supervision is high.

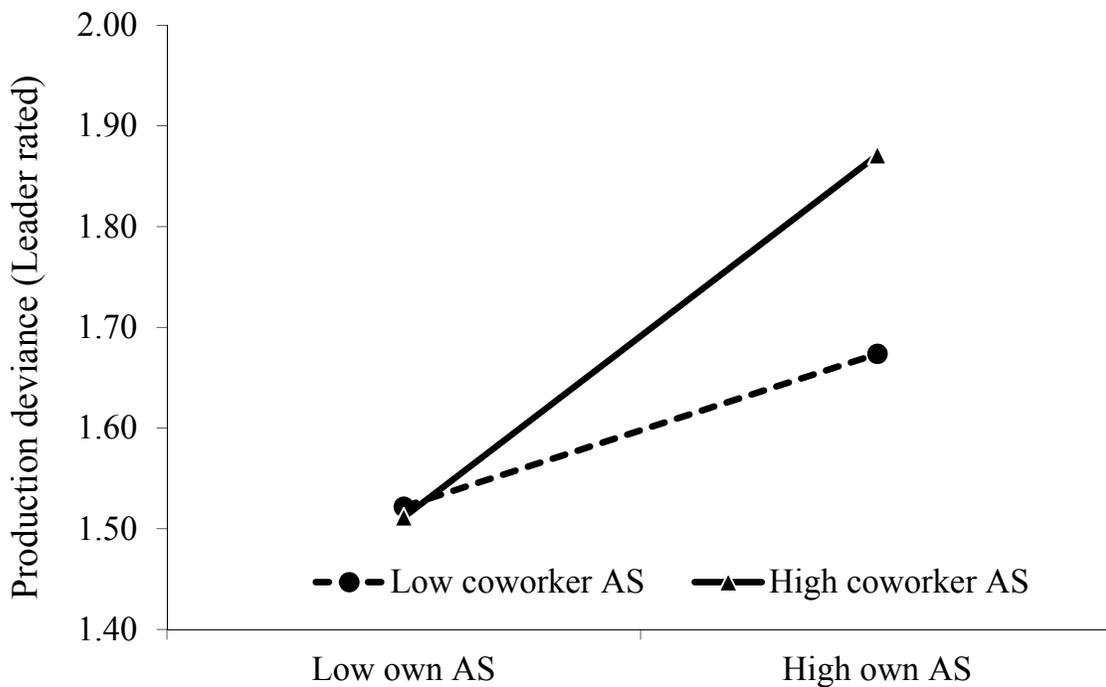
To sum up, the foregoing supplementary analyses suggest that the low frequency of the own abusive supervision variable is not likely to bias the findings of interactive influences of own and coworker abusive supervision on justice-related motive states. Those interaction findings are also not influenced by the distribution of abusive supervision reports within unit, when the distribution is indexed by the standard variation of abusive supervision across unit members. The significant influence of being singled out for leader abuse on social exclusion, after controlling for one's own abusive supervision, is in accord with the interactive effect of own and coworker abusive supervision in predicting social exclusion by peers. Finally, despite their non-significant

relationships with employee deviant behaviors, the three justice-related motive states are significantly associated with important employee outcomes that include turnover intention, job satisfaction, and employee well-being.

FIGURE 9

Interaction of Own and Coworker Abusive Supervision Predicting Production

Deviance as Rated by the Leader



Note. Simple slope t-statistics using the approach introduced by Preacher et al. (2006) are $t = 4.32$ ($p < .01$) for the low coworker AS condition, and $t = 1.38$ (*n.s.*) for the high coworker AS condition.

CHAPTER 7

DISCUSSION

This study examined how own abusive supervision and coworker abusive supervision interact in determining individuals' engaging in different deviant behaviors, as carried through distinct psychological processes. With responses from fulltime employees from 55 work units in two Chinese organizations, my overall model was not supported, as none of the hypothesized mediation effects of justice-related motive states were statistically significant. Among the significant findings, I found that own and coworker abusive supervision interacted in predicting production deviance. Own abusive supervision had a positive time-lagged relationship with production deviance when coworker abusive supervision was low, but not when coworker abusive supervision was high. However, the other predicted interaction effects on coworker-directed deviance and supervisor-directed deviance were not supported. Finally, I observed significant interaction effects of own and coworker abusive supervision in predicting abuse victims' moral disapproval of leader and social exclusion by peers. Although these two interactions are not completely in accord with the hypothesized patterns, findings overall suggest that coworker abusive supervision influences employees' interpretations of and reactions toward their own mistreatment by the leader. However, these particular outcomes, the hypothesized mediators in my model, were not in turn significantly related to peer-rated deviance outcomes measured at a later time.

In the following sections, I first discuss the study findings. I then identify the strengths and limitations of this study, speculating on possible conceptual and empirical

reasons for the weak empirical support for my model. I then discuss future research directions and practical implications before presenting my concluding observations.

Main Findings

Abusive supervision and justice-related motive states. Based on the accessible identity model (AIM, Skitka, 2003), I proposed three distinct justice-related motive states as mediating the influences of abusive supervision on employee deviant behaviors. The results did not support the overall model, primarily because the justice motive states were not related to their corresponding deviant behavioral outcomes. Below (in the “Strengths and Limitations” subsection) I speculate about empirical and theoretical factors that may have contributed to the weak linkage between justice-related motive states and employee deviance.

In terms of findings that supported hypotheses, own abusive supervision and coworker abusive supervision interacted in distinct ways in predicting two out of the three hypothesized justice motives. Specifically, the interaction of own and coworker abusive supervision was significant in predicting moral disapproval of leader (i.e., concerns about one’s justice motive to uphold moral principles) and social exclusion by peers (i.e., threats to one’s justice motive to maintain positive social connections). Abusive supervision directed toward oneself appeared to precipitate threats to these two justice motives in ways that are contingent on the general level of leader abuse directed toward one’s coworkers.

Whereas the interaction of own and coworker abusive supervision in predicting social exclusion is consistent with my prediction, the same interaction predicting moral disapproval of leader is contrary to my prediction, which was based on a moral

perspective of justice (see Figure 3). The moral perspective of justice would predict substantial levels of moral disapproval of leader when coworkers are largely abused, regardless of one's own abusive supervision. In other words, coworker abusive supervision would neutralize the influence of own abuse on moral disapproval of leader but it would have a substantial main effect on one's perceptions of leader morality. Contrary to this prediction, coworker abusive supervision augmented the relationship between own abusive supervision and one's moral disapproval of the leader. The main effect of coworker abusive supervision was also not significant after controlling for own abusive supervision. One possible reason for the discrepancy between my prediction and the interaction pattern observed may be that personal abuse by the leader tends to be a more salient and painful experience compared to learning or observing coworkers' abuse. Because the perceived consequence of an action is a key criterion in individual' morality judgment (Piaget, 1932; Surber, 1977), one may more readily perceives the leader has violated moral principles when he or she has been abused, compared to when coworkers are abused. This finding may also reflect an actor-observer bias (Jones & Nisbett, 1972) in workers' moral judgments. When individuals themselves are victims of abusive supervision, they tend to perceive being unfairly treated and conclude that the leader has violated moral principles. When making sense of other coworkers' mistreatment, individuals may often tend to simplify their reasoning by making a dispositional attribution in which they associate coworkers' mistreatment with coworkers' undesirable dispositions (e.g., being lazy). Thus asymmetry in perceived severity of mistreatment, or an actor-observer bias, may contribute to producing the interaction pattern observed in predicting morality judgment of the leader.

It should also note that own abusive supervision had significant main effects on all three justice motive variables after controlling for coworker abusive supervision (see Table 5). Thus reward expectancy, together with moral disapproval of leader and social exclusion by peers, may still be an important mediator of the influence of abusive supervision on other employee outcomes. My supplementary analyses showed that all three of these justice-related motive states had significant time-lagged relationships with other commonly studied employee outcomes such as employee well-being, job satisfaction, and turnover intention ($p < .01$; see Table 8). More interestingly, the justice-related motive states exhibited differential time-lagged relationships with these outcomes when all three motive states were examined together as predictors in a supplementary HLM analysis (see Table 9). Whereas reward expectancy was the strongest and the only significant predictor of turnover intention, moral disapproval of leader and social exclusion by peers (but not reward expectancy) were significant predictors of employee well-being. Yet, all three justice motive variables had significant influences on job satisfaction and these influences were compatible in magnitude. These results provide additional evidence for the distinctness of the proposed three justice-related motive states. Overall, the findings suggest that the AIM may still be a useful framework to understand how one's own abusive supervision influences employee outcomes by evoking different justice motive states.

Abusive supervision and internal/external attributions. While the overall mediation model was not supported, there were some supportive findings concerning particular hypotheses. The most interesting findings are the distinct patterns of the interaction between own abusive supervision and coworker abusive supervision in

predicting moral disapproval of leader and social exclusion by peers. When coworkers were abused by the leader to a greater extent, own abusive supervision was more strongly related to the individual's disapproval of the leader's ethicality. In contrast, individuals' own experience of leader abuse had a positive relationship with perceived social exclusion by peers only when coworker abusive supervision was low. I interpret these findings as suggesting that victims of abusive supervision engage in different attributions when they are treated more abusively than their peers, compared to when their peers are abused by the supervisor to a similar extent. When an employee is treated disrespectfully by the leader, he or she is likely to reflect on the reasons for his or her mistreatment. In making such attributions, one may tend to draw informational cues from his or her immediate work environment. When the leader also abuses other coworkers in the unit, victims of abusive supervision may be inclined to make an external attribution in which they view the leader's traits as being responsible for the behavior (e.g., "The leader lacks of moral integrity;" "The leader is an abusive person."). Thus, own abusive supervision may lead individual abuse victims to attribute their mistreatment to the leader's low ethical integrity when other coworkers are seen mistreated by the leader. Conversely, when other unit peers are rarely abused by the leader, a victim of leader abuse may tend to make an internal attribution in which she believes her own behaviors (e.g., mistakes in performing a job activity) or undesirable attributes (e.g., lack of competency) are the reasons that she has been mistreated by her supervisor. Because she views her own problems as a legitimate trigger for abusive supervision, she is less likely to blame the leader. This process explains the weaker association between own abusive supervision and moral disapproval of leader when coworker abusive supervision is low.

How victims make attributions about their mistreatment by the leader may also affect their perceived relationships with their unit peers. As noted above, own abusive supervision is associated with perceived social exclusion by peers when individuals are singled out for abuse, but not when coworkers report a high level of abuse. According to Tyler and colleagues (Lind & Tyler, 1988; Tyler & Lind, 1992; Tyler et al., 1996), victims of unfair treatment by their leaders tend to perceive that they have lower social status in the group, and this is reflected in the perception that they are less respected by their peers. This is because leaders are often seen as representing the opinion the group (Tyler & Lind, 1992; Tyler et al., 1996). Feelings that one has lost status and respect from one's peers may be particularly salient when the abuse victim makes an attribution to his or her own undesirable qualities or inappropriate behaviors. This is because self-blame harms the individual victim's self-view (Shaver, 1985) and leads him to perceive that peers respect him less and they do not want to associate with him on a personal level. Accordingly, he perceives that he is socially isolated from his peers. An individual's perceived social exclusion by peers may also reflect the attributions made by one's coworkers. Similar to the victim of abusive supervision, coworkers often make attributions when they hear about or observe the focal subordinate's disrespectful treatment by the leader. When the victim is the only person in the unit that is abused by the leader, coworkers view this as a distinct event that is associated with some unique characteristics of the victim. Peers may perceive that the victim of abusive supervision is somewhat responsible for his or her mistreatment. For example, they may believe the victim's misbehavior has caused his or her mistreatment by the leader. Such attributions lead the coworkers to believe that the victim of abusive supervision deserves the

treatment. They may even socially isolate the victim to the extent that they believe the collective interest has been harmed by the victim's misbehavior.

Two recent studies on vicarious experience of leader mistreatment provide some supportive evidence for these attributional processes about which I have speculated. In a study that examined the influence of leader aggressive humor (i.e., disrespectful and hostile humor directed toward the subordinates), the authors found that leader aggressive humor had a strong influence on the victim's psychological strain when his or her coworkers were not mistreated in this way (Huo et al., 2012). Huo et al. rationalized that when individuals are the only persons or the minority group that receive the leader's aggressive humor, they make internal attributions to their own characteristics (e.g., "I am stupid") and consequently feel more psychological strain. When other peers are also cruelly ridiculed by the leader, victims of leader aggressive humor make external attributions to the motives and dispositions of the leader (e.g., "The leader is mean"). External attributions protect the victims' self-esteem and alleviate their psychological strain. They also suggested that when peers are similarly ridiculed by the leader, victims may tend to get more emotional support and condolence from their peers that help them cope with the leader's disrespectful behavior.

Similarly, Harris et al. (2013) examined the influences of vicarious abuse on employees' perceived organizational support and their deviant behavior directed toward coworkers. As I reviewed earlier, they measured vicarious abuse by asking the focal employee to report his or her perceptions about the extent to which other individuals are abused by their leaders. They found that a lower level of vicarious abuse was associated with a stronger positive relationship between own abusive supervision and coworker-

directed deviance. This finding is contrary to their prediction, but it is consistent with the interaction effect between own and coworker abusive supervision in predicting social exclusion by peers which I observed in this study. Specifically, being abused by the leader who does not mistreat other unit peers leads a victim to be socially excluded by his or her peers, which in turn motivates the victim to engage in deviant behaviors to retaliate against his or her coworkers. In addition, Harris et al. found that vicarious leader abuse intensified a negative influence of own abusive supervision on employee perceived organization support. They proposed that individuals who are alone mistreated by the leader may still feel hopeful about their organization because they perceive that the organization overall cares about its employees. Thus they remain motivated to maintain a good exchange relationship with the larger organization. When there is a high level of vicarious abuse, employees may perceive the organization as a whole is dysfunctional, and they may accordingly become pessimistic about their exchange relationship with their organization. In short, much like my own findings, Harris et al.'s findings suggest that victims of abusive supervision may make rather different attributions contingent on the experience of other coworkers. Thus my findings with respect to moral disapproval of the leader and social exclusion are largely in line with those reported by Harris et al. (2013) and Huo et al. (2012), and an attributional logic seems to explain all of these findings.

The results are also consistent with findings from two other studies that have reported a moderation effect of locus of control on one's reactions toward one's mistreatment by the leader (Mitchell & Ambrose, 2012; Wei & Si, 2013). Specifically, both studies showed that a low locus of control (i.e., a tendency to make an external

attribution for one's failure or success) was associated with a stronger positive relationship between abusive supervision and retaliatory behaviors. The authors proposed that individuals with a low locus of control tend to make external attributions for their supervisory abuse and evaluate the abusive supervision as leader misconduct. External attributions to the immorality of the leader thus drive them to retaliate either directly against their supervisors (Mitchell & Ambrose, 2012) or indirectly by performing counterproductive behaviors (Wei & Si, 2013).

Abusive supervision and production deviance. The proposed interactive influences of own and coworker abusive supervision on employee deviant behaviors were largely unsupported. The only significant interaction I found was in predicting production deviance. It shows that own abusive supervision leads workers to intentionally reduce their productivity only when the leader rarely abuses other coworkers. Consistent with the social comparison process I discussed earlier, own abusive supervision has a stronger positive relationship with production deviance when coworker abusive supervision is low. The social comparison argument, however, does not provide a complete account for the overall high levels of production deviance engaged by individuals whose unit coworkers are largely abused by the leader. This finding may reflect a social learning process among such individuals. Because people often learn from others' experience besides their own (Bandura, 1986), individuals who are not personally abused but who are surrounded by coworkers who are victims of abusive supervision may perceive that the leader will eventually treat them in a similarly abusive manner. Their anticipation for a negative treatment by the leader may lead these individuals to withdraw effort from work, protecting them from being exploited.

Because the sample mean of peer ratings on production deviance was very low, I examined other measures of production deviance obtained from employees themselves and from their supervisors. The results, reported in Chapter 6, showed that both self-reports and leader ratings of production deviance had higher sample means than peer ratings. In addition, both self-rated and leader-rated production deviance were negatively related to reward expectancy. However, the findings were mixed regarding the interactive effect of own and coworker abusive supervision using self-rated or leader-rated production deviance variable. Whereas I found no significant interaction effect predicting self-rated production deviance, own abusive supervision and coworker abusive supervision interacted to predict the leader-rated production deviance variable. The pattern of this interaction (see Figure 9), however, is the opposite of the interaction predicting peer-rated production deviance. Thus each source of evaluation (self, peer, or supervisor) of production deviance may have its unique bias or it may reflect a different mindset.

Theoretical Implications

Drawing from the three general perspectives on justice and the AIM framework (Skitaka, 2003), I developed a model that explains how own and coworker abusive supervision interaction influences particular forms of employee deviant behavior through precipitating distinct justice-related motive states. The overall model was not supported because none of the justice-related motive states was related to a corresponding type of employee deviance as predicted. However, own and coworker abusive supervision interacted in distinct ways in predicting two out of the three justice-related motive states, which is consistent with Hypotheses 4 and 6. Different combinations of own and

coworker abusive supervision appear to precipitate distinct justice motive concerns. Although this interaction was not significant in predicting the instrumental motive concern in my sample, it is important to note that own abusive supervision had a significant influence on all three justice motive states. While the findings did not support my overall model, there is evidence that all three justice motive states can operate in a distinct fashion for individuals, as theorized in AIM and other theoretical models on justice (e.g., Zhu et al., 2012). While the AIM also incorporates the role of individuals' personal, relational, and collective identity construal states and I did not study those states, one may assume that over the time periods I measured the variables, for each individual the different identity states are activated at one time or another.

Despite their weak influences on employee deviance outcomes, the three justice-related motive states were differentially related to important employee attitudes and to well-being. In conjunction with the influences of own abusive supervision on these motive states, these findings suggest that these justice-related motive states are important mechanisms linking abusive supervision to employee outcomes. These findings extend current research on the mediating role of justice variables by offering an alternative approach to examining how justice perceptions may explain the influences of abusive supervision on particular outcomes. More broadly, my findings advance the limited knowledge about the mediating processes that explain the consequences of abusive supervision (Tepper, 2007).

The overall findings also show that the interactive influences of own and coworker abusive supervision, as suggested in earlier research on supervisor social undermining behavior (Duffy et al., 2006) and leader aggressive humor (Huo et al., 2012),

exhibit time-lagged influences on important outcomes. The patterns of interaction indicate that the vicarious experience of abusive supervision determines how an individual interprets his or her personal experience of leader mistreatment. Whereas a high level of coworker abusive supervision reinforces the abuse victims' moral disapproval of the leader, it appears to limit the extent to which the victims to feel socially excluded by their unit peers. Consistent with the AIM framework, these distinct patterns offer insights into how particular justice motive concerns may be more or less salient under different situations. To be specific, individuals' moral motive concerns may be most salient when everyone in the unit is abused by the leader, but their relational motive concerns are particularly strong when they are more abused than others, or in more extreme cases, when one is the sole victim of leader abuse in the unit.

Strengths and Limitations

One of the main contributions of this study is to identify the role of coworker abusive supervision in shaping the influence of one's own experience of leader abuse on employee outcomes. It thus contributes to the literature on abusive supervision that has to date largely focused on the negative consequences of individuals' personal abuse by the leader (see a review by Tepper, 2007). As such, this study joins the extant studies (Duffy et al., 2006; Hannah et al., in press; Harris et al., 2013; Huo et al., 2012) by indicating how vicarious experiences of leader mistreatment affect employee attitudes and behavior. It also extends the literature on third-party justice (e.g., Kahneman et al., 1986; Kray & Lind, 2002; Skarlicki & Rupp, 2010; Spencer & Rupp, 2009) by demonstrating the influence of others' unjust experiences on workers' attitudes and behaviors in a real organizational setting. It suggests that the psychological reactions employees may have in

an actual work setting are more complex than those that have been suggested by controlled laboratory environments in which participants have no extant relationships with the leader or with peers that would permit the kinds of relational dynamics I have discussed to emerge. Specifically, my study shows that own abusive supervision and coworker abusive supervision interact in distinct ways in influencing individuals' moral judgments about their leaders and their perceptions of their social inclusion by unit coworkers. Compared to participants who focus only on moral issues in an experimental setting, employees have multiple motives in their justice reasoning. The pattern of the abusive supervision interaction in predicting moral disapproval of leader also deviates from fairness judgment triggered by the combinations of own injustice and others' injustice in an experimental setting (e.g., Spencer & Rupp, 2009; van den Bos & Lind, 2001). The ambiguity of information and the potential observer biases in real work settings may contribute to this observed deviation.

The time-lagged design is one of the strength of this study. Studies of abusive supervision have been mostly cross-sectional in nature, and as a result the hypothesized causal relationship between abusive supervision and its presumed consequences are subject to issues of both common method bias and reversed causality. For example, although studies have typically specified and examined follower task performance as an outcome of abusive supervision (e.g., Aryee et al., 2007; Harris et al., 2007; Xu et al., 2011), research has also shown that low task performance may precipitate one's mistreatment by the leader (Tepper, Moss, & Duffy, 2011). By separating by time the predictors (abusive supervision), mediators (justice-related motive states), and dependent variables (employee deviance), this study provides a better test for the hypothesized

causal chain that links abusive supervision to employee behavior. Nevertheless, a rigorous test of the hypothesized causal relationships would require an experimental design, and there are obvious practical barriers to manipulating abusive supervision.

Another strength worth noting is that I obtained high response rates from the majority of work units (forty-five percent (45%) of these work units had a full response rate and 73% of them had a response rate of .75 and above). Obtaining responses from the vast majority of the unit members enabled a more accurate assessment of coworker abusive supervision, which was indexed by the average of the other unit peers' self-reports of abusive supervision. Compared to the approach of using a unit mean level of abusive supervision by aggregating the self-reports of all members within the same unit (e.g., Duffy et al., 2006; Hannah et al., in press), because my approach does not include one's own abusive supervision in the mean of work unit peers' ratings (also see Huo et al., 2012), it does not raise concern about non-independence between own abusive supervision and coworker abusive supervision that may bias the estimates. The concern about non-interdependence can be more salient when the group size is relatively small and the approach used in this study may be more appropriate in this regard.

One limitation of this study is that the peer ratings of employee deviance may have underrepresented the actual levels of deviant behaviors engaged by the employees. This is a possible reason for the nonsignificant relationships between the justice-related motive states (i.e., reward expectancy, moral disapproval of leader, and social exclusion by peers) and their corresponding deviance outcomes. While mean levels of peer-rated deviant behavior were comparable to those reported in other studies (e.g., Ambrose & Schminke, 2009; Judge, LePine, & Rich, 2006; Mitchell & Ambrose, 2007), it may be

that many peer-raters were reluctant to report on coworkers' deviant behaviors. Many peers may also have been unaware of at least some of their peers' deviant behaviors. As reported earlier, the supplementary analyses with self-reports on production deviance and the ratings from the supervisors provide some support for this speculation. Both self-reports and supervisor ratings of production deviance had a higher sample mean than the peer ratings of production deviance.

Especially considering that the mean levels of peer-rated deviant behavior are in line with prior research, it may be that the separation of the predictor and outcome variables by a period of three months is greater than the actual lag in which each putative mediator variable causally influences its corresponding deviant behavior outcome. While practical constraints prevented me from obtaining additional observations on the peer ratings, bracketing additional observations between Time 2 and Time 3 would have enabled me to determine if a lack of functional stability was responsible for the weak time lagged relationships between the justice motive variables and the outcomes. Another possible explanation is that the measures of either the predictor or outcome variables, or both, were insufficiently sensitive. It is also plausible that the predictions are simply incorrect, and that in this population instrumentality perceptions simply do not influence production deviance, moral disapproval of the leader does not induce supervisor-directed deviance, and social exclusion does not tend to precipitate coworker-directed deviance. For example, scholars have suggested that, owing to the power asymmetry between followers and their leaders, followers are reluctant to confront their leaders for perceived abuse (Hoobler & Brass, 2006; Wu, Kwan, Liu, & Resick, 2011). Extending this logic, employees who disapprove of their leaders may be disinclined to express that by acting

against him or her in a deviant manner. As I noted in Chapter 2, until the very recent studies reported by Harris et al. (2013), studies linking injustices to third parties' actions direct against the perpetrators were conducted in laboratory environments. In these controlled environments there are likely to be fewer psychological barriers to retaliating against the perpetrator. Similarly, there is some literature suggesting that socially ostracized individuals may not only resort to deviant behavior against their peers in response to social exclusion, many may instead seek to improve their relationships with their peers by engaging in prosocial behaviors (Smart Richman & Leary, 2009). Even if some individuals who perceive they are socially excluded by their peers direct deviant behaviors toward them, the presence of similarly excluded others who seek to create a better impression with their peers would likely reduce the observed relationship between social exclusion and coworker-directed deviance.

The weak relationships between abusive supervision and deviant behavior also merit my considering possible explanations that derive from the study design or population, or the interaction of the design and the population. The mean of the abusive supervision variable was quite low. Abusive supervision has known to have low sample means in the literature, with the majority of the participants reporting that they have never been abused by their supervisors. The sample mean of abusive supervision in my study (Mean = 1.27) and the variation across participants (S.D. = .59) are pretty low. The mean is lower than the average reported means in the literature, and this includes a number of studies that were conducted in China (Aryee et al., 2007; J. Liu et al., 2012; Wu & Hu, 2009). It is noteworthy that my sample consisted of knowledge workers in large corporations. This restriction in the range of abusive supervision may have

prevented me from observing significant relationships. My hypotheses might have received more support if the model were tested in organizational settings whereby abusive supervision is more prevalent (e.g., manufactory plants, fast food restaurants, small service providers in private sector). Good knowledge workers are scarce even in China, and wise employers avoid treating them abusively for fear that they will lose them to other employers. Based on my reading of the literature, there tend to be lower levels of abusive supervision in samples with higher mean education levels.

As with other studies, the results are based on a single sample and tests conducted in different societal and occupational settings would be needed to ascertain the generalizability of the findings. For example, my sample consisted of corporate employees from small work units. Compared to those in bigger work units, employees in small groups may be more attentive to each other's experience and may also be more reactive to their coworkers' mistreatment by the leader. This may suggest that coworker abusive supervision, computed by averaging the scores of other coworkers' self-reports of abusive supervision, may be more in line with individuals' *perceptions* of coworkers' abuse, as in the vicarious abuse construct examined by Harris et al. (2013). In a larger work unit, however, there may be a weaker correlation between an aggregated measure of coworker abusive supervision and a perceptual measure, as peers may perceive high coworker abusive supervision when it is peers they work with more closely, or whose work spaces are more physically proximal to their own. Thus the performance of this aggregated measure of coworker abusive supervision in larger work units needs to be examined in future research.

In addition, my sample is from a collectivistic culture, China. Studies have reported that the cultural value of high power distance weakens the influences of abusive supervision on employee outcomes when examined at the individual level of analysis within particular societal cultures (e.g., Lin, Wang, & Chen, 2012). A meta-analysis of the abusive supervision literature conducted by Kermond, Schaubroeck, and Malonson (2013) found no evidence that power distance, as imputed to studies on the basis of the country in which the data were collected, moderates the strength of relationships between abusive supervision and deviant behaviors. Moreover, there are no apparent reasons to expect that power distance alters the interaction effect between own and coworker abusive supervision in predicting employee outcomes. Neither my hypothesized psychological mechanisms nor those about which I have speculated in this section (e.g., social comparisons, internal vs. external attributions) are established to be universal human processes. Nevertheless, it would be valuable for researchers who may wish to test these or related relationships to examine samples composed of workers from other cultural backgrounds and from a variety of organizational and occupational settings.

Directions for Future Research

Researchers have begun to recognize that workers' vicarious experiences of leader mistreatment, as represented by high mean levels of abusive supervision (Hannah et al., in press), aggressive humor (Huo et al., 2012), or supervisor social undermining (Duffy et al., 2006) reported by their coworkers, or individuals' perceptions of their coworkers' mistreatment by the supervisor (Harris et al., 2013), have important implications for employees' attitudes and behaviors. These emerging studies provide what is in my opinion the first meaningful new stream of abusive supervision research to

emerge since the seminal work by Tepper (2000). One future research agenda is to uncover the range of psychological processes that are precipitated by vicarious leader mistreatment. Different theoretical perspectives (e.g., social comparison theory, justice perspectives, attribution theory, and social exchange theory) have been proved to be useful tools for conceptualizing the mechanisms through which vicarious leader mistreatment influences outcomes. The findings of my study did not support my overarching theoretical perspective in which own and coworker abusive supervision interact in specific ways to influence three different forms of employee deviant behavior through three distinct motives underlying social justice perceptions, as with the other studies (Harris et al., 2013; Huo et al., 2012). However, my findings suggest that the attributions triggered by both direct and indirect experiences of leader abuse are worthy of further in-depth examination. These very recent studies, including mine, suggest that victims of abusive supervision tend to have more negative attitudes toward the leader and the organization and engage in more retaliatory actions against them when they have made attributions to the motives and traits of the leader for the abusive behavior. When they are making attributions to their own behaviors or dispositions, on the other hand, they may experience more psychological strain and withdraw socially from the group. None of these studies, however, has assessed individuals' attributions. Direct examination of these attributional processes is needed. Studies could also measure individuals' distinct emotions associated with internal and external attributions (e.g., shame vs. anger) as an alternative approach to capturing these attributions (see Barclay, Skarlicki, & Pugh, 2005).

Researchers might also examine specific types of attributions that extend beyond the locus of causality, such as by assessing individuals' perceptions of the leader's motives for engaging in abusive behavior. D. Liu et al. (2012) reported that the motives for abusive supervision attributed by team members moderated the influence of abusive supervision on team member creative performance. When the leader is perceived to attempt to promote the performance of the member(s) or the group by displaying hostile behaviors, there was a weaker influence of abusive supervision on creative performance. On the contrary, abusive supervision was more harmful to creative performance when the leader was perceived to be seeking to hurt the well-being of the abuse victims. Not only do members make such attributions, leaders may often strategically display hostility to push their followers to achieve performance goals (Tepper, Duffy, & Breaux-Soignet, 2012). For example, it is likely that when the victim of leader abuse is a poor performer and the leader is known as being tough on poor performers, the victim or other unit peers may attribute the leader's hostile behavior as arising from his or her intention to promote higher performance. In contrast, when the leader is mistreating a high performer or a popular employee, employees may tend to view the leader's motive as being selfish and destructive.

Another possible research direction may be to integrate the different methodological approaches toward examining the interaction of own and coworker abusive supervision. As I mentioned earlier, there have been different indices of individuals' vicarious experience of leader abuse, and each may be more or less effective depending on the study contexts (e.g., group size) and the conceptual content of the outcome variables. For example, when the main research question is to understand how

leader abuse directed toward coworkers may influence employees' sense-making and attritional processes, an aggregated score of coworkers' self-reports may be more useful for capturing the social environment that is the object of the employee's pivotal sense-making processes. A perceptual measure of vicarious abuse may, on the other hand, provide a more direct assessment of individuals' actual perceptions and feelings that better predicts psychological reactions. Future research on this topic might also employ network analytic techniques, assessing not only global perceptions of coworker's abuse, but also the abuse experiences of the individuals that are more psychologically close (Hansen, 1999) to the individual. Vicarious abuse may influence an employee's responses to a greater extent when the victims are friends or close associates in whom the individual has high affect-based trust. In such relationships there are reciprocity expectations and the employee may feel stronger empathy and a stronger impulse for reprisal when the partner is abused by the supervisor. Using a network-based lens would enable researchers to more precisely capture individuals' perceptions of and reactions toward coworkers' mistreatment that are contingent on the strength of their relationship ties with the victims.

Practical Implications

The findings of my study also have some practical implications. First, as shown in Table 3, coworker abusive supervision was positively associated with moral disapproval of leader ($r = .28, p < .01$), production deviance ($r = .18, p < .01$), and supervisor-directed deviance ($r = .29, p < .01$). It was also negatively associated with employee's perceptions about reward expectancy ($r = -.17, p < .01$). Even after controlling for one's own abusive supervision, coworker abusive supervision was positively associated with production

deviance ($\gamma = .14, p < .01$; Table 4) and supervisor-directed deviance ($\gamma = .17, p < .05$; Table 4). These results indicate that coworker abusive supervision may have an adverse influence on employee behavior to which managers should be alerted. This would further their understanding of the social costs of abusive supervision beyond the more acknowledged fact that it is harmful to the victim himself or herself. Specifically, leader abuse directed toward one member is likely to create an adverse vicarious experience of abusive supervision for all the other members of the group, leading to negative work outcomes for these individuals as well, perhaps creating an adverse influence on their functioning as a group. Although abusive supervision is a low frequency phenomenon, the potential for abusive supervision to influence followers both directly and indirectly augments our understanding of its undesirable consequences for the followers, the work unit, or the organization. By improving managers' awareness of the pervasive negative impact of leader abuse through leadership training or organizational ethics training, managers may learn to be more cautious about their behaviors. If this is not effective for managers and they continue a pattern of abusive behavior, more direct remediation may be required, including termination.

Organizations should have practices and regulations that guarantee discipline of the most abusive leader behaviors. Senior management's failure to attend to the misconducts of a frontline manager can be interpreted by the lower-level employees as the organization's condoning leaders' misbehaviors. As a result, employees may be deterred from reporting the misconduct of their direct supervisor to the upper-level management. Because they may perceive the organization is to some extent responsible for their supervisor's misconduct, employees may retaliate against the organization as a

whole. They may be less willing to invest in a favorable exchange relationship with the organization and may even engage in behaviors that ultimately harm the reputation and productivity of the organization. Therefore, senior management needs to build a strong ethical culture and provide channels in the organization that encourage and empower employees to confront their leader or report their misconduct without fear of negative personal consequences.

As being abused by the leader more than one's peers was related to an employee's perception of being socially excluded by peers, organizations must also consider the insidious social consequences of abusive supervision not only for the victim, but also for the work group as a whole. When abuse leads an individual to withdraw his initiative from the group or the members became less responsive to his initiatives, the group may lose a valuable asset. This is a largely overlooked consequence of abusive supervision. Although my study did not find a significant relationship between social exclusion by peers and employee deviant behaviors as rated by the peers, it is established by a large volume of studies that social exclusion is one of the most severe threats to an individual's well-being (Maner et al., 2007). The negative consequence of leader abuse on victims' perceived social exclusion may be reduced if the unit peers better understand that there is an almost primal group tendency to isolate abuse victims, and that awareness of this tendency may cause them to be more attentive to the injured feelings of the victims and less supportive to the abusive leader. Enhancing unit cohesiveness and trust among unit peers may be one approach to this problem.

Conclusion

This study tested a model in which own and coworker abusive supervision interact in distinct ways in influencing three justice-related motive states, leading to different types of employee deviant behaviors. I tested this model using a three-wave time-lagged design with a sample of 275 fulltime workers from two organizations located in China. Although the results provide little support for the hypothesized moderated mediation effects, the interaction effect of own and coworker abusive supervision was significant in predicting production deviance, moral disapproval of the leader, and social exclusion by peers. A high level of coworker abusive supervision is associated with a stronger influence of own abusive supervision on moral disapproval of the leader, but with a weaker influence of own abusive supervision on social exclusion by peers and production deviance. These findings, in conjunction with other literature, suggest that own and coworker abusive supervision may jointly precipitate internal or external attributions about the abusive behavior among the victims or their coworkers in ways that can influence their moral judgment of the leader and their relationships with the coworkers. Overall, this study demonstrates that employees' own abusive supervision affects justice motives and its influences are contingent on their coworkers' experiences of abusive supervision. By examining the influence of coworker abusive supervision on employees' justice-related motive states and their subsequent deviant behaviors, this study joins recent work on vicarious leader mistreatment in pointing out that abusive supervision can have a broader impact by creating vicarious experiences of abuse for the victims' coworkers. It also identifies distinct justice-related motives that are precipitated by abusive supervision that is experienced directly or indirectly. While my study

observed weak relationships between the justice motives and deviant behaviors, these motive states may have more substantial relationships with other employee outcomes.

APPENDIX

SURVEY ITEMS

Time One Survey

Own abusive supervision:

My supervisor ...

1. tells me my thoughts and feelings are stupid
2. puts me down in front of others
3. makes negative comments about me to others
4. tells me I'm incompetent
5. is rude to me
6. doesn't give me credit for jobs requiring a lot of effort
7. blames me to save himself/herself embarrassment
8. breaks promises he/she made to me
9. Lies to me

Scale range: 1=Never, 2=occasionally, 3=sometimes, 4=quite often, 5=almost always.

Procedural justice

The following items refer to the procedures used to arrive at your (outcome). To what extent:

1. Have you been able to express your views and feelings during those procedures?
2. Have you had influence over the (outcome) arrived at by those procedures?
3. Have those procedures been applied consistently?
4. Have those procedures been free of bias?
5. Have those procedures been based on accurate information?
6. Have you been able to appeal the (outcome) arrived at by those procedures?
7. Have those procedures upheld ethical and moral standards?

Scale range: 1=not at all, 2=little, 3=slightly, 4=moderately, 5=quite a bit, 6=much, 7=a great deal.

Reported by Colquitt (2001), first 2 items are from Thibaut and Walker (1975); and the last five items from Leventhal (1980).

Distributive justice

The following items refer to your (outcome). To what extent:

1. Does your (outcome) reflect the effort you have put into your work?
2. Is your (outcome) appropriate for the work you have completed?
3. Does your (outcome) reflect what you have contributed to the organization?
4. Is your (outcome) justified, given your performance?

Scale range: 1=not at all, 2=little, 3=slightly, 4=moderately, 5=quite a bit, 6=much, 7=a great deal.

Moral disapproval of leader:

1. My supervisor does things that are morally wrong.
2. My supervisor acts in a manner that is ethically appropriate. (reverse coded)
3. My supervisor shows little concern for ethical and moral values.
4. My supervisor uses unethical means to obtain goals.
5. My supervisor makes sure that his/her actions are always ethical. (reverse coded)
6. My supervisor conducts his/her personal life in an ethical manner. (reverse coded)
7. My supervisor treats people in a way that violates basic moral principles.

Scale range: 1=strongly disagree, 2=moderately disagree, 3=slightly disagree, 4=neutral, 5=slightly agree, 6=moderately agree, 7=strongly agree.

Note. The first two items are from Porath , MacInnis, and Folkes (2011), item 3-4 are from Mahsud, Yukl, and Prussia (2009), items 5 is from De Hoogh and Den Hartog (2008), items 6 is from Brown, Trevini and Harrison (2005), and item 7 is composed in this study.

Negative affectivity

This scale consists of a number of words that describe different feelings and emotions.

Read each item and then mark the appropriate answer in the space next to that word.

Indicate to what extent you have felt this way in general. Use the following scale to record your answers.

VERY SLIGHTLY OR NOT AT ALL	A LITTLE	MODERATELY	QUITE A BIT	EXTREMELY
1	2	3	4	5
1. _____ distressed			6. _____ irritable	
2. _____ upset			7. _____ ashamed	
3. _____ guilty			8. _____ nervous	
4. _____ scared			9. _____ jittery	
5. _____ hostile			10. _____ afraid	

Demographic variables:

Your Age _____

Your gender _ male _ female

How long have you worked in this work unit? _____ months

Your Education:

- High school
- Community college
- University degree
- Master Degree
- Doctoral degree

Time Two Survey

Moral disapproval of Leader

1. My supervisor does things that are morally wrong.
2. My supervisor acts in a manner that is ethically appropriate. (reverse coded)
3. My supervisor shows little concern for ethical and moral values.
4. My supervisor uses unethical means to obtain goals.
5. My supervisor makes sure that his/her actions are always ethical. (reverse coded)
6. My supervisor conducts his/her personal life in an ethical manner. (reverse coded)

Scale range: 1=strongly disagree, 2=moderately disagree, 3=slightly disagree, 4=neutral, 5=slightly agree, 6=moderately agree, 7=strongly agree.

Reward expectancy

1. As my performance increases my chances for higher pay increase.
2. As my performance increases my chances for promotion increase.
3. As my performance increases my supervisor will provide more training opportunities for me.
4. Doing good work increases my chances for more job security here
5. Doing a better job results in more opportunities for advancement.
6. If I do a better job I will be awarded with more fringe benefits.

Scale range: 1=strongly disagree, 2=moderately disagree, 3=slightly disagree, 4=neutral, 5=slightly agree, 6=moderately agree, 7=strongly agree.

Social exclusion by peers

1. Others ignored you at work.
2. Others left the area when you entered.
3. Your greetings have gone unanswered at work.
4. Others avoided you at work.
5. Others at work shut you out of the conversation.
6. Others refused to talk to you at work.
7. Others at work treated you as if you weren't there.

Scale range: 1=Never, 2 = Once in a while, 3=Sometimes, 4= Fairly often, 5=Often, 6 =Constantly, 7=Always.

Time Three Survey

In this section, you will be asked to rate the behaviors of your unit coworkers. Please answer each question based on your general experiences and observations with each coworker.

Describe how frequently each of your coworkers has exhibited the behaviors below in your workplace during the past four months, using the scale provided.

- 1=Not at all
- 2=Once
- 3=Several times
- 4=Quite often
- 5=Almost always

Production deviance (Rated by unit peers)

This person:

1. Taken an additional or longer break than is acceptable at your workplace
2. Come in late to work without permission
3. Intentionally worked slower than he/she could have worked
4. Put little effort into his/her work

Supervisor-directed deviance (Rated by unit peers)

This person:

1. Acted rudely toward his/her supervisor.
2. Gossiped about his/her supervisor.
3. Publicly embarrassed his/her supervisor.
4. Cursed at his/her supervisor.
5. Said something hurtful to his/her supervisor at work.

Coworker-directed deviance (Rated by unit peers)

This person:

1. Acted rudely toward a coworker.
2. Gossiped about a coworker.
3. Publicly embarrassed a coworker at work.
4. Cursed at a coworker at work.
5. Said something hurtful to a co-worker at work.

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