Expanding the Role of Power in Employees' Interpretations of and Reactions to Leader Behaviors

by

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Author's Declaration

This thesis consists of material all of which I authored or co-authored: see Statement of

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Statement of Contribution

Research presented in Chapter 2 (Essay 1):

The research presented in Chapter 2 (Essay 1) is currently under review at the Journal of

Leadership and Organization Studies (Hanig, Yang, Liang, Brown, & Lian, *under review*).

Research presented in Chapter 3 (Essay 2):

The research presented in Chapter 3 (Essay 2) is in preparation for a journal submission (Hanig,

Brown, & Liang, *in prep*).

Abstract

Though research on the impact of leader behaviors is generally grounded in the notion that organizational leaders hold formal power over subordinate employees, this conceptualization overlooks the power that employees may experience in the workplace that does not stem from the formal organizational hierarchy. However, with a growing body of theory and research on the psychology of power and informal sources of organizational power, it is possible to broaden our understanding of the role of power in the leadership process. Across two essays, this dissertation explores how employee experiences of power shape their interpretations of and reactions to leader behaviors. Essay 1 considers the well-established connection between abusive supervision and employee supervisor-directed deviance. Though it is understood that engaging in supervisor-directed deviance is dependent on the supervisor-employee power differential, prior accounts of this reaction to abusive supervision have overlooked the role played by power embedded in employees' informal social context. To address this gap, Essay 1 draws on power-dependence theory, the approach-inhibition theory of power, and uses a social network approach to explain the link between abusive supervision and supervisor-directed deviance. In doing so, a three-way interaction is proposed, in which the abuse-deviance relationship is impacted by two components of informal power: social network centrality and influence of subordinate employees. In particular, it is predicted that the relationship will be the strongest when subordinates have high social network centrality and high influence. This prediction was tested through the collection of full social network data, as well as employee self-report surveys. The results provide support for the notion that supervisor-directed deviance emerges most strongly as a consequence of abusive supervision for employees who wield informal power in their organization.

Essay 2 concerns the construct of psychological empowerment, which is positioned in this essay as the cognitive manifestation of personal power in the workplace. While psychological empowerment is commonly framed as an outcome of leadership, Essay 2 builds on a growing body of work which demonstrates that the individual characteristics of employees can influence their ratings of leadership behaviors. A longitudinal crossed-lagged research design was employed over 9 months to determine the extent to which psychological empowerment predicts ratings of leadership, while controlling for reciprocal effects. Through an integration of psychological empowerment with the approach-inhibition theory of power, it was predicted that psychological empowerment would be positively associated with ratings of empowering leadership and negatively associated with ratings of abusive supervision. The findings support these predications and further provide evidence that the effect of psychological empowerment on ratings of empowering leadership is mediated by the experience of positive affect at work, an indicator of behavioral approach system activation. It is suggested that the findings generally support the account offered by the approach-inhibition theory of power on how psychological empowerment may impact one's experience of leadership.

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CHAPTER 1: INTRODUCTION

Power is a ubiquitous element of organizations and fundamental to the leadership process, in that leaders are granted power in order to coordinate group activities and goal pursuit (Magee & Galinsky, 2008; Yukl 1998). In organizational research, the power held by subordinate employees is an aspect of the leadership process that is often overlooked, given that individuals in leadership roles (e.g. manager, supervisor) are generally understood to have power over their employees by occupying a higher position in the organizational hierarchy (Aquino, Bies, & Tripp, 2006; Mawritz, Mayer, Hoober, Wayne & Marinova, 2012). This would be described as their formal power within the organization (Carter, DeChurch, Braun & Contractor, 2015). Within the formal organizational hierarchy, leaders are granted resources that they can withhold, distribute, or use to reward and punish (Carter et al., 2015; Mawritz et al., 2015; French & Raven, 1959). According to power-dependence theory (Emerson, 1962) this control of valued resources constitutes power by enabling one to also control the outcomes of others who are dependent on these resources.

Therefore, at first glance, it may seem that the power dynamic between leaders and employees is clear-cut. Indeed, research has demonstrated that the strength of employees' reactions to leader behaviors is impacted by their structural distance from their leader in the organizational hierarchy (Aquino et al., 2006; Avolio, Zhu, Koh, & Bhatia, 2004). However, it has long been understood that there are other sources of power within organizations that do not rely on one's place in the formal hierarchy (French & Raven, 1959; McEvily, Soda & Totoriello, 2014; Carter et al., 2015). Moreover, recent research suggests that individuals' experience of the psychological states associated with power at work is not entirely dependent on their current hierarchical position (Oh & Farh, 2017; Foulk, Lanaj, Tu, Erez, & Archambeau, 2018; Kilduff &

Galinsky, 2018). Hence, there are alternative conceptualizations of power (outside of the formal hierarchy) that are accessible to employees in subordinate roles, which should be expected to impact the leadership process. Theoretical developments on the psychology of power, particularly the influential approach-inhibition theory of power (Keltner, Gruenfeld, & Anderson, 2003), help to articulate how the experience of power may alter employees' cognition, affect, and behavior, thereby impacting their perceptions of and reactions to leader behaviors.

Two prominent alternative conceptualizations of power, which are accessible to employees in subordinate roles, are informal power and personal power. Informal power refers to the ability to access and control resources stemming from the informal structure in an organization, also described as the social network of an organization (McEvily et al., 2014; Carter et al., 2015; Anderson & Brion, 2014; Brass & Burkhardt, 1993; Brass, 1984). Personal power refers to the ability to pursue one's goals with autonomy and without a sense of dependence on others (Overbeck & Park, 2001; van Dijke & Poppe, 2006; Lammers, Stoke, Rink, & Galinsky, 2016). Personal power does not necessarily imply the ability to control the outcomes of others, in contrast to social power (the more conventional conceptualization of power). However, it has been suggested that the psychological impacts of power, often attributed to social power, are largely applicable to personal power as well (Tost & Johnson, 2019; Galinsky, Gruenfeld, & Magee, 2003). Research is needed to shed light on how these factors and other alternative conceptualizations of power shape employees' relationships with their leaders.

The aim of the current work is to broaden conceptualizations of power in the leadership process by investigating how employee experiences of power impact the manner in which they engage with different leader behaviors. This work, in particular, focuses on leader behaviors which are directly related to the use of power; abusive supervision, a form of destructive

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leadership that involves abusing one's power by engaging in hostile behavior toward subordinates (Tepper, 2000), and empowering leadership, which involves behavior that seeks to enable employees to pursue their goals (Ahearne, Mathieu, & Rapp, 2005). Essay 1, applies power-dependence theory and the approach-inhibition theory of power to understand how the informal power of employees impacts their performance of supervisor-directed deviance as a response to abusive supervision (Mitchell & Ambrose, 2007; Thau & Mitchell 2010). It was predicted that informal power would strengthen the association between abusive supervision and supervisor-directed deviance by creating a situation of mutual dependence between informally powerful employees and their supervisors (Emerson, 1962; Wee, Liao, Liu, & Liu, 2017; Tepper, Carr, Breaux, Geider, Hu, & Hua, 2009), and in turn, by disinhibiting the pursuit of desires for retribution (Keltner et al., 2003; Carlsmith, Darley, & Robinson, 2002; Folger & Skarlicki 2005, Jones, 2009). In this essay, social network analysis with full social network data was used to operationalize the informal power of employees as a combination of occupying a central position in their organization's advice-seeking network and being endorsed as having influence by their coworkers. This work contributes to the literature by examining how power outside of the formal organizational hierarchy impacts responses to abusive supervision and by utilizing social network methods as a robust approach to measuring employees' standing in the informal organization.

In Essay 2 it is suggested that the construct of psychological empowerment can be characterized as the cognitive manifestation of personal power in the workplace (Overbeck & Park, 2001; van Dijke & Poppe, 2006; Lammers et al., 2016). Psychological empowerment refers to the extent to which individuals experience the four cognitions of meaning, competence, self-determination, and impact in their job, which contribute to intrinsic task motivation (Thomas &

Velthouse, 1990; Spreitzer, 1995). This essay explores how psychological empowerment, which is regularly positioned as a mediator in the leadership process, may conversely impact ratings of leader behavior. This approach builds on emerging research demonstrating that ratings of leader behaviors are significantly influenced by employee characteristics (Wang, Iddekinge, Zhang, & Bishoff, 2019). A longitudinal crossed-lagged research design was employed over 9 months to determine the extent which psychological empowerment predicts ratings of leadership, while controlling for reciprocal effects. In applying the approach-inhibition theory of power (Keltner et al., 2003) to psychological empowerment, it was predicted that psychological empowerment would be positively associated with ratings of empowering leadership, by increasing employees' activation of the behavioral approach system (BAS). Further it was predicted that psychological empowerment would be negatively associated with ratings of abusive supervision, by decreasing activation of the behavioral inhibition system (BIS). This work contributes to the literature by drawing from theory and research on the psychology of power to develop an account of how psychological empowerment can be positioned as an employee characteristic that influences ratings of leader behaviors.

CHAPTER 2: ABUSIVE SUPERVISION AND SUPERVISOR-DIRECTED DEVIANCE:

A SOCIAL NETWORK APPROACH (ESSAY 1)

The following work is currently under review at the Journal of Leadership and Organizational Studies (Hanig, Yang, Liang, Brown, & Lian, under review).

Literature Review

Abusive supervision, the subjective perception that one's supervisor engages "in the sustained display of hostile verbal and nonverbal behavior" (Tepper, 2000: 178), is associated with a multitude of negative employee outcomes (Tepper, 2007; Martinko, Harvey, Brees, & Mackey, 2013; Mackey, Frieder, Brees, Martinko, 2015; Xu, Zhang, & Chan, 2019). Of these outcomes, researchers have paid significant attention to the retaliatory behavior of employees against their abusive supervisors (Lian, Brown, Ferris, Liang, Keeping, & Morrison, 2014; Liu, Kwan, Wu, & Wu, 2011; Mitchell & Ambrose, 2007; Park, Hoobler, Wu, Liden, Hu, & Wilson, 2017); Tepper, Carr, Breaux, Geider, Hu, & Hua, 2009; Thau & Mitchell 2010; Restubog, Scott, & Zagenczyk, 2011). This attention is merited, given theory and meta-analytic evidence which suggest that reactions to workplace violations are most strongly directed toward the perpetrator of the violation (Rupp, Shao, Jones, & Liao, 2014). Prominent accounts of how abusive supervision relates to retaliation suggest that abused subordinates experience a desire for retribution that is either expressed in the form of deviant behavior that is intended to harm their supervisor, or is hindered by an imbalance of power with their supervisor (Tepper et al., 2009; Wee, Liao, Liu, & Liu, 2017).

To date, however, the literature on abusive supervision and retaliation offers only a limited account of power within the supervisor-subordinate relationship. Existing theory and research tend to focus on the power formally conferred to supervisors (the ability to reward and

punish subordinates) as a deterrent to retaliation, while overlooking the role of power embedded within the informal social structure of an organization. As a separate entity from an organization's formal hierarchy and job descriptions, the informal social structure refers to an organization's aggregation of interpersonal relationships, or social network (McEvily, Soda, & Tortoriello, 2014; Anderson & Brion, 2014; Brass & Burckhardt, 1993). Though subordinates inevitably lack formal power relative to their supervisor, they can attain power from the informal social structure based on the nature of their relationships within the social network. Therefore, we suggest that the possession of power stemming from the informal social structure, or *informal power*, is one of the few factors that can serve to reduce the imbalance of power in the supervisor-subordinate relationship and is a key determinant of the extent to which an employee will be deterred from retaliating against an abusive supervisor.

In the present research we seek to advance the literature on abusive supervision and retaliation by empirically investigating the role played by employees' informal power. We develop a model of informal power that draws on power-dependence theory (Emerson, 1962; Tepper et al., 2009; Wee, et al., 2017), the approach-inhibition theory of power (Keltner, Gruenfeld, & Magee, 2003) and organizational social network research (Kilduff & Brass, 2010; Brass, Galaskievicz; Greve, Tsai, 2004). Specifically, power-dependence theory and the approach-inhibition theory of power inform our overarching understanding of social power and its psychological effects, while organizational social network research informs our understanding of how power manifests within informal social structures. In turn, we use methods of social network analysis (SNA) in order to operationalize our model of informal power and test the conditional effects of employee informal power on the association between abusive supervision

and employee retaliation. We predict that informal power will strengthen the association between receiving abusive supervision and engaging in retaliatory deviance against one's supervisor.

This research makes three principal contributions to the management literature. First, it contributes to research on abusive supervision by expanding upon existing conceptualizations of employee power in the literature. While many of the detrimental effects of abusive supervision, including supervisor-directed deviance, are predicated on the notion of supervisor power over an employee (Tepper, 2000; Tepper et al., 2009), research to date has primarily explored the role of the supervisor's formal power (Tepper et al., 2009; Aquino et al, 2001; 2006; Mawritz, Mayer, Hoobler, Wayne, & Marinova, 2012). Regarding formal power, employees may vary in the extent to which they feel dependent on their supervisor (Tepper et al., 2009), but this perspective neglects the possibility that employees have other sources of power within their organization, which may impact their reactions to abusive supervision. Hence our research fills a clear gap in the literature by addressing the role of informal power, power which employees wield outside of the organizational hierarchy (McEvily et al., 2014), in retaliatory responses to abusive supervision.

Second, given that informal power is an aspect of an employee's social context, our use of social networks allows for a more thorough and appropriate representation of social context factors than has previously been utilized in the literature on abusive supervision. Prior studies seeking to capture the effects of other social context factors (e.g. aggressive norms) on supervisor-directed deviance are limited by their use of self-report methods. By contrast, our social network approach encompasses the perceptions of an employee's entire set of coworkers, Hence, we contribute to the literature on abusive supervision by bringing in a novel and more valid approach to measuring social context than has been used in previous research.

Third, this research furthers the literature on organizational social networks by exploring the role of employee social network characteristics in the supervisor-employee relationship. While substantial research on organizational social networks has demonstrated that social network characteristics can predict leader emergence and effective leadership (for a broad review see: Carter, DeChurch, Braun, & Contractor, 2015), little is known about how social networks impact employees on the receiving end of leader behavior. By shedding light on how informal power associated with one's social network impacts retaliatory responses to abusive supervision, a form of destructive leadership (Krasikova, Green, & LeBreton, 2013), our research helps to develop a more complete picture of how social networks impact both sides of the leadership process.

Abusive Supervision and Supervisor-Directed Deviance: Applying a Power Lens

In an attempt to explain the psychological processes that lead recipients of abusive supervision to engage in supervisor-directed deviance, researchers have explored a variety of variables that moderate the association between these two constructs (Martinko et al., 2013; Mackey et al., 2015). In line with deviance being defined as a violation of social norms, several studies address how the emergence of supervisor-directed deviance relates to how one perceives social norms. This research shows that when individuals perceive aggressive behavior to be normatively acceptable, they become less likely to restrain deviant acts. For instance, individuals who believe that negative reciprocity is normative (Mitchell & Ambrose, 2007), or who do not ascribe to traditional values (Liu et al., 2010) are inclined toward deviance when abused. Other work has demonstrated that perceptions of aggressive norms in the workplace are associated with the emergence of supervisor-directed deviance (Restubog et al., 2011).

A complementary stream of research on the psychological processes associated with retaliatory deviance draws on the well-established idea that retaliatory exchanges are affected by power (Aquino et al., 2001; 2006). Specifically, it is thought that while employees may seek retribution for offences received in the workplace (Skarlicki & Folger, 1997; Skarlicki, Folger, & Tesluk, 1999; Folger & Skarlicki, 2005), employees refrain from retaliating against instigators who have relatively greater formal power in their organization (like a supervisor), in order to avoid negative repercussions (Aquino et al., 2001; 2006).

This phenomenon likely hinges on the principles of power-dependence theory (Tepper et al., 2009). Power-dependence theory intends to develop an abstract conceptualization of power that is applicable across domains of social interaction. The theory states that the essence of power involves an actor controlling resources that another actor is dependent on (Emerson, 1962). In other words, individuals have power when they are needed by others to obtain rewarding stimuli that are highly valued and cannot be obtained elsewhere (Emerson, 1962). It follows that subordinates are dependent on their supervisors for certain organizational resources (e.g. recognition, promotions, pay) and that this dependence should deter subordinates from engaging in behaviors, like deviance, that may motivate their supervisors to withhold these resources.

Given that subordinates should be deterred from targeting their supervisor with deviant behavior, research has demonstrated that the association between abusive supervision and supervisor-directed deviance is moderated by situational and individual factors that reduce dependence on one's supervisor, or reduce concerns associated with such dependence. These factors allow individuals to loosen restraint over retributive desires which may manifest in acts of deviance (Jones, 2009; Liu et al., 2010). Along this line of thought, subordinates have been

found to engage in supervisor-directed deviance to a greater extent when they plan to quit their organization, and are therefore less driven to restraint by concerns about future outcomes at their job (Tepper et al., 2009). Similarly, if subordinates do not perceive their supervisor to be capable of dealing out punishments, they may be more inclined toward deviance (Lian, Brown et al., 2014).

Though not addressed in the abusive supervision literature, power embedded in the informal social structure of organizations is a critical indicator of the distribution of resources within organizations (Brass et al., 2004; McEvily et al., 2014). The state of research on abusive supervision and deviance is arguably limited by failing to consider employee power embedded within the informal social structure, as it is complementary to the power associated with one's formal job position (McEvily et al., 2014), and is an important determinant of the ability of employees to impact their organizations and develop their careers (Kilduff & Brass, 2010; Podolny & Baron, 1997).

Power Disinhibits Deviant Behavior

Recent research on the psychology of possessing power defines power as control over resources relevant to other individuals (Keltner et al., 2003), a definition which dovetails with the current discussion on power-dependence theory (Anderson & Brion, 2014). The dominant perspective of this research, as articulated in the approach-inhibition theory of power, is that individuals who feel powerful have a heightened sensitivity toward rewarding stimuli and reduced perceptions of threat (Keltner et al., 2003). Hence, feeling powerful enhances one's inclination to pursue personal goals and desires, while giving little consideration to contextual factors (Keltner et al., 2003; Guinote, 2007a).

When trying to understand appropriate standards for behavior in the workplace, it has been argued that individuals engage in sensemaking, and use perceptions of social consensus as a guide (Soneneshein, 2007; Yam, Chen, & Reynolds 2014; Jones, 1991; Reynolds & Ceranic, 2007). Yet, power reduces the extent to which individuals base their decisions and behavior on social norms (Pitesa & Thau, 2013a; Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008). Therefore, in the present context, we suggest that individuals with informal power have a heightened focus on personal pursuits and a reduced sense of threat, which diminishes the salience of social deterrence against deviant behavior. Moreover, we also suggest that possessing informal power should lead individuals to be less dependent on, and thus less threatened by their supervisors. In the following sections, we draw on organizational social network research to describe informal power within organizations, and how it may facilitate retaliation in response to abusive supervision.

A Social Network Approach to Informal Power

Since organizational resources are embedded in both formal and informal organization structures, employees' formal hierarchical position and their informal social network position can respectively impact their control of organizational resources (McEvily et al., 2014; Anderson & Brion, 2014). Given that supervisors occupy a rank in the formal hierarchy that is above that of their subordinates, it is generally understood that subordinates are dependent on their supervisor for formal organizational resources. However, supervisors do not necessarily control their subordinates' access to, and leverage of resources embedded in the social networks of organizations (i.e. information).

Social networks capture relationships; they represent patterns of connections between individuals (Tasseli, Kilduff, & Menges, 2015). These ties within organizations can also be seen

as 'pipes' through which information flows (Podolny, 2001; McEvily et al., 2014). Within social networks, employees can occupy different structural positions, affording varying degrees of access to information (Burt, 1992). In particular, individuals who occupy central positions within their social network have advantageous access to information, and are able to act as brokers of this information, diffusing it amongst their coworkers (Venkatarmani, Richter, & Clarke, 2014; Kilduff & Brass, 2010; Burt, Kilduff, & Tasselli, 2013; Burt, 2004).

Indeed, the extent to which one occupies a central position in the social network of one's organization has been associated with indicators of power across a variety of studies (Brass, 1984; Krackhardt, 1990; Ibarra, 1993; Ibarra & Andrews, 1993; Sparrowe & Liden, 2005; Carter et al., 2015). In particular, betweenness centrality is a form of network centrality that reflects the extent to which an individual serves as the shortest path of communication between pairs of coworkers, and theoretically involves the ability to control the flow of information (Brass, 1984; Freeman, 1979). According to the power-dependence perspective, control of information resources can be a source of power if others are dependent on these resources (Emerson, 1962). In other words, network centrality potentially facilitates the ability to influence others, if it affords control of resources that are valued by others (Brass & Burkhardt, 1993). Influence, in turn, is defined as a "process in which individuals modify others' behaviors, thoughts, and feelings" (Anderson & Kilduff, 2009: 491) and is fundamentally a relational construct, the study of which lends itself to a social network approach (Bowler & Brass, 2006). Indeed, the ability to influence people at work is inherently contingent on how one is perceived by one's coworkers (Anderson & Kilduff, 2009). While network centrality involves resource control, influence has been conceptualized as the active use of power (Anderson & Brion, 2014).

To have power is to use it. Hence, control over resources means little, if one cannot use them to influence others (Anderson & Brion, 2014; Emerson, 1962). Stemming from the notion that power involves both the control of resources and the dependence of others on these resources, Brass and Burkhardt (1993) argue that a distinction must be made between the potential for power and influence, the active use of power. Based on their analysis, Brass and Burkhardt suggest that network centrality, may represent the potential for power, but does not necessarily imply influence.

According to a functionalist perspective, influence is bestowed on individuals by members of their group and cannot be obtained by other means (Anderson & Kilduff. 2009). Hence, individual and situational factors, such as how well individuals fit with their organizational culture, can impact how effectively they are able to influence others (Anderson, Spataro, & Flynn, 2008). Though individuals may obtain influence without having network centrality (Brass & Burkhardt, 1993; Anderson et al., 2008), we propose that individuals who have influence, but lack control over desirable resources, wield unstable power. Given their dependence on the judgment of their peers, such individuals will not exhibit the full range of cognitive and behavioral outcomes associated with a subjective sense of power. In particular, they may be inhibited from engaging in deviance due to the threat of status loss.

Informal Power and Retaliatory Deviance

As we have suggested, based on the approach-inhibition theory of power, informal power may lead individuals to pursue personal desires without consideration of social norms (Keltner et al., 2003; Guinote, 2007a; Pitesa & Thau, 2013a; Galinsky et al., 2008), and to be less restricted in their behavior by a sense of dependence on their supervisors. By having privileged access to information and using this access to wield influence amongst their colleagues, employees may

become instrumental to a supervisor's successful implementation of initiatives within their work unit. Following power-dependence theory, supervisors that are more dependent on a given subordinate, hold less power over that subordinate (Emerson, 1962; Wee et al., 2017). In such a case, by creating mutual dependence, employees may feel less threatened by the possibility that their supervisor would engage in behavior that jeopardizes their long-term relationship. With the threat of supervisory power diminished in this manner, employees should feel more inclined to act on desires that may conflict with their supervisors' interests.

Research suggests that individuals are motivated to give transgressors their just deserts (Carlsmith, Darley, & Robinson, 2002). This motive for punishment likely has an evolutionary basis (Folger & Skarlicki, 2005), and it has been established that desires for retribution precede acts of retaliation in response to an offense (Jones, 2009). Thus, we may expect employees possessing informal power to act on desires for retribution targeted at an abusive supervisor (Skarlicki & Folger, 1997; Mitchell & Ambrose, 2007; Liu et al., 2010; Tepper et al., 2009). Further, informal power may even enhance the extent to which individuals feel morally justified in such acts of retribution (Wiltermuth & Flynn, 2010).

Having a central position within one's organization, which can afford control over informal resources, does not constitute power from the perspective of power-dependence theory, if one's coworkers are not dependent on these resources (Burkhardt & Brass, 1993; Emerson 1962). It follows that having network centrality, but being unable to influence others, may do little to enhance feelings of power and reduce inhibitions against deviant behavior (Keltner et al, 2003; Pitesa & Thau, 2013a; 2013b). Moreover, since influence is granted by one's peers, individuals who have achieved influence—those who are able to actively exercise power—but lack the resources associated with network centrality, may be wary of overstepping boundaries of

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acceptable behavior, in order to maintain good standing amongst their group members (Anderson, Srivastava, Beer, Sparro, & Chatman, 2006; Anderson, Hildreth, & Howlett, 2015; Sligte, de Dreu, & Njistad, 2011). Hence, such individuals may not engage in deviant behavior, if they believe that such behavior will be viewed as inappropriate by their coworkers, and will cause them to lose the endorsement of their coworkers. Therefore, we suggest that for individuals to experience the psychological effects associated with power in their relationship with their supervisor, both network centrality and influence are needed.

In summary, we propose that informal power facilitates the occurrence of supervisor-directed deviance as a consequence of abusive supervision. We suggest that employees with both network centrality and influence experience informal power in their relationship with their supervisor. Employees who have both of these characteristics should be less inhibited in the pursuit of their desires for retribution against an abusive supervisor by standards of appropriate behavior, and should be less threatened by their supervisor, making them more inclined to engage in supervisor-directed deviance (Tepper et al., 2009; Lian, Brown, et al., 2014; Liu et al., 2010).

Hypothesis: There will be a three-way interactive effect of abusive supervision, social network centrality, and influence on supervisor-directed deviance. The effect of abusive supervision on supervisor-directed deviance will be strongest when both social network centrality and influence are high.

Method

Participants and Procedures

Whole social network data was collected from government employees in China across multiple settings. The samples were pooled together (N = 272) for all analyses. The participants

in the pooled sample are 76.6% female, with a mean age of 40.05 years (SD = 7.89), and a mean tenure with their current supervisor of 3.71 years (SD = 2.50). Further, 19.62% of participants occupy managerial roles in their organization. One participant with unusable data (i.e., with missing independent variable) was omitted from our sample. Moreover, we screened out multivariate outliers using by calculating Mahalanobis Distance as recommended by Tabachnick and Fidell (2001). Based on Mahalanobis Distance critical value greater than 20.52, we omitted 6 additional participants from the analyses. Due to missing values in the managerial position variable, we have a final sample of 259 participants.[1]

All measures were translated from English to Mandarin by a primary translator, and translated back to English by a secondary translator. A third translator checked for, and amended discrepancies between the translations (Brislin, 1980). Following well-established procedures in social network analysis, participants in each sample were given a comprehensive roster list of each member of their organization. Participants were then asked to report their perceptions of each member on the list, and their responses were compiled into a data-matrix for each sample (Bowler & Brass, 2006; Venkataramani, et al., 2014; Marsden, 1990). This data was then used to create measures of network centrality and influence (see below). All other variables were collected in the form of self-report questionnaires.

Measures[2]

Abusive supervision. Abusive supervision was measured using the 15-item scale published by Tepper (2000). Participants responded on a 5-point scale *(1 = I cannot remember him/her ever using this behavior with me; 5 = He/she uses this behavior very often with me)* to

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[1] The final analyses were also repeated including the multivariate outliers (see Appendix B) and without controlling for managerial position (see Appendix C) and the results are analogous to the findings reported in Table 2.
[2] See Appendix A for complete measure items, instructions, and response scales.

items that refer to their supervisor's behavior over past 12 months such as; "my supervisor ridicules me" and "my supervisor puts me down in front of others."

Supervisor-directed deviance. Supervisor-Directed Deviance was measured using the 10-item scale published by Mitchell and Ambrose (2007), which derived its items from Bennett and Robinson's (2000) measure of workplace deviance. Participants indicated the number of times in the past 12-months (*1 = Never; 7 = Daily*) that they engaged in behaviors such as; "made fun of my supervisor at work" and "acted rudely toward my supervisor."

Influence. Following the methods of Bowler and Brass (2006) Participants' level of workplace influence was measured as the mean rating given to an employee by all of his or her coworkers in the social network. Coworkers responded to one item; "this person has influence in the division." This item was rated on a 5-point scale (*1 = Strongly Disagree; 5 = Strongly Agree*).

Network centrality. To measure participants' betweenness centrality in the advice-seeking network of their organization, we collected social network data using a sociometric survey. A roster of all organizational members' names was presented in the questionnaire, and the respondents were asked to indicate the nature of their interaction with each member of their network by categorically choosing whether they primarily need advice from, support from, or prefer to avoid a given individual. The responses were used to construct an advice-seeking network matrix for each organization, Cell X_{ij} would be coded as 1 if participant *i* reported that he or she needs advice from participant *j* and coded as 0 otherwise. The data was coded in this manner in order to capture the flow of information (a prominent informal resource) in a given network, which can be represented through the transmission of advice (Flynn & Wiltermuth, 2010; Sparrowe & Liden, 2005).

Then, each participant's betweenness centrality score was generated from the advice-seeking network matrices. Betweenness centrality refers to the frequency that an actor serves as an intermediary on the shortest path between two individuals in a network that are not directly connected and is indicative of the ability to control the information that passes between the two parties (Freeman, 1979). Since one's betweenness centrality score is related to the size of one's network, raw betweenness centrality scores cannot be compared across networks. Thus, we calculated normalized betweenness centrality scores in UCINET 6 (Borgatti, Everett, & Freeman., 2002), whereby the betweenness centrality score of each participant is divided by the maximum betweenness score possible in a given network, based on the network's size (Borgatti et al., 2002). This procedure makes it possible to meaningfully compare betweenness centrality scores across the participants in our combined sample. In calculating normalized betweenness centrality, it was also necessary to account for the directed nature of the data (Flynn & Wiltermuth, 2010; White & Borgatti, 1994).

Controls variables. Since the data was drawn from six distinct samples, we controlled for this systematic source of error by including five dummy-coded variables to represent each sample (Sample 6 received a dummy code of 0 on all five variables). Given that betweenness centrality is heavily influenced by individual's rank in their team, we controlled for whether participants occupy a managerial position in their organization (0 = non-manager, 1 = supervisor/ mid-level manager/ top-level manager).[3]

Analytic Strategy

We tested the hypothesis with ordinary least squares (OLS) hierarchical multiple regression in SPSS 23.0 and a slope difference test of interaction effects (Dawson & Richter,

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[3] The final analyses were also repeated without controlling for sample (see Appendix D) or, as previously noted, managerial position (see Appendix C) and are analogous to the findings reported in Table 2.

2006). All lower-order terms used in interactions were centered, and interactions were created

with mean-centered independent variables (Aiken & West, 1991). In the first step, we entered the

control variables (dummy-coded variables representing each sample, and employees' managerial

position). In step 2, we entered the main effects (abusive supervision, network betweenness

centrality, and influence). The two-way interactions were entered in step 3, and the three-way

interaction was entered in step 4.

Results

Descriptive statistics and bivariate correlations can be seen in Table 1. As expected, a

significant, positive correlation between abusive supervision and supervisor-directed deviance

was found ($r = .24$, $p < .01$). Abusive supervision was also found to have a negative correlation

with influence ($r = -.34$, $p < .01$), while influence and network centrality were found to be

positively correlated ($r = .18$, $p < .01$)

Table 1

Descriptive Statistics, Zero-Order Correlations, and Reliabilities

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Sample 1	.11	.31	-									
2. Sample 2	.23	.42	-.19**	-								
3. Sample 3	.22	.41	-.18**	-.29**	-							
4. Sample 4	.18	.39	-.16**	-.26**	-.25**	-						
5. Sample 5	.12	.33	-.13**	-.21**	-.20**	-.18**	-					
6. Managerial position	.20	.40	.14**	-.25**	-.04	.03	-.01	-				
7. Abusive supervision	1.22	.40	.02**	-.20**	-.20**	.15*	-.13*	.23**	**.94**			
8. Centrality	.29	.78	.28	-.12	.04	-.04	.02	.14*	-.09	-		
9. Influence	3.59	.27	.30	-.03	.46**	-.66**	.41**	.04	-.34**	.18**	-	
10. SDD	1.03	.09	.17**	.20**	-.14*	-.11	-.09	.07	.24**	.03	.05	**.63**

Note. $n = 259$. Alpha reliabilities are boldfaced and noted in the diagonals. SDD = Supervisor-Directed Deviance. Sample 6 is represented by a code of 0 on all sample variables.

*$p < .05$
**$p < .01$
Two tailed tests.

To test the predicted three-way interactive effect of abusive supervision, network centrality, and influence on supervisor-directed deviance, a hierarchical multiple regression analysis was conducted in order (Table 2). Control variables were entered at step 1, while the mean-centered independent variables were entered at step 2. The addition of the independent variables led to a significant increase in the variance of supervisor-directed deviance accounted for by the model ($\Delta R^2 = 0.08$, $p < 0.01$). The mean-centered independent variables were used to create two-way interaction terms (Aiken & West, 1991), which were entered at step 3. The additional variance explained by the two-way interaction terms was significant ($\Delta R^2 = .15$, p $< .01$). Further, there was a significant abusive supervision by network centrality interaction ($b = .14$, $SE = .03$, $p < .01$) and a significant abusive supervision by influence interaction ($b = .34$, $SE = .05$, $p < .01$) in predicting supervisor-directed deviance. As in step 3, the mean-centered independent variables were used to create a three-way interaction term that was entered at step 4. This interaction term of abusive supervision by influence and network centrality was found to be significant ($b = .34$, $SE = .11$, $p < 0.01$), explaining an additional 3% of the variance of supervisor-directed deviance ($\Delta R^2 = 0.03$, $p < 0.01$).

Table 2

Result of Regression Analyses Predicting Supervisor-Directed Deviance

Variable	Step 1	Step 2	Step 3	Step 4
Intercept	1.02^{**} (.02)	1.02^{**} (.03)	1.05^{**} (.03)	1.04^{**} (.03)
Sample 1	$.05^{*}$ (.02)	.04 (.04)	-.03 (.04)	-.01 (.04)
Sample 2	$.05^{*}$ (.02)	$.06^{*}$ (.03)	.03 (.03)	.05 (.03)
Sample 3	-.02 (.02)	-.02 (.04)	-.05 (.04)	-.02 (.04)
Sample 4	-.01 (.02)	.01 (.02)	-.00 (.02)	.01 (.02)
Sample 5	-.02 (.02)	-.02 (.05)	-.05 (.04)	-.03 (.04)
Managerial Position	.02 (.01)	.01 (.02)	.01 (.01)	.02 (.01)
Abusive Supervision		$.07^{**}$ (.02)	$.13^{**}$ (.02)	$.13^{**}$ (.02)
Centrality		.00 (.01)	.02 (.01)	.02 (.01)
Influence		.08 (.07)	$.12^{*}$ (.06)	.11 (.06)
Abusive Supervision x Centrality			$.15^{**}$ (.03)	.14 (.03)
Abusive Supervision x Influence			$.32^{**}$ (.05)	$.34^{**}$ (.05)
Centrality x Influence			.05 (.03)	.11 (.03)
Abusive Supervision x Centrality x Influence				$.36^{**}$ (.11)
ΔR^2	$.10^{**}$	$.08^{**}$	$.15^{**}$	$.03^{**}$

Note. $n = 259$. Values are unstandardized regression coefficients; standard error estimates are in parentheses. All lower-order terms used in interactions were centered prior to analysis. Sample 6 is represented by a code of 0 on all sample variables.

$^{*}p < .05$
$^{**}p < .01$
Two tailed tests

The methods of Aiken and West (1991) were used to probe the significant three-way interaction, which is depicted in Figure 1. Points for these analyses were pegged at one standard deviation above and one standard deviation below the mean for the moderator variables. However, one standard deviation below the mean was beyond the range of the network centrality variable, so the minimum value of this variable was used. Tests of simple slope analyses indicated that the relation between abusive supervision and supervisor-directed deviance was significant when network centrality was high and influence was high *(b = .41, SE = .04, p < .001)*, but not significant when centrality was high and influence was low *(b = .07, SE = .04, p*

= .08), when centrality was low and influence was high ($b = .04$, $SE = .04$, $p = .32$), and when centrality was low and influence was low ($b = .01$, $SE = .04$, $p = .88$). A further probe of this interaction was conducted using Dawson and Richter's (2006) slope difference test. It was found that the effect of abusive supervision on supervisor-directed deviance was significantly stronger when network centrality was high and influence was high, as compared to when network centrality was high and influence was low ($t = 5.82$, $p < .01$), when network centrality was low and influence was high ($t = 5.25$, $p < .01$), and when network centrality was low and influence was low ($t = 6.87$, $p < .01$). These results provide support for our hypothesis.[4]

Figure 1. Interaction effect of abusive supervision by network centrality and influence on supervisor-directed deviance.

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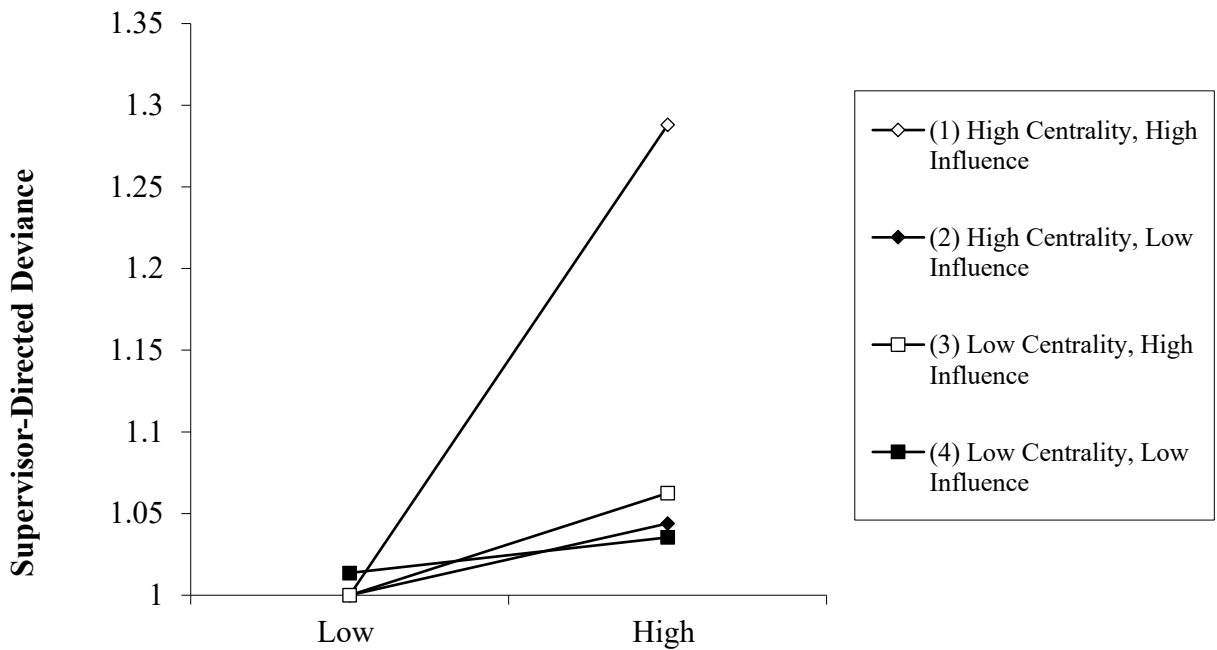
[4] The results should be interpreted with caution since the influence variable had a VIF value of 13.64, which indicates a significant collinearity issue in the analysis. This issue was addressed when the dummy-coded sample variables were excluded from the model, and the findings remained unchanged (see Appendix D). Given the consistent findings, the results with the dummy-coded sample variables included are reported because of the need to control for any unobserved heterogeneity across the 6 samples.

Discussion

The present research adopted a social network approach in order to study how the informal social structure of organizations relates to employees' retaliatory behavior in response to abusive supervision. While abusive supervision has been found to predict supervisor-directed deviance across a variety of studies (Martinko et al., 2013; Mackay et al., 2015) the work at hand sought to further explore retaliation from a structural perspective. Specifically, it was proposed that informal power, which was conceptualized as an amalgamation of social network centrality and influence, would exacerbate the effect of abusive supervision on supervisor-directed deviance.

We found that the effect of abusive supervision was moderated, in a three-way interaction, by both network centrality and influence. Consistent with prior organizational research concerning power and deviance (Tepper et al., 2009; Pitesa & Thau 2013a; 2013b), we suggest that our results provide support for a model whereby informal power increases the performance of supervisor-directed deviance in response to abusive supervision. In this case, we believe that informal power reduces employees' dependence on their supervisor, allowing them greater freedom and drive to pursue desires for retribution (Tepper et al., 2009; Lian, Brown et al., 2014).

Furthermore, we believe that the present finding supports our argument that network centrality and influence are important components of informal power in the supervisor subordinate relationship that may lessen subordinates' perceptions of the dependence. We found a significant three-way interactive effect whereby the effect of abusive supervision on supervisor-directed deviance was significantly strengthened for individuals with high levels of both network centrality and influence, as compared to individuals with high levels of only one of

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these variables. Thus, we propose that individuals who have network centrality but lack influence are likely unable to translate the informational resources afforded by their position into usable power (Brass & Burckhardt, 1993). While those who have influence but lack informal organizational resources should be unwilling to violate group norms, in order to maintain their social standing (Anderson et al., 2006; 2015; Sligte, et al., 2011).

Theoretical Implications

This research contributes to the literature on abusive supervision by highlighting the role of employee informal power in retaliatory responses to abuse. Power in the supervisor-employee relationship is at the root of how abusive supervision impacts employee outcomes (Tepper, 2000), and it is a fundamental theoretical factor in predicting retaliation against a supervisor (Tepper et al., 2009; Aquino et al, 2001; 2006; Skarlicki & Folger, 1997). Despite the importance of power, the literature has almost entirely focused on a single type of power; the formal power of supervisors. It is clear that supervisors have formal power over their employees, yet this perspective is limited in scope. An abundance of research has demonstrated that informal processes are a ubiquitous source of power in organizations that is separate from the formal hierarchy (McEvily et al., 2014; Kilduff & Brass, 2010). It follows that research on abusive supervision and retaliation is incomplete without taking into consideration the informal power of employees as an aspect of their social context which will shape their reactions to abusive supervision. Hence, by incorporating employee informal power, the present research helps to provide a more complete picture of the role of power in retaliatory responses to abusive supervision.

Though this research was conducted in China, we see no reason why its implications for abusive supervision would not translate to a North American context. In East Asia abusive

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supervision is more prevalent than in North America (MacKey et al., 2015), and it may be considered more in line with social norms there, due to the heightened power distance orientation found in this region (Vogel et al., 2015). However, there is evidence that abusive supervision is still a strong predictor of supervisor-directed deviance in East Asian contexts (Zhang & Liao, 2015) and much of the theory on abusive supervision and retaliation has been developed through research outside of North America (e.g Liu et al., 2010; Restubog et al., 2011). There is also evidence that network characteristics associated with informal power function similarly in Asian and Western cultures (Salk & Brannen, 2000). While we would expect an equivalent pattern of findings in a North American context, subsequent research in this this region may yield interesting implications for the role of employee informal power in different cultures.

Although East Asian cultures generally place strong emphasis on the importance of hierarchical relations, the collectivist orientation of these cultures may give way to the view that power holders are responsible for furthering group interests (Zhong, Magee, Maddux, & Galinsky, 2006; Torelli & Shavitt, 2010). By contrast, possessing power is more likely to be equated with the ability to further one's own self-interest in North America, which has a more individualistic cultural orientation. Further, East Asian cultures consider effective leaders to be those who support the welfare and relations of the group, while North Americans place emphasis on the need for leaders to take assertive action (Menon, Sim, Fu, Chiu, & Hong, 2010). Hence, it is possible that despite findings suggesting that abusive supervision is more tolerated in East Asia (Vogel et al., 2015), this relationship may only be relevant to the extent that abusive supervision is seen as a leader behavior intended to support the interests of the group.

Research has applied attribution theory to interpretations of abusive supervision, suggesting that it may be more tolerated if it is seen to be oriented toward promoting

performance, rather than intended to cause injury (Liu, Liao, & Loi, 2012; Yu & Duffy, 2020). As such, it is possible that subordinates in East Asia may be more inclined to retaliate against abusive supervisors, if their actions are perceived to be injurious, rather than supportive of group outcomes. Moreover, this effect may be exacerbated for subordinates with informal power in an East Asian context, who may have a heightened sense of responsibility to protect the interests of the group (Zhong et al., 2006), in addition to individual desires for retribution. Therefore, while there may be a lower rate of retaliation in East Asia as compared to North America, informal power could be expected to impel retaliation across both cultures, based on the extent to which individuals attribute abusive supervision to intentions to cause harm. A comparison of the attributions for abusive supervision in East Asia and North America would support a better understanding of the applicability of theories of abusive supervision across cultures.

Furthermore, at the organizational and individual levels of analysis we would expect factors that impact the importance of informal power would serve as boundary conditions to our findings. For example, in mechanistic organizations that are more reliant on bureaucratic structures and policies, as opposed organic organizations which emphasize flexibility and shared decision-making, informal power may yield fewer advantages that would translate into a psychological sense of power (Dust, Resick, & Mawritz, 2014; McEvily et al., 2014, Burns & Stalker, 1961). Given that the samples in the present study consisted of teachers and other government employees, it is possible that our results reflect the experience of employees in more mechanistic organizations. Perhaps a stronger moderation effect of informal power would be found in more prototypically organic organizations, like high-tech firms. Moreover, recent theoretical work bridging the gap between structural power and the psychological sense of power suggests that individual perceptions of illegitimacy, high dependence on others, and a lack of

confidence in one's abilities can prevent both formal and informal power-holders from experiencing the cognitive effects of power (Tost, 2015).

A second contribution of the present research stems from its use of social network methods. Though previous research has identified effects of social context-related variables on supervisor-directed deviance (Mitchel & Ambrose, 2007; Liu et al., 2010; Restubog et al., 2011; Lian, Brown et al., 2014; Thau & Mitchell, 2010), the present work is the first to operationalize social context by collecting social network data. This social network approach allowed for the appropriate measurement of betweenness centrality (Brass 1984; Freeman, 1979), and influence (Bowler & Brass, 2006; Anderson et al., 2008). Arguably by collecting multi-source data on the relational ties of organizations, we have achieved a more rigorous measurement of social context than has previously been done in this area of research. We believe that research on both destructive and constructive leadership processes would be greatly advanced by using social networks to better understand how the supervisor-employee relationship is embedded within the broader social contexts of both parties.

Relatedly, our work also contributes to the literature on organizational social networks (Kilduff & Brass, 2010) by demonstrating that network characteristics can impact employee reactions to supervisors. While much is known about how the social networks of formal and emergent leaders affect behavior and workplace outcomes (Carter et al., 2015), little is known about how the social networks of employees on the receiving end of leadership impact the effectiveness of leader behavior. In two exceptions, Venkatarmani and colleagues (2014) found that for leaders who are central within their peer network, subordinates who are central in their local team network exhibit greater creativity. This research group also found that employees who are central within their team are more likely initiate voice when they have leaders who are also

central within that team (Vankataramani, Zhou, Wang, Liao, & Shi, 2016). While this work

sheds light on positive aspects of the leadership process, in tapping into abusive supervision and

retaliatory behaviors, our work makes strides in understanding how the social networks of

employees impact destructive leadership processes. In so doing, we provide preliminary

evidence for a social network-based model of employee informal power, which involves a

double requirement of network centrality and influence. The present work also contributes novel

empirical research to the broader literature on the dark side implications of organizational social

networks, which to date have received little attention. (see Flynn & Wiltermuth, 2010; Brass

Butterfield, & Skaggs, 1998; Bizzi, 2012).

Practical Implications

In finding that the emergence of supervisor-directed deviance is influenced by informal

power, it appears that the very attributes that make employees most inclined to act out (network

centrality and influence) in response to abusive supervision, could otherwise lead them to be

strong performers in their organization. Some empirical work supports the propositions that

central network positions are positively associated with job performance (Sparrow et al., 2001;

Mehra, Kilduff, & Brass, 2001) and voice (Venkataramani & Tangirala, 2010; Venkataramani et

al., 2016). Central employees should also have an enhanced ability to share novel information

with their coworkers, which could yield performance benefits for their work group

(Venkatarmani et al., 2014; Burt et al., 2013; Burt, 2004). Furthermore, individuals who feel

powerful are inclined to intensely focus on, and pursue their goals (Keltner, et al., 2003; Guinote,

2007a), and those who attain influence are typically both highly capable of accomplishing core

tasks and are particularly well suited to meet the demands of their organizations (Anderson et al.,

2008, Anderson & Kilduff, 2009).

Given the inference that aspects of informal power are closely associated with high performance, it would be unfortunate if individuals with such characteristics were driven by their managers to engage in deviance. If such individuals were to engage in increased deviance at the expense of sharing information and achieving their work-related goals, it would mean a large aggregate performance loss for an organization. Thus, it may be the case that some of the most detrimental effects of abusive supervision for organizations emerge when it is targeted against high-flying employees. On the other hand, it would be desirable if these individuals could be leading the charge to improve a work environment affected by abusive supervision, rather than engaging in deviance. Hence, it would be a promising opportunity for organizations experiencing abusive supervision to encourage employees with informal power to make positive organizational change as an alternative to lashing out in retaliation. For example, these employees could be encouraged to use their power to model and promote norms of civil behavior within the workplace (McGonagle, Walsh, Kath, & Morrow, 2014).

Limitations and Future Directions

One limitation of this study is that it involves cross-sectional data and is therefore exposed to analytic issues associated with common-method variance. Specifically, associations between variables may be inflated due to systematic error associated with the point in time of data collection (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Yet, this concern is dampened to a certain extent by the use of other-reported observations in the construction of the social network variables. A second limitation relates to the fact that the data was compiled from six organizations, giving it a nested structure. While it would be most appropriate to handle this data with the analytic procedures of multilevel modeling, a sample size of six organizations is insufficient to conduct such an analysis (Mass & Hox, 2005). However, in order to mitigate some

of the systematic variance associated with this nested structure, the various samples were controlled for in the multiple regression analysis (see Tepper et al., 2009).

A third limitation is that the present theorizing involves psychological mechanisms that are not explicitly measured. Though we suggest that informal power decreases inhibitions against pursuing desires for retribution, we neither measure subjective experiences of power (e.g. Anderson, John, & Keltner, 2012), nor desires for retribution (e.g. Liu et al., 2010). Future research is needed to compensate for this discrepancy by studying the potential mediation effects of these theoretically important variables. A fourth limitation stems from recent work that brings the directionality of the relation between abusive supervision and workplace deviance into question (Lian, Ferris et al. 2014). While we did not account for the possibility that supervisor-directed deviance may predict abusive supervision, future research would benefit from the use of a cross-lagged panel design to study the role of informal power in hostile exchanges between supervisors and subordinates (Lian, Ferris et al., 2014; Finkel, 1995).

Additional future directions should further tease out the nature of informal power within the supervisor-subordinate relationship, and how it relates to abusive supervision and deviance. Research has demonstrated that traits such as self-monitoring can contribute to attaining a central position in one's social network (Mehrah, Kilduff, & Brass, 2001; Oh, & Kilduff, 2009) and trait dominance and person-organization fit predict influence (Anderson et al., 2008; Anderson & Kilduff, 2009). Thus, the inclusion of these individual difference variables in future studies may allow for a more comprehensive model of deviance as an outcome of individuals interacting with the formal and informal structures of their organization.

Furthermore, we expect that the role of informal power may be conditional upon other structural considerations of organizations. Factors such as the degree to which an organization is

organic versus mechanistic in structure (Dust et al. 2014; McEvily et al., 2014; Burns & Stalker, 1961), as well as the importance of employee empowerment within a given organization or industry (Spreitzer, 1995), should be included in future work. Individual perceptions that impact the translational of structural power to one's psychological sense of power should also be considered (Tost, 2015). Finally, given research showing that the network position of managers can impact employee outcomes (Venkataramani et al., 2014; 2016), our understanding of how employee informal power contributes to responses to abusive supervision is likely incomplete without taking the informal power of managers into account.

Conclusion

The present research demonstrates that the informal power of employees strengthens their retaliatory responses to abusive supervision. This finding provides support for the view that the association between abusive supervision and supervisor-directed deviance is strengthened by factors that reduce employees' dependence on their supervisor (Tepper et al., 2009; Emerson, 1962). Moreover, we argue that organizational phenomena related to the distribution of power, such as the supervisor-subordinate relationship, need to be considered from the perspective of both formal and informal organizational structures (McEvily et al., 2014). In line with this position, we used social network analysis to study the process by which abusive supervision interacts with the informal power of employees to predict retaliation. To our knowledge this is the first study on abusive supervision and deviance to make use of social networks. In doing so, we were able to rigorously operationalize aspects of employees' social context that are of theoretical relevance to informal power.

CHAPTER 3: HOW DO EMPOWERED EMPLOYEES SEE THEIR LEADERS? A TEST OF CROSS-LAGGED RELATIONS BETWEEN PSYCHOLOGICAL EMPOWERMENT AND RATINGS OF EMPOWERING LEADERSHIP AND ABUSIVE SUPERVISION (ESSAY 2)

The following work is currently in preparation for a journal submission (Hanig, Brown, & Liang, in prep).

Literature Review

Psychological empowerment as an outcome of leadership is an area that has seen much attention in theory and research. A significant body of research is devoted to how leadership behaviors can encourage psychological empowerment, and frequently frame psychological empowerment as a mediator between leadership and performance, as well as other workplace outcomes (Maynard, Gilson, & Mathieu, 2012; Lee, Willis, & Tian, 2018). Meta-analytic evidence supports the notion that leadership is an important predictor of empowerment ($r_c = 0.53$; Seibert, Wang, & Courtright, 2011) and that psychological empowerment serves as a mediator between empowering leadership and performance outcomes such as task performance, organizational citizenship behaviors (OCBs), and creativity (Lee et al., 2018). However, given recent research on followership suggesting that a considerable amount of the variability in leadership ratings may be attributable to employee characteristics (Wang, Iddekinge, Zhang, & Bishoff, 2019) and growing body of work examining potential reciprocal relations between leadership and employee characteristics (Lang, Bliese, Lang, & Adler, 2010; Lian, Ferris, Morrison, & Brown, 2014; Eby, Butts, Hoffman, & Sauer, 2015; Simon, Hirst, Kelley, & Judge, 2015; Liang, Hanig, Evans, Brown, & Lian, 2018), we suggest that the directionality of this relationship should be re-examined to advance theory and research.

In re-examining this relationship, we propose that recent theory and research on the psychology of power can and should be integrated with the construct of psychological empowerment. In particular, the approach-inhibition theory of power (Keltner, Gruenfeld, & Magee, 2003) offers a theoretical lens for understanding how psychological empowerment may influence leadership ratings. Specifically, based on the approach-inhibition theory of power, we expect that empowered individuals would be more likely to experience their leader as behaving in manner that is enabling of their goals and less likely to experience them as being socially threatening. We test this theory on ratings of leadership behaviors that theoretically promote the pursuit of internally driven goals (empowering leadership) and pose social threats to one's well-being (abusive supervision). The present research employs a cross-lagged panel design (Finkel, 1995; Little, Preacher, Selig, & Card, 2007) to identify whether reciprocal relationships exist between psychological empowerment and ratings of empowering leadership and abusive supervision, respectively. Further, we examined whether these effects would be mediated by positive affect and negative affect, respectively. For the purpose of this study, experiences of affect in the workplace are being used to operationalize activation of the behavior approach and behavioral inhibition systems, given their close associations with these systems (Keltner et al., 2003; Elliot & Thrash, 2002). While a cross-lagged design has previously been conducted to examine the directionality of the relationship between psychological empowerment and job performance outcomes (Maynard, Luciano, D'Innocenzo, & Mathieu, 2014), to our knowledge this is the first study to employ such a design to study of psychological empowerment and leadership.

We believe that the present research makes several contributions to the management literature. First, we suggest that this research contributes to the literature on psychological

empowerment by offering a theoretical account of how empowerment shapes the manner in which individuals perceive and interact with their work environment, with particular focus on the leader-follower dynamic. Though this aspect of psychological empowerment was identified in early thinking on the topic (Spreitzer, 1996; Thomas & Velthouse, 1990), the body of research that has accumulated since has primarily framed psychological empowerment as a predicator of job attitudes and performance. Second, we believe that this research contributes to the literature on power by integrating psychological empowerment within current conceptualizations of power and theories of how power impacts individual psychology. In so doing, this work provides an avenue for applying theory and research on power, which has primarily occurred in an experimental setting, to organizational contexts. Third, this research contributes to the emergent paradigm in the leadership literature, that ratings of leadership may be heavily influenced by follower characteristics (Wang et al., 2019; Martinko, Randolph-Seng, Shen, Brees, Mahoney, & Kessler, 2018) by proposing a theory-driven approach of why psychological empowerment would be expected to influence leadership ratings, as well as the particular leadership behaviors that it would impact.

Psychological Empowerment and Leadership

Early work on the concept of empowerment in organizations proposes that empowerment occurs when employees are enabled to accomplish goals (Conger & Kanungo, 1988). In a highly influential theoretical review, Thomas & Velthouse (1990) added nuance to the concept of empowerment by introducing the construct that psychological empowerment – individuals' sense of intrinsic motivation in a job or task, based on the extent to which they experience four cognitions – *meaning, competence, self-determination,* and *impact*. *Meaning* refers to the sentiment that one's work has personal relevance and value. *Competence* refers to the sense that

one is capable of performing one's work to a high standard. *Self-determination* refers to the sense that one has choice and autonomy in going about completing one's work. *Impact* refers to the belief that one's performance gives way to work outcomes. In response to Thomas and Velthouse's theory, these cognitions were formalized into a psychometric scale by Spreitzer (1995), which is widely used as the predominant tool for the study of psychological empowerment. The scale contains four dimensions reflecting each of the cognitions respectively, which are thought to additively contribute to the construct of psychological empowerment (Maynard et al., 2012).

Findings from a meta-analysis by Seibert and colleagues (2011) support the notion that psychological empowerment is a second-order construct that is formed by the four cognitions. The meta-analysis, which was based on 151 independent samples obtained from 142 articles, also identified outcomes and antecedents of the construct. Regarding outcomes, it was found that psychological empowerment strongly relates to job attitudes such as job satisfaction and organizational commitment, while having a moderate relationship with behavioral outcomes such as job performance, OCBs, and innovation. Psychological empowerment also negatively predicts the experience of strain and turnover intentions (Seibert et al., 2011). Regarding antecedents, it was found that individual characteristics such as age, education, and tenure had a weak relationship to psychological empowerment, however positive self-evaluation traits (also referred to as core self-evaluations; Judge, Locke, & Durham, 1997) strongly predict the construct. Leadership was one of a several key contextual factors of the work environment that were found to have a strong relationship with psychological empowerment, other factors include high-performance managerial practices, socio-political support, and work design characteristics (Seibert et al., 2011).

In contrast to these findings, recent research has drawn into question the traditional assumption that leadership impacts the psychological and behavioral outcomes of employees unidirectionally. A recent meta-analysis by Wang and colleagues (2019) demonstrated that the individual characteristics of followers, such as the Big Five personality traits and core self-evaluations, accounted for substantial variance in ratings of positive and negative leadership behaviors. Further, these researchers conducted a follow-up study to help answer the question of whether the effect of individual characteristics on leadership ratings is due to follower subjective perceptions of leadership behavior, or actual changes in leadership behavior that occur due to follower characteristics. Using ratings of leadership vignettes to control for variance in ratings of leadership behavior, it was found that both pathways likely have a hand in influencing leadership ratings, though in certain cases the subjective perceptions of followers predominate. Related work has shown that ratings of a leader who is observed via video in an experimental setting, can be influenced by individual characteristics, including implicit leadership theories and attribution styles (Martinko et al., 2018), while other research has demonstrated that the positive and negative affect that followers feel toward their leader accounts for a significant portion of the variance in follower ratings of leadership across a variety of leadership behaviors (Martinko, Mackey, Moss, Harvey, McAllister, & Brees, 2018).

Research using cross-lagged panel designs has further contradicted pre-existing notions of causality in the leader-follower relationship, showing that employee citizenship behaviors predict supervisor mentoring (Eby et al., 2015) and that employee deviance and avoidance predict abusive supervision (Lian et al., 2014; Simon et al., 2015). Lang and colleagues (2011) demonstrated that employee depressive symptoms predict their perceptions of organizational justice (which leaders play a central role in establishing). These authors also acknowledge the

difficulty in teasing out whether employee characteristics influence leadership ratings through subjective perceptions or by having an impact on actual leadership behaviors. In the present work, we extend this line of research by employing a cross-lagged panel design to test the directionality of the relationship between psychological empowerment and ratings of leadership behaviors, focusing on empowering leadership and abusive supervision.

Integrating Psychological Empowerment with the Power Literature

Though psychological empowerment has a rich theoretical grounding in job characteristics theory (Hackman & Oldham, 1980), self-efficacy theory (Bandura, 1986), self-determination theory (Deci & Ryan, 1985), and other paradigms, we propose that recent research on the psychological effects of power, in particular the approach-inhibition theory of power (Keltner et al., 2003) offers a succinct account for how psychological empowerment can influence ratings of leadership and other contextual factors of one's work environment. However, before addressing this account, it is necessary to theoretically integrate the construct of psychological empowerment with current conceptualizations of power.

In much of the recent literature, power is conceptualized as *social power,* which is defined as having asymmetric control of resources that others are dependent on (Galinsky Rucker, & Magee, 2015; Anderson & Brion, 2014; Emerson, 1962). In other words, individuals have social power when they have control over factors that are important to the outcomes of others (e.g. the ability to grant or withhold a job promotion) and use this control to influence the behavior of others (Emerson, 1962). Though less prominent in the literature, it is also acknowledged that power can be conceptualized as *personal power* (Overbeck & Park, 2001; van Dijke & Poppe, 2006; Lammers, Stoke, Rink, & Galinsky, 2016). Personal power has been defined as "the extent to which actors (power holders) are capable to act with agency, or to

produce their intended effects in the environment" (van Dijke & Poppe, 2006 p.538). Researchers suggest that personal power involves a lack of dependence on other individuals without necessarily having the ability to control others, which is required for social power. While work on personal power is nascent, initial findings suggest that people actually have a stronger motivation to pursue personal power rather than social power, which is perhaps due to the notion individuals desire power in order to fulfill needs for autonomy, rather than needs for influence (van Dijke & Poppe, 2006; Lammers et al., 2016).

Interestingly, it has been proposed that despite seeking to understand social power, much of the theorizing within the current power literature places greater emphasis on having freedom from constraints, rather than control over others (Tost & Johnson, 2019), and that it can be difficult to tease out whether the personal or social components are responsible for the psychological and behavioral effects of power (Galinsky, Gruenfeld, & Magee, 2003). Indeed, the literature has at times pursed research questions that are directly related to the personal component, without necessarily referring to them as such (see Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008). Hence, it is arguable that the body of work on social power may not be clearly differentiated from the study of personal power and that much of the research on the psychological impacts of social power could also apply to situations characterized by personal power.

We propose that psychological empowerment equates to the psychological experience of personal power. Given that personal power is characterized as the capability to act with agency (van Dijke & Poppe, 2006), it is plausible that the psychological experience of personal power in the work domain would be akin to the experience of intrinsic task motivation, which characterizes psychological empowerment (Spreitzer, 1995; Thomas & Velthouse, 1990).

Relatedly, Guinote's (2017) review of the psychological impacts of power characterizes psychological empowerment as the ability to have control at work, which the author describes as "one ingredient of power" (p.363). This perspective appears to imply that psychological empowerment would concern the ability to control one's destiny at work, rather than have control over others, which aligns with the description of personal power discussed above.

In equating psychological empowerment to the experience of personal power, it is possible to apply current perspectives on the psychology of power to explain how empowerment may impact perceptions of leadership. Specifically, we draw on the approach-inhibition theory of power (Keltner et al., 2003), which has arguably had the most influence on recent power research.

Applying the Approach-Inhibition Theory of Power to Psychological Empowerment

The approach-inhibition theory of power suggests that individuals who feel powerful have a heightened sensitivity toward rewarding stimuli and reduced perceptions of threat (Keltner et al., 2003). Hence, feeling powerful enhances one's inclination to pursue personal goals and desires, while giving less consideration to goal irrelevant features of the environment (Keltner et al., 2003; Anderson & Brion, 2014; Guinote, 2017). Keltner and colleagues (2003) argue that differences in affect, cognition, and behavior between the powerful and powerless are a function of the differential activation of the behavioral approach system (BAS) and behavioral inhibition system (BIS). The behavioral approach system seeks out the potential for reward, triggers positive affect, and drives the pursuit of goal-oriented behavior. By contrast, the behavioral inhibition system is vigilant to threats in the environment, triggers negative affect, and prompts withdrawal behaviors (Keltner et al., 2003; Gray, 1990; Carver & White, 1994).

According to the approach-inhibition theory, the relative control that powerful individuals have over their environment allows them the freedom to pursue goals without hindrances, in turn, this ability for unhindered goal pursuit gives way to the activation of the behavioral approach system. Keltner and colleagues (2003) postulate that among other approach-related qualities, the powerful have relatively heightened sensitivity to rewards, and heightened levels of approach-related behavior. Those without power, on the other hand, are not free to pursue their goals, since they must be ever conscious of the doings of powerful others, who have the potential to threaten their goal attainment. Hence, as a function of an activated behavioral inhibition system, low-power individuals are proposed to have a heightened sensitivity to threat and increased likelihood of inhibiting their social behavior. In line with this theory, power has been shown to enhance goal-directed behavior (Guinote, 2007a), prompt initiation of action (Galinsky, Gruendfeld, and Magee, 2003), reduce the ability of context to influence one's behavior (Galinsky et al, 2008) and lead to context-independent (rather than context-dependent) cognitive processing (Miyamoto, & Ji, 2011). In interpersonal encounters, powerful individuals are also more inclined to perceive rewarding interpersonal information (Anderson & Berdahl, 2002) and are more inclined to attend to individuating information about others when it is relevant to their goals (Overbeck & Park, 2001). Powerful individuals therefore act in greater accordance with personally held goals than the less powerful, whose behavior will be constrained to a greater extent by perceived social norms, and other situational variables.

In the present research we propose that psychological empowerment equates to the psychological experience of personal power in the workplace, which should give way to enhanced activation of the behavioral approach system and reduced activation of the behavioral inhibition system. In turn, it is expected that psychological empowerment enhances the salience

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of goals and goal pursuit in the workplace and reduces the salience of threats in the workplace. We use this lens to theorize how psychological empowerment predicts ratings of leadership. Specifically, we propose that individuals who experience psychological empowerment will be more inclined to rate their leader as behaving in a manner that facilitates their personal goal pursuit. Moreover, we expect that they will be less inclined to rate their leader as behaving in a manner that is threatening to their personal well-being. Taking into consideration that individual characteristics can influence both perceptions of leader behavior and actual leader treatment of individuals (Wang et al., 2018; Lang et al., 2011), we suggest the approach-inhibition theory of power offers an account for how leadership ratings may be influenced by employee perceptions, as well as employee behaviors (which in turn, may evoke particular behavioral responses from leaders).

The constructs of empowering leadership and abusive supervision have been identified to represent a spectrum of behaviors that facilitate employee goal pursuit and are threatening to employee well-being, respectively. Therefore, we extend our theorizing to these leadership variables.

Psychological Empowerment and Ratings of Empowering Leadership

While different aspects of the leadership process have been associated with psychological empowerment, including transformational leadership (Avolio, Zhu, Koh, & Bhatia, 2004; Dust, Resick, & Mawritz, 2014) and leader-member exchange (Liden, Wayne, & Sparrowe, 2000; Chen, Kanfer, Kirkman, Allen, & Rosen, 2007), empowering leadership behaviors are specifically tailored to induce a sense of meaning, competence, self-determination, and impact in direct reports (Ahearne, Mathieu, & Rapp, 2005; Kirkman & Rosen, 1999). In turn, a significant association between empowering leadership and employee psychological empowerment has been

replicated across several recent studies (Zhang, & Bartol, 2010; Chen, Sharma, Edinger, Shapiro, & Farh, 2011; Li, Chiaburu, & Kirkman, 2014). A recent meta-analysis on empowering leadership shows that this form of leadership accounts for 41% of the variance in individual psychological empowerment above and beyond other forms of positive leadership including transformational leadership and leader-member exchanges (Lee et al., 2018).

Empowering leadership can be seen as a leadership style that encourages taking on self-directed work activities (Kearney, Shemla, van Knippenberg, & Scholz, 2019). It has been conceptualized as a set of behaviors that allow employees to pursue internally driven goals and initiatives in order to enhance motivation. Such behaviors include enhancing the meaningfulness of work, expressing confidence in employee competence, providing autonomy from bureaucratic constraints, and fostering participative decision-making (Zhang & Bartol, 2010; Ahearne et al., 2005; Kirkman & Rosen, 1999). Existing research provides evidence that empowering leadership successfully predicts psychological empowerment (Lee et al., 2018; Kim, Beehr, & Prewett, 2018) as well as a variety of more distal behaviors that are associated with employee empowerment and related psychological processes such as creativity (Zhang & Bartol, 2010), job performance and proactivity (Ahearne et al., 2010; Martin, Liao, & Campbell, 2013), and team performance (Chen et al., 2011; Srivastava, Bartol, & Locke, 2012). One recent study conversely demonstrated that employees' proactive personality predicted their supervisor's empowering leadership behaviors by allowing the supervisor to have affect-based trust for their direct report (Han, Harold, & Cheong, 2019). However, this research utilized a cross-sectional, rather than cross-lagged longitudinal approach to explore this topic, which draws into question the directionality of the main effect.

As previously noted, our application of the approach-inhibition theory of power, allows for both perceptual and behavioral pathways by which psychological empowerment may impact ratings of leadership. Regarding the perceptual pathway, it is expected that empowered individuals will be more likely to attend to features of their work environment that are conducive to goal pursuit and in turn will take action to pursue their goals (Keltner, 2003, Anderson & Brion, 2014; Guinote, 2017). Hence, empowered individuals may be more inclined to perceive their supervisor as engaging in empowering leadership behaviors. Moreover, empowered individuals, by engaging in more goal-oriented behaviors, may display enhanced job performance (Guinote, 2017; Maynard et al., 2014; Seibert et al. 2011). Supervisors, in turn, may be more inclined to reward these employees by supporting their initiatives (Han et al., 2019; Li, Fay, Frese, Harms, & Gao, 2014), prompting more actual empowering leadership behaviors.

Hypopthesis1a. There will be a positive time-lagged effect of psychological empowerment on ratings of empowering leadership behaviors.

Moreover, we anticipate that the effect of psychological empowerment on ratings of empowering leadership will be mediated by positive affect. In this case, the experience of positive affect in the workplace is conceptualized as an indicator of activation of the behavioral approach system; individuals with a more regularly activated behavioral approach system, should be more inclined to experience positive affect at work (Keltner et al., 2003; Langner & Keltner, 2008; Anderson & Berdahl, 2002, Elliot & Thrash, 2002). A benefit of using positive affect as an indicator in this instance, is that it can serve non-cognitive measure of BAS that has little risk conflating with the cognitions that comprise psychological empowerment.

Hypothesis 1b. Positive affect will meditate the time-lagged effect of psychological empowerment on ratings of empowering leadership behaviors.

Psychological Empowerment and Ratings of Abusive Supervision

Abusive supervision is the subjective perception that one's supervisor engages in "hostile verbal and nonverbal behavior" (Tepper, 2000, p.178). Abusive supervision can be conceptualized as a threatening element of the work environment, as it is associated with a wide variety of negative psychological and behavioral outcomes for employees (Tepper, Simon, & Park, 2017). Findings across two recent meta-analyses corroborate that abusive supervision is associated with psychological outcomes such as reduced organizational commitment and job satisfaction, and increased emotional exhaustion and depression, as well behavioral outcomes such as reduced task performance and OCBs, and increased interpersonal, organizational, and supervisor-directed deviance (Mackey, Frieder, Brees, & Martinko, 2015; Zhang & Liao, 2015).

A growing number of studies in the abusive supervision literature take into consideration the role of followers in the abusive supervision process. Research has demonstrated that abusive supervisors are likely to target employees that they perceive to be poor performers (Liang, Lian, Brown, Ferris, Hanig, & Keeping, 2016). Further, across two articles using cross-lagged panel design studies, it has been shown employee deviance and supervisor-direct avoidance can serve to instigate abusive supervision (Lian et al., 2014; Simon et al., 2015). Moreover, it is an emerging trend in the abusive supervision literature that ratings of abusive supervision may be dependent on the individual characteristics of employees (Tepper et al., 2017). Across several studies it has been demonstrated that employee characteristics such as hostile attribution style, sense of entitlement, negative affect, and trait anger predict ratings of abusive supervision (Martinko, Harvey, Douglas, & Sikora, 2011; Harvey, Harris, Gillis, & Martinko, 2014; Brees, Martinko, & Harvey, 2016; Mackey, Brees, McAllister, Zorn, Martinko, & Harvey, 2018). The Big Five personality traits have also been shown to differentially predict ratings of abusive

supervision (Brees, Mackey, Martinko, & Harvey, 2014; Wang et al. 2018). However, other research employing a cross-lagged panel design found that employee ratings of their own physical health were in fact predicated by abusive supervision, rather than the reverse, and that this effect was mediated by employee rumination (Liang et al., 2018).

Building on the approach-inhibition theory of power, we suggest that through reduced activation of the behavioral inhibition system (Keltner et al., 2003), empowered employees should be less attentive to threats in their work environment and less likely to engage in withdrawal behaviors that may instigate abusive supervision, such as supervisor-director avoidance (Simon et al., 2015), absenteeism, and work disengagement. In either case, psychological empowerment is expected to predict lower ratings of abusive supervision.

Hypopthesis2a. There will be a negative time-lagged effect of psychological empowerment on ratings of abusive supervision behaviors.

It follows that the effect of psychological empowerment on ratings of abusive supervision is expected to be mediated by negative affect, which in the present study serves as an indicator of activation of the behavioral inhibition system. Empowered individuals are posited to have reduced activation of the behavioral inhibition system and should therefore be less inclined to experience negative affect at work (Keltner et al., 2003; Langner & Keltner, 2008; Anderson & Berdahl, 2002; Elliot & Thrash, 2002).

Hypothesis 2b. Negative affect will meditate the time-lagged effect of psychological empowerment on ratings of abusive supervision behaviors.

Method

Participants and Procedures

Use of a cross-lagged panel design is appropriate to address the proposed hypotheses, as it allows for an analysis of how psychological empowerment impacts ratings of leadership variables, while controlling for possible reciprocal relations, and testing for possible mediating mechanisms (Finkel, 1995; Little et al., 2007, Cole & Maxwell, 2003). The study design involved the administration of questionnaires across 3 time-lags over a 9-month period, with 3-month intervals between the time-lags. Each time-lag was administered over 2 separate survey waves, with the first survey wave being administered at the beginning of the month, followed by a second survey wave, roughly one week later. Leadership questionnaires (empowering leadership, abusive supervision) were provided in the first wave, while individual characteristics (psychological empowerment, positive and negative affect) were provided in the second wave. This approach was taken in order to minimize common method variance within time-lags (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

605 North American participants we're invited to participate in the study through The Amazon Mechanical Turk, a prominent online labor pool that has been validated as an appropriate resource for research in the social sciences (Paolacci & Chandler, 2014), having been pre-screened to work full-time at their primary occupation and to have regular interactions with co-workers. 471 participants completed the initial survey. Further, 379 participants completed entire first time-lag (Time 1; consisting of 2 survey waves), which comprised the final sample for the study. Though 40% of the final sample completed all subsequent surveys (4 survey waves, across 2 time-lags; Time 2 and Time 3), we retained all participants and utilized maximum likelihood estimation to accommodate the missing data (Muthén & Muthén, 1998-2017). Further,

13.5% of the final sample changed supervisors or jobs during the study, at which point their subsequent data was no longer included in the analyses. As a further precaution, we reanalyzed the data with these individuals removed from the sample entirely (n = 328) and found analogous results (see Appendix F). Hence the data reported here reflects the final sample of 379 participants. Participants were 52% female, with a mean age of 35.2 years (SD = 9.8), a mean organizational tenure of 5.3 years (SD = 5.3 years), and a mean tenure with their present supervisor of 3.0 years (SD = 3.5 years).

Measures[5]

For each questionnaire, participants were asked to respond to items based on their experiences over the preceding 3 months.

Empowering Leadership. We used Ahearne and colleagues' (2005) 12-item measure of empowering leadership. The scale consists of four dimensions that relate to different aspects of the construct including enhancing the meaningfulness of work, expressing confidence in employee competence, providing autonomy from bureaucratic constraints, and fostering participative decision-making. Each dimension consists of three items and, participants rate their agreement with each item on a 7-point scale (from 1 = *strongly disagree,* to 7 = *strongly agree*). Example items include "my manager makes many decisions together with me" and "my manager believes I can handle demanding tasks."

Abusive supervision. Abusive supervision was measured using the 15-item scale published by Tepper (2000). Participants responded on a 5-point scale *(1 = I cannot remember him/her ever using this behavior with me; 5 = He/she uses this behavior very often with me)* to

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[5] See Appendix E for complete measure items, instructions, and response scales.

items that refer to their supervisor's behavior over past 3 months such as; "my supervisor ridicules me" and "my supervisor puts me down in front of others."

Psychological Empowerment. To measure psychological empowerment, we employed Spreitzer's (1995) 12-item measure. The measure has four dimensions that correspond to the four cognitions related to intrinsic task motivation identified by Thomas and Velthouse (2000). Hence, the measure includes the dimensions of meaning, self-determination, competence and impact. Each dimension consists of three items and participants rate their agreement with each item on a 7-point scale (from 1 = *strongly disagree,* to 7 = *strongly agree*). Example items include "I have significant autonomy in determining how I do my job" and "I am self-assured about my capabilities to perform my work activities."

Positive and Negative Affect. Positive and negative affect were measured with the Positive Affect Negative Affect Schedule (PANAS) published by Watson, Clark, and Tellegen (1988). PANAS contains two 10-item subscales for positive affect and negative affect, respectively. Participants responded on a 5-point scale *(1 = Very slightly or not at all; 5 = Extremely*) to items that refer to the feelings they have experienced at work over past 3 months such as; "interested", "excited", and "enthusiastic" for positive affect and "upset", "scared", and "irritable" for negative affect.

Results

Descriptive statistics, reliabilities, and zero-order correlations for all study variables can be found in Table 3. The cross-lagged panel data was analyzed using structural equation modeling (Little et al., 2007; Cole & Maxwell, 2003) in Mplus Version 7. For the structural equation models, four items parcels were used as indicators for the constructs of psychological empowerment and empowering leadership, corresponding to the four dimensions of these

constructs. Three item parcels were used as indicators for all other constructs including abusive

supervision, positive affect, and negative affect (Liang et al., 2018; Little et al., 2013).

Table 3

Descriptive Statistics, Zero-Order Correlations, and Reliabilities

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. PE-T1	3.81	.70	**.89**														
2. PE-T2	3.92	.70	.79**	**.91**													
3. PE-T3	3.80	.74	.76**	.81**	**.91**												
4. EL-T1	3.75	.75	.52**	.52**	.54**	**.92**											
5. EL-T2	3.86	.73	.61**	.61**	.64**	.69**	**.92**										
6. EL-T3	3.76	.80	.53**	.54**	.63**	.67**	.83**	**.94**									
7. AS-T1	1.50	.68	-.21**	-.20**	-.25**	-.58	-.55**	-.51**	**.94**								
8. AS-T2	1.39	.58	-.34**	-.33**	-.38**	-.47**	-.67**	-.60**	.67**	**.94**							
9. AS-T3	1.46	.67	-.29**	-.29**	-.37**	-.50**	-.65**	-.68**	.66**	.82**	**.95**						
10. PA-T1	3.28	.89	.60**	.57**	.52**	.40**	.45**	.36**	-.11*	-.12	-.03	**.93**					
11. PA-T2	3.39	.91	.56**	.64**	.60**	.35**	.48**	.41**	-.10	-.17*	-.12	.78**	**.94**				
12. PA-T3	3.33	.91	.58**	.61**	.69**	.41**	.52**	.53**	-.13	-.19*	-.18*	.71**	.79**	**.94**			
13. NA-T1	1.44	.54	-.24**	-.31**	-.27**	-.27**	-.35**	-.34**	.37**	.38**	.40**	-.21**	-.30**	-.25**	**.88**		
14. NA-T2	1.49	.55	-.31**	-.37**	-.33**	-.26**	-.40**	-.43**	.34**	.41**	.42**	-.31**	-.35**	-.29**	.67**	**.88**	
25. NA-T3	1.58	.62	-.28**	-.25**	-.33**	-.28**	-.36**	-.48**	.25**	.33**	.49**	-.23**	-.32**	-.35**	.58**	.65**	**.90**

Note. Alpha reliabilities are in bold on the diagonal; PE = psychological empowerment; EL = empowering leadership; AS = abusive supervision. PA = positive affect; NA = negative affect; *p < .05, **p < .01.

Measurement Invariance

Prior to conducting the cross-lagged analyses, measurement invariance of the study variables was examined (Little et al., 2007; Cole & Maxwell, 2003; Vandenberg & Lance, 2000). We examined configural invariance to determine whether the factor structure of all study variables is constant over time by testing a freely estimated confirmatory factor analysis (CFA) model of the five study variables at each of the three time-lags. The model was found to be an acceptable fit to the data ($\chi^2_{[1068]} = 2141.95$, CFI = .92, RMSEA = .05) which confirms the longitudinal factor structure of the study variables and confirms the construct distinctiveness of the five variables. Following the protocol of recent studies employing a cross-lagged panel design (Lang et al., 2011; Maynard et al. 2014; Zablah, Carlson Donovan, Maxham, & Brown, 2016; Liang et al., 2018), we also examined metric invariance by constraining the factor loadings for each of the study variables over time and assessing the change in model fit from the configural invariance model. It has been suggested that changes to the CFI and RMSEA fit indices should be examined to assess metric invariance for sample sizes greater than 300, with recommended cut-off values being: ΔCFI $\leq$ .010 and ΔRMSEA $\leq$ .015 (Chen, 2007; Cheung & Rensvold, 2002). The metric invariance model yielded an acceptable fit to the data ($\chi^2_{[1092]} = 2178.02$, CFI = .91, RMSEA = .05), with changes in fit indices from the configural model being within acceptable parameters (ΔCFI = .001; ΔRMSEA = .001). Configural and metric invariance tests for individual study variables can be found in Table 4.

Table 4

Configural and Metric Invariance

| Variable	Measurement Invariance	χ^2	df	CFI	ΔCFI	RMSEA	ΔRMSEA
Psychological Empowerment	Configural Invariance	46.60	39	.996		.023	
	Metric Invariance	61.19	45	.991	.005	.031	.008
Empowering Leadership	Configural Invariance	84.28	39	.978		.055	
	Metric Invariance	89.11	45	.979	.001	.051	.004
Abusive Supervision	Configural Invariance	45.02	15	.988		.073	
	Metric Invariance	61.38	19	.983	.005	.077	.004
Positive Affect	Configural Invariance	10.40	15	1.00		.000	
	Metric Invariance	12.21	19	1.00	.000	.000	.000
Negative Affect	Configural Invariance	51.97	15	.977		.081	
	Metric Invariance	56.50	19	.977	.000	.072	.009

Note. df = degrees of freedom; CFI = comparative fit index; RMSEA = root-mean-square error approximate.

Structural Models and Tests of Hypotheses

We tested our hypotheses across four cross-lagged models (see Figure 2). Model 1a tested the directionality of the relationship between psychological empowerment and empowering leadership, while Model 1b tested whether this relationship is mediated by positive affect. Model 2a tested directionality of the relationship between psychological empowerment and abusive supervision, while Model 2b tested whether this relationship is mediated by negative affect. For each of the models, we specified temporal stability paths and cross lagged paths (Cole & Maxwell, 2003). For the mediation models (Model 1b and Model 2b) we specified cross-lagged paths from the psychological empowerment at Time t to the affect variables at Time t + 1 and from the affect variables at Time t to the leadership variables at Time t + 1. We also specified the reverse causal direction within these models. For all four cross-lagged models, the temporal stability paths were constrained to be equal across the first time interval (Time 1 to Time 2) and second time interval (Time 2 to Time 3). The same procedure was also used for the cross-lagged paths. In constraining the temporal stability and cross-lagged paths to be equal across the two time intervals, it is assumed: that the causal relationships being analyzed are constant across the two time intervals; and that the cross-sectional variances and covariances for the variables being analyzed are constant at across the two time intervals (Cole & Maxwell, 2003). Also, for all four cross-lagged models: exogenous latent variables were allowed to freely correlate; each construct and the item parcels for that construct from different time-lags were allowed to freely correlate; and disturbances of the constructs were allowed to freely correlate. Standardized path coefficients for all models can be found in Table 5.

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Figure 2. Heuristic model

Model 1a
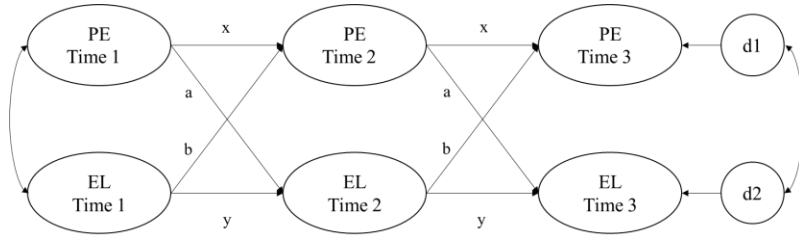
Model 2a
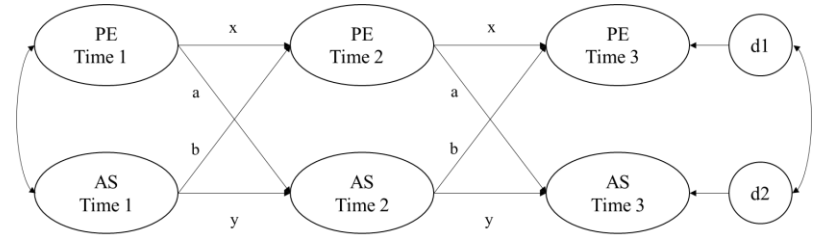
Model 1b
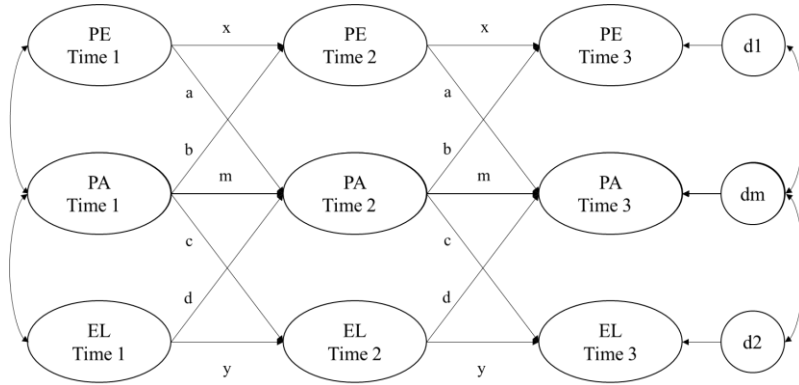
Model 2b
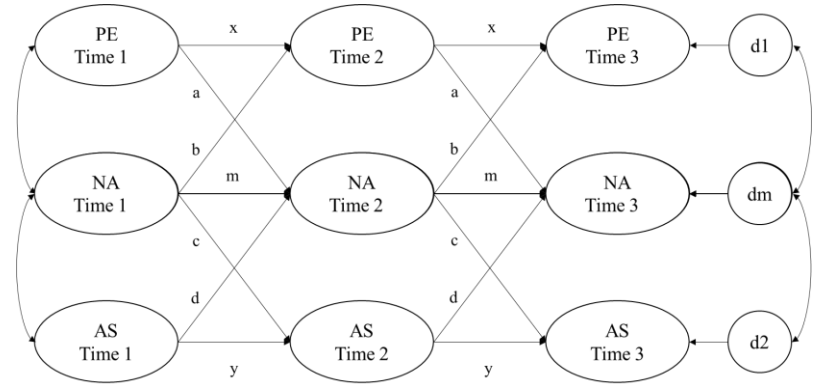
Note. PE = psychological empowerment; EL = empowering leadership; AS = abusive supervision; PA = positive affect; NA = negative affect; d1 = error disturbance term for psychological empowerment at Time 3; d2 = error disturbance term for the leader behavior variables at Time 3; dm = error disturbance term for the mediating affect variables at Time 3

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For Model 1a, the constrained model provides an acceptable fit ($\chi^2_{[222]}$ = 487.63, CFI = .94, RMSEA = .06) and the change in imposing the constraints on paths across time-lags of the freely estimated model was sufficiently small (ΔCFI = .004; ΔRMSEA = .001). In testing Model 1a, we found that psychological empowerment significantly predicted empowering leadership (β = .20, p < 01), we also found that empowering leadership significantly predicted psychological empowerment (β = .19, p < .01), which provides evidence for a bidirectional relationship between these variables. This finding supports Hypothesis 1a that psychological empowerment would positively predict ratings of empowering leadership.

For Model 2a the constrained model provides an acceptable fit ($\chi^2_{[161]}$ = 384.54, CFI = .95, RMSEA = .06) and the change in imposing the constraints on paths across time-lags of the freely estimated model was sufficiently small (ΔCFI = .004; ΔRMSEA = .001). In testing Model 2a, we found that psychological empowerment significantly predicted abusive supervision (β = -.09 p < .05), while the effect of abusive supervision on psychological empowerment (β = -.04, ns) was non-significant. This finding supports Hypothesis 2a that psychological empowerment would positively predict ratings of abusive supervision.

Table 5
Standardized Path Coefficients of All Constrained Models

	Constrained Models	
	Time 1 → Time 2	Time 2 → Time 3
Model 1a		
Temporal stability effects		
Psychological Empowerment → psychological empowerment	.73**	.74**
Empowering Leadership → empowering leadership	.65**	.71**
Cross-lagged effects		
Psychological Empowerment → empowering leadership	.20**	.22**
Empowering Leadership → psychological empowerment	.19**	.18**
Model 1b		
Temporal stability effects		
Psychological Empowerment → psychological empowerment	.78**	.77**
Positive Affect → positive affect	.66**	.67**
Empowering Leadership → empowering leadership	.73**	.80**
Cross-lagged effects		
Psychological Empowerment → positive affect	.25**	.26**
Positive Affect → psychological empowerment	.14*	.14*
Empowering Leadership → positive affect	-.04	-.04
Positive Affect → empowering leadership	.13**	.14**
Model 2a		
Temporal stability effects		
Psychological Empowerment → psychological empowerment	.85**	85**
Abusive Supervision → abusive supervision	.71**	.80**
Cross-lagged effects		
Psychological Empowerment → abusive supervision	-.09*	-.12*
Abusive Supervision → psychological empowerment	-.04	-.03
Model 2b		
Temporal stability effects		
Psychological Empowerment → psychological empowerment	.84**	.84**
Negative Affect → negative affect	.77**	.75**
Abusive Supervision → abusive supervision	.70**	.80**

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Cross-lagged effects		
Psychological Empowerment → negative affect	-.04	-.04
Negative Affect → psychological empowerment	-.04	-.04
Abusive Supervision → negative affect	.03	.02
Negative Affect → abusive supervision	.10**	.12**

Note. Despite imposing constraints on unstandardized path estimates, standardized path coefficients will display slight variation across time intervals; *$p < .05$, **$p < .01$.

Tests of Mediation

For Model 1b the constrained model provides an acceptable fit ($\chi^2_{[449]}$ = 965.12, CFI = .93, RMSEA = .06) and the change in imposing the constraints on paths across time-lags of the freely estimated model was sufficiently small (ΔCFI = .000; ΔRMSEA = .000). In testing Model 1b it was found that psychological empowerment significantly predicted positive affect (β = .25, $p < 01$), it was also found the positive affect significantly predicted empowering leadership (β = .14, $p < .01$). The reverse causation path was also tested. Empowering leadership was not found to significantly predict positive affect (-.04, *ns*), though positive affect was found to significantly predict psychological empowerment (β = .14, $p < .05$).

Bayesian analysis with 20,000 iterations (Muthén, 2010) was used to test the indirect effect of psychological empowerment on empowering leadership, through positive affect. Bayesian approaches for testing indirect effects are somewhat novel to management research, despite emphatic calls for researchers to adopt Bayesian methods (Rosen Simon, Gajendran, Johnson, Lee, & Lin, 2018; Koopman, Howe, Hollenbeck, & Sin, 2015; Kruschke, Aguinis, & Joo, 2012). However, Bayesian tests of indirect effects are advantageous in that they do not impose assumptions of normality on sampling distributions for indirect effect (which are not normally distributed; Yuan & MacKinon, 2009) and have been shown to yield unbiased estimates, with equivalent or higher power than bootstrapping methods (Wang & Preacher, 2015). In support of Hypothesis 2a, it was found that positive affect mediates the effect of psychological empowerment on ratings of empowering leadership (Indirect Effect = .036, 95% CI [.01, .07]).

For Model 2b the constrained model provides an acceptable fit ($\chi^2_{[362]}$ = 793.30, CFI = .93, RMSEA = .06) and the change in imposing the constraints on paths across time-lags of the

freely estimated model was sufficiently small (ΔCFI = .001; ΔRMSEA = .000). In testing Model 2b, psychological empowerment was not found to significantly predict negative affect (β = -.04, *ns*), though negative affect was found to significantly predict ratings of abusive supervision (β = .12, *p* < .01), confirming previous research (Brees, Martinko, & Harvey, 2016). The reverse causation path was also tested. Abusive supervision was not found to significantly predict negative affect (.03, *ns*), nor was negative affect found to significantly predict psychological empowerment (β = -.04, *ns*). These findings do not support Hypothesis 2b.

Discussion

In summary, we found that psychological empowerment significantly predicted ratings of empowering leadership (we also found a significant reciprocal effect of empowering leadership ratings on psychological empowerment), and that this relationship was mediated by positive affect. Further we found that psychological empowerment significantly predicted ratings of abusive supervision, however we did not find evidence what this relationship was mediated by negative affect.

Theoretical Implications

Taken together, we believe that the present findings generally support our application of the approach-inhibition theory of power to the relationship between psychological empowerment and leadership ratings, with certain caveats. Our finding that positive affect mediates the effect of psychological empowerment on ratings of empowering leadership, aligns with the notion that psychological empowerment activates the behavioral approach system. Activation of the behavioral approach system at work could either prompt individuals to perceive their supervisor as being more supportive of their goals, or it could lead to enhanced task performance that elicits

a positive response from their supervisor. Ultimately, either pathway can account for the positive relationship between psychological empowerment and ratings of empowering leadership.

While our hypothesis that psychological empowerment would be negatively related to abusive supervision was also supported, we did not find evidence that this effect is mediated by negative affect, which was used in this study as an indicator of activation of the behavioral inhibition system in the workplace. Given that reduced activation of the BIS system was not found in the present study, it is worthwhile to consider where adjustments may need to be made to our use of the approach-inhibition theory of power. Importantly, the present findings suggest that the experience of psychological empowerment may not fully equate to a sense of personal power, in that individuals do not feel that they are immune from threats in their work environment, even though they may be enabled to engage in goal-oriented behavior. This situation is possibly akin to the experience of unstable power (see Galinsky et al., 2015).

An alternate explanation of the relationship between psychological empowerment and ratings of abusive supervision, which does not rely on reduced activation of the behavioral inhibition system, can be gleaned from Guinote's situated focus theory of power (Guinote, 2007b). The situated focus theory is a cognitive theory of power that is seen to be complementary to approach-inhibition theory (Guinote, 2017). It proposes that power leads individuals to prioritize, and *selectively* attend to and process goal-relevant information. This theory adds nuance to our previous conceptualization of psychological empowerment, by implying that the experience of empowerment may better enable individuals to consciously 'tune out' goal irrelevant information, which may include abusive supervision, if it is not seen as directly hindering goal pursuit.

From the above considerations, it is apparent that integrating psychological empowerment with theories of power, opens up a rich body of knowledge for understanding how experiences of empowerment may impact the manner in which one perceives and interacts with the work environment. This potential area of study was acknowledged in early theorizing on empowerment (Spreitzer, 1996; Thomas & Velthouse, 1990), but has received little attention in subsequent theory and research. In a similar fashion, the present research opens up new directions for the power literature, by offering the organizational construct of psychological empowerment as a means of pursuing novel research on the topic of personal power and on the potentially nuanced implications of applying the approach-inhibition theory of power to organizational settings. Lastly, this research contributes to burgeoning work reconceptualizing the relationship between individual characteristics and ratings of leadership (Wang et al., 2018), by identifying psychological empowerment as an individual characteristic that can impact such ratings, and by providing a theory-driven account of how it does so.

Limitations and Future Directions

The present study is limited in its use of positive and negative affect as the sole indicators of the activation of the BAS and BIS systems, respectively. Future research should seek to confirm the application of the approach-inhibition theory to psychological empowerment, by testing cognitive and behavioral indicators of the activation of these systems. Moreover, the present study does not differentiate whether the relationship between psychological empowerment and ratings of leadership is impacted through perceptual or behavior pathways (Wang et al., 2018; Lang et al., 2011). Future research may consider exploring multi-source ratings of leadership behavior or a vignette methodology (see Wang et al., 2018), to better tease

out the extent to which psychological empowerment impacts solely subjective perceptions of leadership or elicits actual change in leadership behaviors.

Further, additional research is needed to better understand the extent which the situated focus theory of power (Guinote, 2007; 2017) may provide an appropriate alternative explanation for our findings. This theory would suggest that psychological empowerment may enhance individuals' ability to selectively ignore threatening leadership behaviors. Such research could perhaps use a critical incident paradigm (see Liang, Brown, Lian, Hanig, Ferris, & Keeping, 2018) to determine whether psychological empowerment reduces the salience of abusive supervision behaviors that do not directly impact goal pursuit, in comparison to those that do.

Practical Implications

Several practical implications stem from the present research. Principally, given the finding that psychological empowerment can predict ratings of leadership, managers should be mindful of the various organizational factors that drive psychological empowerment other than leadership, such as job design and strategic human resources practices (Seibert et al., 2011). These drivers, depending on how they are managed, can have a variety of impacts on employees' experience of leadership in an organization; they could potentially complement or work against organizational leadership initiatives, or possibly have the ability to buffer against negative leadership arising from a toxic organization culture. Further, managers and organizations should also be conscious that 360 leadership assessments could be reflective of variety individual and situational factors and may in fact of have little relevance to the actual behavior of the leader being assessed.

Finally, we suggest that leaders who are seeking to empower their employees should consider taking an individualized approach to each direct report. For employees who already feel

empowered in their role, the slightest leader behavior that helps to facilitate an initiative may be highly salient. On the other hand, for an employee who struggles to have a sense of control over their work environment, substantial effort by a leader to create an empowering workplace may go unrecognized. In which case, it would be helpful for the leader to get a better sense of the employee's individual context, in order to better tailor future efforts. In essence, it appears that employee empowerment is not a 'one size fits all' process.

Conclusion

Research is beginning to upend the typical narrative that leader influence on employee cognitions, attitudes, and behaviors is a one-way trajectory (Wang et al., 2019; Martinko et al., 2018; Lian et al., 2014, Eby et al., 2015; Simon et al. 2015; Lang et al., 2011). The construct of psychological empowerment has particularly been subjected to this narrative, as it has been positioned as a perennial mediator between leadership variables and employee workplace outcomes (Seibert et al., 2011, Maynard et al., 2012; Lee et al., 2018; Kim et al., 2018). By applying well-established theory from the now mature field of the psychology of power, our work serves as a preliminary step in extending this trend in the leadership literature to the construct of psychological empowerment.

CHAPTER 4: CONCLUDING REMARKS

Current conceptualizations of the functions of leader behaviors typically do not take into consideration the nuances of power within organizations. It is important that the leadership literature move beyond traditional assumptions about leaders wielding power over subordinates through their hierarchical positions, to acknowledging a more dynamic interplay of multiple sources of power within organizations, some of which are accessible to employees in subordinate roles. Across two essays, this work sought to apply current theory and research on the psychology of power, particularly stemming from the approach-inhibition theory of power, to different aspects of the leadership process. Essay 1 drew on the concept of informal power embedded within employees' social networks, to better understand the nature of retaliatory reactions to abusive supervision. Essay 2 placed emphasis on the role of psychological empowerment, and by extension experiences of personal power, on ratings of leadership, demonstrating that feeling powerful may impel employees to view their leaders as being more enabling of their goals and less threatening. Taken together the findings from Essay 1 and Essay 2 serve to link current theories of power and leadership and contribute to a more refined illustration of the power dynamic that employees and leaders experience.

Of note, integrating the theoretical implications of the two essays provides insight into how the aspects of power that employees have access to compare to formal power, in terms of how they are derived and their psychological impacts. As discussed, the power-dependence theory of power (Emerson, 1962) is readily applied to instances of formal power, whereby individuals who occupy higher positions within their organizational hierarchy (which often equate to leadership positions) wield power by controlling organizational resources (e.g. recognition, pay, promotions), which employees are dependent on. In Essay 1, it is argued based

on organizational social network theory and research (Brass, 1984; Brass & Burkhardt, 1993; Kilduff & Brass, 2010; McEvily et al., 2014; Carter et al., 2015) that informal sources of power derived through one's social network (particularly privileged access to information) can also be used to wield power by creating dependence relations. Hence both formal and informal conceptualizations of power imply some degree of control over others, and in turn following the approach-inhibition theory of power, would be expected to give way to increased activation of the behavioral approach system (BAS) and decreased activation of the behavioral inhibition system (BIS; Keltner et al., 2003).

However, the conceptualization of psychological empowerment, presented in Essay 2 as a manifestation of personal power, implies a different understanding of how experiences of power may arise. Specifically, considering personal power from the perspective of power-dependence theory would suggest that the experiences of personal power can arise from a lack of dependence on others, without necessarily having control over others (van Dijke & Poppe, 2006; Lammers et al., 2016). Though Essay 2 predicted that personal power would yield psychological outcomes in line with the approach-inhibition theory of power, the findings support the notion that personal power may lead to enhanced BAS activation, but not necessarily to decreased BIS activation. However, personal power may lead to reduced attention to some threats in the workplace (i.e. abusive supervision) by better enabling employees to 'tune out' goal irrelevant information, in line with the situated focus theory of power (Guinote, 2007b), as opposed to through reduced BIS activation.

In aggregate, Essays 1 and 2 integrate several theories of power and potentially add nuance to conceptualizations of power relevant to leadership processes and the workplace in general. Specifically, this work supports an integration of formal power, informal power, and

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personal power under power-dependence theory and provides insight into the extent to which

theories of the psychological impacts of power are applicable across different contexts.

REFERENCES

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.

Ahearne, M., Mathieu, J., & Rapp, A. (2005). To Empower or Not to Empower Your Sales Force? An Empirical Examination of the Influence of Leadership Empowerment Behavior on Customer Satisfaction and Performance. *Journal of Applied Psychology*, *90*(5), 945–955. https://doi.org/10.1037/0021-9010.90.5.945

Anderson, C., & Berdahl, J. L. (2002). The experience of power: Examining the effects of power on approach and inhibition tendencies. *Journal of Personality and Social Psychology*, *83*(6), 1362–1377. https://doi.org/10.1037/0022-3514.83.6.1362

Anderson, C., & Brion, S. (2014). Perspectives on Power in Organizations. *Annual Review of Organizational Psychology and Organizational Behavior, 1,* 67–97. http://dx.doi.org/10.1146/annurev-orgpsych-031413-091259

Anderson, C., Hildreth, J. A. D., & Howland, L. (2015). Is the desire for status a fundamental human motive? *Psychological Bulletin, 141,* 574–601. http://dx.doi.org/10.1037/a0038781

Anderson, C., John, O. P., & Keltner, D. (2012). The personal sense of power. *Journal of Personality, 80,* 313–344. http://dx.doi.org/10.1111/j.1467-6494.2011.00734.x

Anderson, C., & Kilduff, G. J. (2009). Why do dominant personalities attain influence in face-to-face groups? The competence-signaling effects of trait dominance. *Journal of Personality and Social Psychology, 96,* 491–503. http://dx.doi.org/10.1037/a0014201

Anderson, C., Spataro, S. E., & Flynn, F. J. (2008). Personality and organizational culture as determinants of influence. *Journal of Applied Psychology, 93,* 702–710.

http://dx.doi.org/10.1037/0021-9010.93.3.702

Anderson, C., Srivastava, S., Beer, J. S., Spataro, S. E., & Chatman, J. A. (2006). Knowing your place: Self-perceptions of status in face-to-face groups. *Journal of Personality and Social Psychology, 91,* 1094–1110. http://dx.doi.org/10.1037/0022-3514.91.6.1094

Aquino, K., Tripp, T. M., & Bies, R. J. (2001). How employees respond to personal offense: The effects of blame attribution, victim status, and offender status on revenge and reconciliation in the workplace. *Journal of Applied Psychology, 86,* 52–59. http://dx.doi.org/10.1037/0021-9010.86.1.52

Aquino, K., Tripp, T. M., & Bies, R. J. (2006). Getting even or moving on? Power, procedural justice, and types of offense as predictors of revenge, forgiveness, reconciliation, and avoidance in organizations. *Journal of Applied Psychology, 91,* 653–668. http://dx.doi.org/10.1037/0021-9010.91.3.653

Avolio, B. J., Zhu, W., Koh, W., & Bhatia, P. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *Journal of Organizational Behavior*, *25*(8), 951–968. https://doi.org/10.1002/job.283

Bandura, A. (1986). *Social foundations of Thought and Action: A Social-Cognitive View*. Englewood Cliffs, NJ: Prentice- Hall.

Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology, 85,* 349–360. http://dx.doi.org/10.1037/0021-9010.85.3.349

Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research*

Methods, 8, 274-289. http://dx.doi.org/10.1177/1094428105278021

Bizzi, L. (2013). The Dark Side of Structural Holes: A Multilevel Investigation. *Journal of Management, 39,* 1554–1578. http://dx.doi.org/10.1177/0149206312471385

Borgatti, S. P., Everett, M. G., & Freeman, L. C. (2002). *Ucinet for Windows: Software for social network analysis.* Harvard, MA: Analytic Technologies.

Bowler, W. M., & Brass, D. J. (2006). Relational correlates of interpersonal citizenship behavior: A social network perspective. *Journal of Applied Psychology, 91,* 70–82. http://dx.doi.org/10.1037/0021-9010.91.1.70

Brass, D. J. (1984). Being in the Right Place: A Structural Analysis of Individual Influence in an Organization. *Administrative Science Quarterly, 29,* 518–539. http://dx.doi.org/10.2307/2392937

Brass, D. J., & Burkhardt, M. E. (1993). Potential power and power use: An investigation of structure and behavior. *Academy of Management Journal, 36,* 441–470. http://dx.doi.org/10.2307/256588

Brass, D. J., Butterfield, K. D., & Skaggs, B. C. (1998). Relationships and Unethical Behavior: A Social Network Perspective. *The Academy of Management Review, 23,* 14–31. http://doi.org/10.2307/259097

Brass, D. J., Galaskiewicz, J., Greve, H. R., & Tsai, W. (2004). Taking stock of networks and organizations: A multilevel perspective. *Academy of Management Journal, 47,* 795–817. http://dx.doi.org/10.2307/20159624

Brees, J., Mackey, J., Martinko, M., & Harvey, P. (2014). The Mediating Role of Perceptions of Abusive Supervision in the Relationship Between Personality and Aggression. *Journal of Leadership & Organizational Studies*, *21*(4), 403–413.

https://doi.org/10.1177/1548051813505859

Brees, J., Martinko, M., & Harvey, P. (2016). Abusive supervision: Subordinate personality or

supervisor behavior? *Journal of Managerial Psychology*, *31*(2), 405–419.

https://doi.org/10.1108/JMP-04-2014-0129

Brislin, R. W. 1980. Translation and content analysis of oral and written material. In H. C.

Triandis & J. W. Berry (Eds.), *Handbook of cross-cultural psychology,* vol. 1: 389–444.

Boston, MA: Allyn & Bacon.

Burns, T., & Stalker, G. M. (1961). *The management of innovation*. London: Tavistock.

Burt, R. (1992). *Structural holes: The social structure of competition.* Cambridge, MA: Harvard

University Press.

Burt, R. S. (2004). Structural holes and good ideas. *American Journal of Sociology, 110,* 349–

399. http://dx.doi.org/10.1086/421787

Burt, R., Kilduff, M., & Tasselli, S. (2013). Social network analysis: Foundations and frontiers

of advantage. *Annual Review of Psychology, 64,* 527–547.

http://dx.doi.org/10.1146/annurev-psych-113011-143828

Carter, D. R., DeChurch, L. A., Braun, M. T., & Contractor, N. S. (2015). Social network

approaches to leadership: An integrative conceptual review. *Journal of Applied

Psychology*, *100*(3), 597–622. https://doi.org/10.1037/a0038922

Carlsmith, K. M., Darley, J. M., & Robinson, P. H. (2002). Why do we punish?: Deterrence and

just deserts as motives for punishment. *Journal of Personality and Social Psychology, 83,*

284–299. http://dx.doi.org/10.1037/0022-3514.83.2.284

Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective

responses to impending reward and punishment: The BIS/BAS Scales. *Journal of*

Personality and Social Psychology, *67*(2), 319–333. https://doi.org/10.1037/0022-3514.67.2.319

Chen, F. F. (2007). Sensitivity of Goodness of Fit Indexes to Lack of Measurement Invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, *14*(3), 464–504. https://doi.org/10.1080/10705510701301834

Chen, G., Kirkman, B. L., Kanfer, R., Allen, D., & Rosen, B. (2007). A multilevel study of leadership, empowerment, and performance in teams. *Journal of Applied Psychology*, *92*(2), 331–346. https://doi.org/10.1037/0021-9010.92.2.331

Chen, G., Sharma, P. N., Edinger, S. K., Shapiro, D. L., & Farh, J.-L. (2011). Motivating and demotivating forces in teams: Cross-level influences of empowering leadership and relationship conflict. *Journal of Applied Psychology*, *96*(3), 541–557. https://doi.org/10.1037/a0021886

Cheung, G. W., & Rensvold, R. B. (2002). Evaluating Goodness-of-Fit Indexes for Testing Measurement Invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, *9*(2), 233–255. https://doi.org/10.1207/S15328007SEM0902_5

Cole, D. A., & Maxwell, S. E. (2003). Testing Mediational Models With Longitudinal Data: Questions and Tips in the Use of Structural Equation Modeling. *Journal of Abnormal Psychology*, *112*(4), 558–577. https://doi.org/10.1037/0021-843X.112.4.558

Conger, J. A., & Kanungo, R. N. (1988). The Empowerment Process: Integrating Theory and Practice. *The Academy of Management Review*, *13*(3), 471. https://doi.org/10.2307/258093

Dawson, J. F., & Richter, A. W. (2006). Probing three-way interactions in moderated multiple regression: Development and application of a slope difference test. *Journal of Applied*

Psychology, 91, 917–926. http://dx.doi.org/10.1037/0021-9010.91.4.917

Deci, E. L., & Ryan, R. M. (1985) *Intrinsic Motivation and Self-Determination in Human Behavior*. New York: Plenum.

Dust, S. B., Resick, C. J., & Mawritz, M. B. (2014). Transformational leadership, psychological empowerment, and the moderating role of mechanistic-organic contexts. *Journal of Organizational Behavior, 35,* 413–433. http://dx.doi.org/10.1002/job.1904

Eby, L. T., Butts, M. M., Hoffman, B. J., & Sauer, J. B. (2015). Cross-lagged relations between mentoring received from supervisors and employee OCBs: Disentangling causal direction and identifying boundary conditions. *Journal of Applied Psychology*, *100*(4), 1275–1285. https://doi.org/10.1037/a0038628

Emerson, R. M. (1962). Power-dependence relations. *American Sociological Review, 27,* 31. http://dx.doi.org/10.2307/2089716

Elliot, A. J., & Thrash, T. M. (2002). Approach-avoidance motivation in personality: Approach and avoidance temperaments and goals. *Journal of Personality and Social Psychology*, *82*(5), 804–818. https://doi.org/10.1037/0022-3514.82.5.804

Finkel, S. E. 1995. *Causal analysis with panel data.* Beverly Hills, CA: Sage Publications.

Flynn, F. J., & Wiltermuth, S. S. (2010). Who's with me? False consensus, brokerage, and ethical decision making in organizations. *Academy of Management Journal, 53,* 1074–1089. http://dx.doi.org/10.5465/AMJ.2010.54533202

Folger, R., & Skarlicki, D. P. (2005). Beyond Counterproductive Work Behavior: Moral Emotions and Deontic Retaliation Versus Reconciliation. In S. Fox & P. E. Spector (Eds.), *Counterproductive work behavior: Investigations of actors and targets.* (pp. 83–105). Washington: American Psychological Association.

Freeman, L. C. 1979. Centrality in social networks: Conceptual clarification. *Social Networks, 1,* 215–239. http://dx.doi.org/10.1016/0378-8733(78)90021-7

French, J. R. P., Jr., & Raven, B. (1959). *The bases of social power.* In D. Cartwright (Ed.), *Studies in social power* (p. 150–167). Univer. Michigan.

Foulk, T. A., Lanaj, K., Tu, M.-H., Erez, A., & Archambeau, L. (2018). Heavy Is the Head that Wears the crown: An actor-centric approach to daily psychological power, abusive leader behavior, and perceived incivility. *Academy of Management Journal*, *61*(2), 661–684. https://doi.org/10.5465/amj.2015.1061

Galinsky, A. D., Magee, J. C., Gruenfeld, D. H., Whitson, J. A., & Liljenquist, K. A. (2008). Power reduces the press of the situation: Implications for creativity, conformity, and dissonance. *Journal of Personality and Social Psychology, 95,* 1450–1466. http://dx.doi.org/10.1037/a0012633

Galinsky, A. D., Rucker, D. D., & Magee, J. C. (2015). Power: Past findings, present considerations, and future directions. In M. Mikulincer, P. R. Shaver, J. A. Simpson, & J. F. Dovidio (Eds.), *APA handbook of personality and social psychology, Volume 3: Interpersonal relations.* (pp. 421–460). American Psychological Association. https://doi.org/10.1037/14344-016

Guinote, A. (2007a). Power and Goal Pursuit. *Personality and Social Psychology Bulletin*, *33*(8), 1076–1087. https://doi.org/10.1177/0146167207301011

Guinote, A. (2007b). Behaviour variability and the Situated Focus Theory of Power. *European Review of Social Psychology*, *18*(1), 256–295. https://doi.org/10.1080/10463280701692813

Guinote, A. (2017). How Power Affects People: Activating, Wanting, and Goal Seeking. *Annual*

Review of Psychology, *68*(1), 353–381. https://doi.org/10.1146/annurev-psych-010416-044153

Gray, J. A. (1990). Brain systems that mediate both emotion and cognition. *Cognition & Emotion*, *4*(3), 269–288. https://doi.org/10.1080/02699939008410799

Hackman, J. R., & Oldham, G. R. (1980). *Work Redesign*. Reading, MA: Addison-Wesley.

Han, S., Harold, C. M., & Cheong, M. (2019). Examining why employee proactive personality influences empowering leadership: The roles of cognition- and affect-based trust. *Journal of Occupational and Organizational Psychology*, *92*(2), 352–383. https://doi.org/10.1111/joop.12252

Harvey, P., Harris, K. J., Gillis, W. E., & Martinko, M. J. (2014). Abusive supervision and the entitled employee. *The Leadership Quarterly*, *25*(2), 204–217. https://doi.org/10.1016/j.leaqua.2013.08.001

Ibarra, H. (1993). Network centrality, power, and innovation involvement: Determinants of technical and administrative roles. *Academy of Management Journal, 36,* 471–501. http://dx.doi.org/10.2307/256589

Ibarra, H., & Andrews, S. B. (1993). Power, Social Influence, and Sense Making: Effects of Network Centrality and Proximity on Employee Perceptions. *Administrative Science Quarterly, 38,* 277. http://dx.doi.org/10.2307/2393414

Jones, D. A. (2009). Getting even with one's supervisor and one's organization: relationships among types of injustice, desires for revenge, and counterproductive work behaviors. *Journal of Organizational Behavior, 30,* 525–542. http://dx.doi.org/10.1002/job.5

Jones, T. M. (1991). Ethical decision making by individuals in organizations: An issue-contingent model. *The Academy of Management Review, 16,* 366.

http://dx.doi.org/10.2307/258867

Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology, 83*(1), 17–34.

Kearney, E., Shemla, M., van Knippenberg, D., & Scholz, F. A. (2019). A paradox perspective on the interactive effects of visionary and empowering leadership. *Organizational Behavior and Human Decision Processes*, *155*, 20–30. https://doi.org/10.1016/j.obhdp.2019.01.001

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review, 110,* 265–284. http://dx.doi.org/10.1037/0033-295X.110.2.265

Kilduff, M., & Brass, D. J. (2010). Organizational social network Research: Core ideas and key debates. *The Academy of Management Annals, 4,* 317–357. http://dx.doi.org/10.1080/19416520.2010.494827

Kilduff, G. J., & Galinsky, A. D. (2013). From the ephemeral to the enduring: How approach-oriented mindsets lead to greater status. *Journal of Personality and Social Psychology*, *105*(5), 816–831. https://doi.org/10.1037/a0033667

Kim, M., Beehr, T. A., & Prewett, M. S. (2018). Employee Responses to Empowering Leadership: A Meta-Analysis. *Journal of Leadership & Organizational Studies*, *25*(3), 257–276. https://doi.org/10.1177/1548051817750538

Kirkman, B. L., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. *Academy of Management Journal*, *42*(1), 58–74. https://doi.org/10.2307/256874

Koopman, J., Howe, M., Hollenbeck, J. R., & Sin, H.-P. (2015). Small sample mediation testing:

Misplaced confidence in bootstrapped confidence intervals. *Journal of Applied Psychology*, *100*(1), 194–202. https://doi.org/10.1037/a0036635

Krackhardt, D. (1990). Assessing the political landscape: Structure, cognition, and power in organizations. *Administrative Science Quarterly, 35,* 342. http://dx.doi.org/10.2307/2393394

Krasikova, D. V., Green, S. G., & LeBreton, J. M. (2013). Destructive leadership a theoretical review, integration, and future research agenda. *Journal of Management*, 39, 1308-1338. doi: 10.1177/0149206312471388

Kruschke, J. K., Aguinis, H., & Joo, H. (2012). The Time Has Come: Bayesian Methods for Data Analysis in the Organizational Sciences. *Organizational Research Methods*, *15*(4), 722–752. https://doi.org/10.1177/1094428112457829

Lammers, J., Stoker, J. I., Rink, F., & Galinsky, A. D. (2016). To have control over or to be free from others? The desire for power reflects a need for autonomy. *Personality and Social Psychology Bulletin*, *42*(4), 498–512. https://doi.org/10.1177/0146167216634064

Lang, J., Bliese, P. D., Lang, J. W. B., & Adler, A. B. (2011). Work gets unfair for the depressed: Cross-lagged relations between organizational justice perceptions and depressive symptoms. *Journal of Applied Psychology*, *96*(3), 602–618. https://doi.org/10.1037/a0022463

Langner, C. A., & Keltner, D. (2008). Social power and emotional experience: Actor and partner effects within dyadic interactions. *Journal of Experimental Social Psychology*, *44*(3), 848–856. https://doi.org/10.1016/j.jesp.2007.08.002

Lee, A., Willis, S., & Tian, A. W. (2018). Empowering leadership: A meta-analytic examination of incremental contribution, mediation, and moderation. *Journal of Organizational*

Behavior, *39*(3), 306–325. https://doi.org/10.1002/job.2220

Li, N., Chiaburu, D. S., & Kirkman, B. L. (2017). Cross-Level Influences of Empowering

Leadership on Citizenship Behavior: Organizational Support Climate as a Double-Edged

Sword. *Journal of Management*, *43*(4), 1076–1102.

https://doi.org/10.1177/0149206314546193

Li, W.-D., Fay, D., Frese, M., Harms, P. D., & Gao, X. Y. (2014). Reciprocal relationship

between proactive personality and work characteristics: A latent change score approach.

Journal of Applied Psychology, *99*(5), 948–965. https://doi.org/10.1037/a0036169

Lian, H., Brown, D. J., Ferris, D. L., Liang, L. H., Keeping, L. M., & Morrison, R. (2014).

Abusive supervision and retaliation: A self-control framework. *Academy of Management*

Journal, 57, 116–139. http://dx.doi.org/10.5465/amj.2011.0977

Lian, H., Ferris, D. L., Morrison, R., & Brown, D. J. (2014). Blame it on the supervisor or the

subordinate? Reciprocal relations between abusive supervision and organizational

deviance. *Journal of Applied Psychology, 99,* 651–664.

http://dx.doi.org/10.1037/a0035498

Liang, L. H., Brown, D. J., Lian, H., Hanig, S., Ferris, D. L., & Keeping, L. M. (2018). Righting

a wrong: Retaliation on a voodoo doll symbolizing an abusive supervisor restores justice.

The Leadership Quarterly, *29*(4), 443–456. https://doi.org/10.1016/j.leaqua.2018.01.004

Liang, L. H., Hanig, S., Evans, R., Brown, D. J., & Lian, H. (2018). Why is your boss making

you sick? A longitudinal investigation modeling time-lagged relations between abusive

supervision and employee physical health. *Journal of Organizational Behavior*, *39*(9),

1050–1065. https://doi.org/10.1002/job.2248

Liang, L. H., Lian, H., Brown, D. J., Ferris, D. L., Hanig, S., & Keeping, L. M. (2016). Why Are

Abusive Supervisors Abusive? A Dual-system Self-control Model. *Academy of Management Journal*, *59*(4), 1385–1406. https://doi.org/10.5465/amj.2014.0651

Liden, R. C., Wayne, S. J., & Sparrowe, R. T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes. *Journal of Applied Psychology*, *85*(3), 407–416. https://doi.org/10.1037/0021-9010.85.3.407

Little, T. D., Preacher, K. J., Selig, J. P., & Card, N. A. (2007). New developments in latent variable panel analyses of longitudinal data. *International Journal of Behavioral Development*, *31*(4), 357–365. https://doi.org/10.1177/0165025407077757

Liu, J., Kwan, H. K. Wu, L., & Wu, W. (2010). Abusive supervision and subordinate supervisor-directed deviance: The moderating role of traditional values and the mediating role of revenge cognitions. *Journal of Occupational and Organizational Psychology, 83,* 835–856. http://dx.doi.org/10.1348/096317909X485216

Liu, D., Liao, H., & Loi, R. (2012). The Dark Side of Leadership: A Three-Level Investigation of the Cascading Effect of Abusive Supervision on Employee Creativity. *Academy of Management Journal*, *55*(5), 1187–1212. https://doi.org/10.5465/amj.2010.0400

Mackey, J. D., Brees, J. R., McAllister, C. P., Zorn, M. L., Martinko, M. J., & Harvey, P. (2018). Victim and Culprit? The Effects of Entitlement and Felt Accountability on Perceptions of Abusive Supervision and Perpetration of Workplace Bullying. *Journal of Business Ethics*, *153*(3), 659–673. https://doi.org/10.1007/s10551-016-3348-7

Mackey, J. D., Frieder, R. E., Brees, J. R., & Martinko, M. J. (2015). Abusive Supervision A Meta-Analysis and Empirical Review. *Journal of Management, 34* (S1)*,* 120-137. http://dx.doi.org/10.1177/0149206315573997

Magee, J. C., & Galinsky, A. D. (2008). 8 Social Hierarchy: The Self-Reinforcing Nature of

    Power and Status. *Academy of Management Annals*, *2*(1), 351–398.

    https://doi.org/10.5465/19416520802211628

Marsden, P. V. (1990). Network data and measurement. *Annual Review of Sociology, 16,* 435–

    463. http://dx.doi.org/10.1146/annurev.so.16.080190.002251

Martin, S. L., Liao, H., & Campbell, E. M. (2013). Directive versus empowering leadership: A

    field experiment comparing impacts on task proficiency and proactivity. *Academy of*

    Management Journal, *56*(5), 1372–1395. https://doi.org/10.5465/amj.2011.0113

Martinko, M. J., Harvey, P., Brees, J. R., & Mackey, J. (2013). A review of abusive supervision

    research. *Journal of Organizational Behavior, 34*(S1)*,* S120–S137.

    http://dx.doi.org/10.1002/job.1888

Martinko, M. J., Harvey, P., Sikora, D., & Douglas, S. C. (2011). Perceptions of abusive

    supervision: The role of subordinates' attribution styles. *The Leadership Quarterly*,

    22(4), 751–764. https://doi.org/10.1016/j.leaqua.2011.05.013

Martinko, M. J., Moss, S. E., McAllister, C. P., Mackey, J. D., Harvey, P., & Brees, J. R. (2018).

    An Exploration of the Role of Subordinate Affect in Leader Evaluations. *Journal of*

    Applied Psychology, 103, 738-752.

Martinko, M. J., Randolph-Seng, B., Shen, W., Brees, J. R., Mahoney, K. T., & Kessler, S. R.

    (2018). An Examination of the Influence of Implicit Theories, Attribution Styles, and

    Performance Cues on Questionnaire Measures of Leadership. *Journal of Leadership &*

    Organizational Studies, *25*(1), 116–133. https://doi.org/10.1177/1548051817720384

Mass, J., & Hox, J. J. (2005). Sufficient Sample Sizes for Multilevel Modeling. *Methodology:*

    European Journal of Research Methods for the Behavioral and Social Sciences, 1, 86–

92. http://dx.doi.org/10.1027/1614-2241.1.3.86

Mawritz, M. B., Mayer, D. M., Hoobler, J. M., Wayne, S. J., & Marinova, S. V. (2012). A trickle-down model of abusive supervision. *Personnel Psychology, 65,* 325–357. http://dx.doi.org/10.1111/j.1744-6570.2012.01246.x

Maynard, M. T., Gilson, L. L., & Mathieu, J. E. (2012). Empowerment—Fad or Fab? A Multilevel Review of the Past Two Decades of Research. *Journal of Management*, *38*(4), 1231–1281. https://doi.org/10.1177/0149206312438773

Maynard, M. T., Luciano, M. M., D'Innocenzo, L., Mathieu, J. E., & Dean, M. D. (2014). Modeling time-lagged reciprocal psychological empowerment–performance relationships. *Journal of Applied Psychology*, *99*(6), 1244–1253. https://doi.org/10.1037/a0037623

McGonagle, A. K., Walsh, B. M., Kath, L. M., & Morrow, S. L. (2014). Civility norms, safety climate, and safety outcomes: A preliminary investigation. *Journal of Occupational Health Psychology*, *19*(4), 437–452. https://doi.org/10.1037/a0037110

McEvily, B., Soda, G., & Tortoriello, M. (2014). More Formally: Rediscovering the Missing Link between Formal Organization and Informal Social Structure. *The Academy of Management Annals, 8,* 299–345. http://dx.doi.org/10.1080/19416520.2014.885252

Mehra, A., Kilduff, M., & Brass, D. J. (2001). The social networks of high and low self-monitors: Implications for workplace performance. *Administrative Science Quarterly, 46,* 121–146. http://dx.doi.org/10.2307/2667127

Menon, T., Sim, J., Fu, J. H.-Y., Chiu, C., & Hong, Y. (2010). Blazing the trail versus trailing the group: Culture and perceptions of the leader's position. *Organizational Behavior and Human Decision Processes*, *113*(1), 51–61. https://doi.org/10.1016/j.obhdp.2010.04.001

Mitchell, M. S., & Ambrose, M. L. (2007). Abusive supervision and workplace deviance and the

    moderating effects of negative reciprocity beliefs. *Journal of Applied Psychology, 92,*

    1159–1168. http://dx.doi.org/10.1037/0021-9010.92.4.1159

Mitchell, M. S., & Ambrose, M. L. (2012). Employees' behavioral reactions to supervisor

    aggression: An examination of individual and situational factors. *Journal of Applied*

    Psychology, 97, 1148–1170. http://dx.doi.org/10.1037/a0029452

Miyamoto, Y., & Ji, L.-J. (2011). Power Fosters Context-Independent, Analytic Cognition.

    Personality and Social Psychology Bulletin, *37*(11), 1449–1458.

    https://doi.org/10.1177/0146167211411485

Muthén, L.K. and Muthén, B.O. (1998-2017). *Mplus User's Guide. Eighth Edition.* Los Angeles,

    CA: Muthén & Muthén

Muthen, B. (2010). *Bayesian Analysis in Mplus: A Brief Introduction*.

Oh, J. K., & Farh, C. I. C. (2017). An Emotional Process Theory of How Subordinates Appraise,

    Experience, and Respond to Abusive Supervision Over Time. *Academy of Management*

    Review, *42*(2), 207–232. https://doi.org/10.5465/amr.2014.0347

Oh, H., & Kilduff, M. (2008). The ripple effect of personality on social structure: Self-

    monitoring origins of network brokerage. *Journal of Applied Psychology, 93,* 1155–1164.

    http://dx.doi.org/10.1037/0021-9010.93.5.1155

Overbeck, J. R., & Park, B. (2001). When power does not corrupt: Superior individuation

    processes among powerful perceivers. *Journal of Personality and Social Psychology*,

    81(4), 549–565. https://doi.org/10.1037/0022-3514.81.4.549

Paolacci, G., & Chandler, J. (2014). Inside the Turk: Understanding Mechanical Turk as a

    Participant Pool. *Current Directions in Psychological Science*, *23*(3), 184–188.

https://doi.org/10.1177/0963721414531598

Park, H., Hoobler, J. M., Wu, J., Liden, R. C., Hu, J., & Wilson, M. S. (2017). Abusive

supervision and employee deviance: A multifoci justice perspective *Journal of*

Business Ethics, 158, 1113–1131. http://doi.org/10.1007/s10551-017-3749-2

Pitesa, M., & Thau, S. (2013a). Compliant Sinners, Obstinate Saints: How power and self-focus

determine the effectiveness of social influences in ethical decision making. *Academy of*

Management Journal, 56, 635–658. http://dx.doi.org/10.5465/amj.2011.0891

Pitesa, M., & Thau, S. (2013b). Masters of the universe: How power and accountability influence

self-serving decisions under moral hazard. *Journal of Applied Psychology, 98,* 550–558.

http://dx.doi.org/10.1037/a0031697

Podolny, J. M. (2001). Networks as the Pipes and Prisms of the Market. *American Journal of*

Sociology, 107, 33–60. http://dx.doi.org/10.1086/323038

Podolny, J. M., & Baron, J. N. (1997). Resources and Relationships: Social Networks and

Mobility in the Workplace. *American Sociological Review*, *62*(5), 673.

https://doi.org/10.2307/2657354

Podsakoff, P. M., MacKenzie, S. B., Lee, J. -Y., & Podsakoff, N. P. (2003). Common method

biases in behavioral research: A critical review of the literature and recommended

remedies. *Journal of Applied Psychology, 88,* 879–903. http://dx.doi.org/10.1037/0021-

9010.88.5.879

Restubog, S. L. D., Scott, K. L., & Zagenczyk, T. J. (2011). When distress hits home: The role of

contextual factors and psychological distress in predicting employees' responses to

abusive supervision. *Journal of Applied Psychology, 96,* 713–729.

http://dx.doi.org/10.1037/a0021593

Reynolds, S. J., & Ceranic, T. L. (2007). The effects of moral judgment and moral identity on

    moral behavior: An empirical examination of the moral individual. *Journal of Applied*

    Psychology, *92*(6), 1610–1624. https://doi.org/10.1037/0021-9010.92.6.1610

Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A

    multidimensional scaling study. *Academy of Management Journal, 38,* 555–572.

    http://dx.doi.org/10.2307/256693

Robinson, S. L., & Greenberg, J. (1998). Employees behaving badly: Dimensions, determinants,

    and dilemmas in the study of workplace deviance. In C. L. Cooper & D. M. Rousseau

    (Eds), *Trends in organizational behavior, vol. 5*: 1-30. New York: Wiley.

Rosen, C. C., Simon, L. S., Gajendran, R. S., Johnson, R. E., Lee, H. W., & Lin, S.-H. (2019).

    Boxed in by your inbox: Implications of daily e-mail demands for managers' leadership

    behaviors. *Journal of Applied Psychology*, *104*(1), 19–33.

    https://doi.org/10.1037/apl0000343

Rupp, D. E., Shao, R., Jones, K. S., & Liao, H. (2014). The utility of a multifoci approach to the

    study of organizational justice: A meta-analytic investigation into the consideration of

    normative rules, moral accountability, bandwidth-fidelity, and social exchange.

    Organizational Behavior and Human Decision Processes, 123, 159–185.

    http://dx.doi.org/10.1016/j.obhdp.2013.10.011

Salk, J.E. and Brannen, M.Y. (2000) National culture, networks, and individual influence in a

    multinational management team. *Academy of Management Journal, 43,* 191-202.

    http://dx.doi.org/10.2307/1556376

Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of

    psychological and team empowerment in organizations: A meta-analytic review. *Journal*

of Applied Psychology, *96*(5), 981–1003. https://doi.org/10.1037/a0022676

Simon, L. S., Hurst, C., Kelley, K., & Judge, T. A. (2015). Understanding cycles of abuse: A multimotive approach. *Journal of Applied Psychology*, *100*(6), 1798–1810. https://doi.org/10.1037/apl0000031

Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology, 82,* 434–443. http://dx.doi.org/10.1037/0021-9010.82.3.434

Skarlicki, D. P., Folger, R., & Tesluk, P. (1999). Personality as a moderator in the relationship between fairness and retaliation. *Academy of Management Journal, 42,* 100–108. http://dx.doi.org/10.2307/256877

Sligte, D. J., de Dreu, C. K. W., & Nijstad, B. A. (2011). Power, stability, and creativity. *Journal of Experimental Social Psychology, 47,* 891-897. http://dx.doi.org/10.1016/j.jesp.2011.03.009

Sonenshein, S. (2007). The role of construction, intuition, and justification in responding to ethical issues at work: The sensemaking-intuition model. *Academy of Management Review, 32,* 1022–1040. http://dx.doi.org/10.5465/AMR.2007.26585677

Sparrowe, R. T., & Liden, R. C. (2005). Two routes to influence: Integrating leader-member exchange and social network perspectives. *Administrative Science Quarterly, 50,* 505–535. http://dx.doi.org/10.2189/asqu.50.4.505

Sparrowe, R. T., Liden, R. C., Wayne, S. J., & Kraimer, M. L. (2001). Social networks and the performance of individuals and groups. *Academy of Management Journal, 44,* 316–325. http://dx.doi.org/10.2307/3069458

Spreitzer, G. (1995). Psychological Empowerment in the Workplace: Dimensions, Measurement,

and Validation. *Academy of Management Journal, 38,* 1442-1465.

Spreitzer, G. (1996). Social Structural Characteristics of Psychological Empowerment. *Academy of Management Journal, 389,* 483-504.

Srivastava, A., Bartol, K. M., & Locke, E. A. (2006). Empowering Leadership in Management Teams: Effects on Knowledge Sharing, Efficacy, And Performance. *Academy of Management Journal*, *49*(6), 1239–1251. https://doi.org/10.5465/amj.2006.23478718

Tabachnick, B. G., & Fidell, L. S. (2001). Cleaning up your act: Screening data prior to analysis. *Using multivariate statistics*, *5*, 61-116.

Tasselli, S., Kilduff, M., & Menges, J. I. (2015). The microfoundations of organizational social networks: A review and an agenda for future research. *Journal of Management, 41,* 1361-1387. http://dx.doi.org/10.1177/0149206315573996

Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal, 43,* 178-190. http://dx.doi.org/10.2307/1556375

Tepper, B. J. (2007). Abusive supervision in work organization: Review, synthesis, and research agenda. *Journal of Management, 33,* 261-289. http://dx.doi.org/10.1177/0149206307300812

Tepper, Bennett J, Simon, L., & Park, H. M. (2017). Abusive Supervision. *Annual Review of Organizational Psychology & Organizational Behavior, 4,* 123-152.

Tepper, B. J., Carr, J. C., Breaux, D. M., Geider, S., Hu, C., & Hua, W. (2009). Abusive supervision, intentions to quit, and employees' workplace deviance: A power-dependence analysis. *Organizational Behavior and Human Decision Processes, 109,* 156–167. http://dx.doi.org/10.1016/j.obhdp.2009.03.004

Thau, S., & Mitchell, M. S. (2010). Self-gain or self-regulation impairment? Tests of competing

explanations of the supervisor abuse and employee deviance relationship through
perceptions of distributive justice. *Journal of Applied Psychology, 95,* 1009–1031.
http://dx.doi.org/10.1037/a0020540

Thomas, K. W., & Velthouse, B. A. (1990). Cognitive Elements of Empowerment: An
"Interpretive" Model of Intrinsic Task Motivation. *The Academy of Management Review*,
15(4), 666. https://doi.org/10.2307/258687

Torelli, C. J., & Shavitt, S. (2010). Culture and concepts of power. *Journal of Personality and
Social Psychology*, *99*(4), 703–723. https://doi.org/10.1037/a0019973

Tost, L. P. (2015). When, why, and how do powerholders "feel the power"? Examining the links
between structural and psychological power and reviving the connection between power
and responsibility. *Research in Organizational Behavior*, 35, 29 –56. http://dx.doi.org/10
.1016/j.riob.2015.10.004

Tost, L. P., & Johnson, H. H. (2019). The prosocial side of power: How structural power over
subordinates can promote social responsibility. *Organizational Behavior and Human
Decision Processes*, *152*, 25–46. https://doi.org/10.1016/j.obhdp.2019.04.004

van Dijke, M., & Poppe, M. (2006). Striving for personal power as a basis for social power
dynamics. *European Journal of Social Psychology*, *36*(4), 537–556.
https://doi.org/10.1002/ejsp.351

Vandenberg, R. J., & Lance, C. E. (2000). A Review and Synthesis of the Measurement
Invariance Literature: Suggestions, Practices, and Recommendations for Organizational
Research. *Organizational Research Methods*, *3*(1), 4–70.
https://doi.org/10.1177/109442810031002

Venkataramani, V., Richter, A. W., & Clarke, R. (2014). Creative benefits from well-connected

leaders: Leader social network ties as facilitators of employee radical creativity. *Journal of Applied Psychology, 99,* 966–975. http://dx.doi.org/10.1037/a0037088

Venkataramani, V., & Tangirala, S. (2010). When and why do central employees speak up? An examination of mediating and moderating variables. *Journal of Applied Psychology, 95,* 582–591. http://dx.doi.org/10.1037/a0018315

Venkataramani, V., Zhou, L., Wang, M., Liao, H., & Shi, J. (2016). Social networks and employee voice: The influence of team members' and team leaders' social network positions on employee voice. *Organizational Behavior and Human Decision Processes, 132,* 37–48. http://dx.doi.org/10.1016/j.obhdp.2015.12.001

Vogel, R. M., Mitchell, M. S., Tepper, B. J., Restubog, S. L. D., Hu, C., Hua, W., & Huang, J-C. (2015). A cross-cultural examination of subordinates' perceptions of and reactions to abusive supervision. *Journal of Organizational Behavior, 36,* 720-745. http://dx.doi.org/10.1002/job.1984

Wang, G., Van Iddekinge, C. H., Zhang, L., & Bishoff, J. (2019). Meta-analytic and primary investigations of the role of followers in ratings of leadership behavior in organizations. *Journal of Applied Psychology*, *104*(1), 70–106. https://doi.org/10.1037/apl0000345

Wang, L. (Peggy), & Preacher, K. J. (2015). Moderated Mediation Analysis Using Bayesian Methods. *Structural Equation Modeling: A Multidisciplinary Journal*, *22*(2), 249–263. https://doi.org/10.1080/10705511.2014.935256

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*(6), 1063–1070. https://doi.org/10.1037/0022-3514.54.6.1063

Wee, E. X. M., Liao, H., Liu, D., & Liu, J. (2017). Moving from abuse to reconciliation: A

power-dependence perspective on when and how a follower can break the spiral of abuse. *Academy of Management Journal*, *60*, 2352–2380. http://doi.org/10.5465/amj.2015.0866

White, D. R., & Borgatti, S. P. (1994). Betweenness centrality measures for directed graphs. *Social Networks, 16,* 335–346. http://dx.doi.org/10.1016/0378-8733(94)90015-9

Wiltermuth, S. S., & Flynn, F. J. (2013). Power, moral clarity, and punishment in the workplace. *Academy of Management Journal, 56,* 1002–1023. http://dx.doi.org/10.5465/amj.2010.0960

Xu, Q., Zhang, G. & Chan, A. (2019). *Journal of Business Ethics, 157*, 829-843. https://doi.org/10.1007/s10551-017-3691-3

Yam, K. C., Chen, X.-P., & Reynolds, S. J. (2014). Ego depletion and its paradoxical effects on ethical decision making. *Organizational Behavior and Human Decision Processes, 124,* 204–214. http://dx.doi.org/10.1016/j.obhdp.2014.03.008

Yuan, Y., & MacKinnon, D. P. (2009). Bayesian mediation analysis. *Psychological Methods*, *14*(4), 301–322. https://doi.org/10.1037/a0016972

Yu, L., & Duffy, M. K. (2020). The whiplash effect: The (moderating) role of attributed motives in emotional and behavioral reactions to abusive supervision. *Journal of Applied Psychology*. https://doi.org/10.1037/apl0000810

Yukl G. (1998). *Leadership in Organizations* (4th ed.). Englewood Cliffs, NJ: Prentice Hall.

Zablah, A. R., Carlson, B. D., Donavan, D. T., Maxham, J. G., & Brown, T. J. (2016). A cross-lagged test of the association between customer satisfaction and employee job satisfaction in a relational context. *Journal of Applied Psychology*, *101*(5), 743–755. https://doi.org/10.1037/apl0000079

Zhang, X., & Bartol, K. M. (2010). Linking Empowering Leadership and Employee Creativity:

The Influence of Psychological Empowerment, Intrinsic Motivation, and Creative Process Engagement. *Academy of Management Journal*, *53*, 107-128.

Zhang, Y., & Liao, Z. (2015). Consequences of abusive supervision: a meta-analytic review. Asia Pacific Journal of Management, 32, 959-987. http://dx.doi.org/10.1007/s10490-015-9425-0

Zhong, C., McGee, J. C., Maddux, W. W., & Galinsky, A. D. (2006). Power, culture, and action: Considerations in the expression and enactment of power in East Asian and Western societies. In E. A. Mannix, M. A. Neale, & Y. Chen (Eds.). *Research on managing in teams and groups* (Vol. 9, pp. 53–73). Greenwich, CT: Elsevier Science.

APPENDIX A: Measure Items, Instructions, and Response Scales (Essay 1)

Abusive Supervision

Instructions: Please indicate, using the following scale, the frequency that your supervisor has engaged in each of the following behaviours over the past 12 months.

My supervisor…

	I can't remember him/her ever using this behavior with me	He/she very seldom uses this behavior with me	He/she occasionally uses this behavior with me	He/she uses this behavior moderately often with me	He/she uses this behavior very often with me
Ridicules me.	1	2	3	4	5
Tells me my thoughts or feelings are stupid.	1	2	3	4	5
Gives me the silent treatment.	1	2	3	4	5
Puts me down in front of others.	1	2	3	4	5
Invades my privacy.	1	2	3	4	5
Reminds me of my past mistakes and failures.	1	2	3	4	5
Doesn't give me credit for jobs requiring a lot of effort.	1	2	3	4	5
Blames me to save himself/herself embarrassment.	1	2	3	4	5
Breaks promises he/she makes.	1	2	3	4	5
Expresses anger at me when he/she is mad for another reason.	1	2	3	4	5
Makes negative comments about me to others.	1	2	3	4	5
Is rude to me.	1	2	3	4	5
Does not allow me to interact with my coworkers.	1	2	3	4	5
Tells me I'm incompetent.	1	2	3	4	5
Lies to me.	1	2	3	4	5

Supervisor-Directed Deviance

Instructions: Please indicate, using the following scale, how often you have engaged in each of the following behaviors in past 12 months at your job.

	Never						Daily
Made fun of my supervisor at work.	1	2	3	4	5	6	7
Played a mean prank on my supervisor.	1	2	3	4	5	6	7
Made an obscene comment or gesture toward my supervisor.	1	2	3	4	5	6	7
Gossiped about my supervisor.	1	2	3	4	5	6	7
Acted rudely toward my supervisor.	1	2	3	4	5	6	7
Made an ethnic, religious, or racial remark against my supervisor.	1	2	3	4	5	6	7
Publicly embarrassed my supervisor.	1	2	3	4	5	6	7
Swore at my supervisor.	1	2	3	4	5	6	7
Refused to talk to my supervisor.	1	2	3	4	5	6	7
Said something hurtful to my supervisor at work.	1	2	3	4	5	6	7

Network Centrality

Instructions: Please indicate the nature of your interaction with each of your coworkers listed below.

	Need his/her advice	Need his/her support	Prefer to avoid
Coworker A	1	2	3
Coworker B	1	2	3
Coworker C	1	2	3
Coworker D	1	2	3

Influence

Instructions: For each of your coworkers listed below, please indicate the extent to which you agree with the following statement:

"This person has influence in the division."

	Strongly Disagree				Strongly Agree
Coworker A	1	2	3	4	5
Coworker B	1	2	3	4	5
Coworker C	1	2	3	4	5
Coworker D	1	2	3	4	5

APPENDIX B: Result of Regression Analyses Predicting Supervisor-Directed Deviance with Full Sample (Essay 1)

Appendix B

Result of Regression Analyses Predicting Supervisor-Directed Deviance with Full Sample
(n = 271)

Variable	Step 1	Step 2	Step 3	Step4 4
Intercept	1.03^{**} (.04)	1.01^{**} (.06)	1.03^{**} (.07)	1.01^{**} (.07)
Sample 1	.04 (.05)	.04 (.10)	.01 (.11)	.03 (.11)
Sample 2	.04 (.04)	.08 (.07)	.06 (.07)	.09 (.07)
Sample 3	.01 (.04)	.02 (.10)	.01 (.10)	.04 (.10)
Sample 4	.01 (.05)	.06 (.05)	.05 (.05)	.07 (.05)
Sample 5	.05 (.05)	.05 (.11)	.03 (.11)	.07 (.11)
Abusive Supervision		$.13^{**}$ (.16)	$.16^{**}$ (.04)	$.17^{**}$ (.04)
Centrality		-.01 (.01)	.00 (.03)	.01 (.03)
Influence		.12 (.16)	.15 (.16)	.15 (.16)
Abusive Supervision x Centrality			.07 (.09)	.06 (.09)
Abusive Supervision x Influence			.18 (.12)	$.28^{**}$ (.12)
Centrality x Influence			.05 (.08)	.16 (.09)
Abusive Supervision x Centrality x Influence				$.70^{**}$ (.29)
ΔR^2		.01	$.06^{**}$	.01	$.02^{**}$

Note. n = 271. One participant with unusable data (i.e., with missing independent variable) was omitted from the full sample. This model does not control for Managerial Position since 6 participants have missing data for this variable. Values are unstandardized regression coefficients; standard error estimates are in parentheses. All lower-order terms used in interactions were centered prior to analysis. Sample 6 is represented by a code of 0 on all sample variables.
$^*p < .05$
$^{**}p < .01$
Two tailed tests.

APPENDIX C: Result of Regression Analyses Predicting Supervisor-Directed Deviance without Controlling for Managerial Position (Essay 1)

Appendix C

Result of Regression Analyses Predicting Supervisor-Directed Deviance with Multivariate without Controlling for Managerial Position (n = 265)

Variable	Step 1	Step 2	Step 3	Step 4
Intercept	1.03^{**} (.01)	1.02^{**} (.02)	1.07^{**} (.02)	1.05^{**} (.02)
Sample 1	.04 (.02)	.03 (.04)	-.04 (.04)	-.03 (.04)
Sample 2	.04 (.02)	$.06^{*}$ (.03)	.02 (.03)	.03 (.03)
Sample 3	-.02 (.02)	-.03 (.04)	-.06 (.04)	-.04 (.04)
Sample 4	-.02 (.02)	.01 (.02)	-.00 (.02)	.01 (.02)
Sample 5	-.02 (.02)	-.03 (.04)	-.06 (.04)	-.04 (.04)
Abusive Supervision		$.08^{**}$ (.02)	$.13^{**}$ (.02)	$.14^{**}$ (.02)
Centrality		.00 (.00)	.02 (.01)	.02 (.01)
Influence		.09 (.06)	$.14^{*}$ (.06)	.14 (.06)
Abusive Supervision x Centrality			$.15^{**}$ (.03)	.14 (.03)
Abusive Supervision x Influence			$.32^{**}$ (.05)	$.34^{**}$ (.05)
Centrality x Influence			.05 (.03)	.11 (.03)
Abusive Supervision x Centrality x Influence				$.35^{**}$ (.11)
ΔR^2		$.09^{**}$	$.09^{**}$	$.15^{**}$	$.03^{**}$

Note. $n = 265$. Multivariate outliers have been removed from the present sample. The 6 participants with missing data for the Managerial Position variable remain in the present sample, despite being excluded from the final sample ($n = 259$). Values are unstandardized regression coefficients; standard error estimates are in parentheses. All lower-order terms used in interactions were centered prior to analysis. Sample 6 is represented by a code of 0 on all sample variables.
$^{*}p < .05$
$^{**}p < .01$
Two tailed tests.

APPENDIX D: Result of Regression Analyses Predicting Supervisor-Directed Deviance with Dummy-Coded Sample Variables Excluded from the Model (Essay 1)

Appendix D

Result of Regression Analyses Predicting Supervisor-Directed Deviance with Dummy-Coded Sample Variables Excluded from the Model (n = 259)

Variable	Model
Intercept	1.04^{**} (.01)
Managerial Position	.01 (.01)
Abusive Supervision	$.13^{**}$ (.02)
Centrality	.02 (.01)
Influence	$.06^{**}$ (.02)
Abusive Supervision x Centrality	$.14^{**}$ (.03)
Abusive Supervision x Influence	$.37^{**}$ (.05)
Centrality x Influence	$.11^{**}$ (.03)
Abusive Supervision x Centrality x Influence	$.35^{**}$ (.11)
Adjusted R^2	$.27^{**}$

Note. n = 259. Values are unstandardized regression coefficients; standard error estimates are in parentheses. All lower-order terms used in interactions were centered prior to analysis. Sample 6 is represented by a code of 0 on all sample variables.
$^*p < .05$, $^{**}p < .01$, two tailed tests.

APPENDIX E: Measure Items, Instructions, and Response Scales (Essay 2)

Psychological Empowerment

Instructions: Please rate the extent to which you agree or disagree with each of the following statements. Please base your ratings on your experiences at your job over the past 3 months.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
The work I do is very important to me.	1	2	3	4	5
My work activities are personally meaningful to me.	1	2	3	4	5
The work I do is meaningful to me.	1	2	3	4	5
I am confident about my ability to do my job.	1	2	3	4	5
I am self-assured about my capabilities to perform my work activities.	1	2	3	4	5
I have mastered the skills necessary for my job.	1	2	3	4	5
I have significant autonomy in determining how I do my job.	1	2	3	4	5
I can decide on my own how to go about doing my work.	1	2	3	4	5
I have considerable opportunity for independence and freedom in how I do my job.	1	2	3	4	5
My impact on what happens in my department is large.	1	2	3	4	5
I have a great deal of control over what happens in my department.	1	2	3	4	5
I have significant influence over what happens in my department.	1	2	3	4	5

Positive and Negative Affect Schedule (PANAS)

Instructions: This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer, using the following scale. Please indicate to what extent you have felt this way over the past 3 months.

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
Interested	1	2	3	4	5
Distressed	1	2	3	4	5
Excited	1	2	3	4	5
Upset	1	2	3	4	5
Strong	1	2	3	4	5
Guilty	1	2	3	4	5
Hostile	1	2	3	4	5
Enthusiastic	1	2	3	4	5
Proud	1	2	3	4	5
Irritable	1	2	3	4	5
Alert	1	2	3	4	5
Inspired	1	2	3	4	5
Nervous	1	2	3	4	5
Determined	1	2	3	4	5
Attentive	1	2	3	4	5
Jittery	1	2	3	4	5
Active	1	2	3	4	5
Afraid	1	2	3	4	5

Empowering Leadership

Instructions: Please rate the extent to which you agree or disagree with each of the following statements. Please base your ratings on your experiences with your supervisor over the past 3 months.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
My manager helps me understand how my objectives and goals relate to that of the company.	1	2	3	4	5
My manager helps me understand the importance of my work to the overall effectiveness of the company	1	2	3	4	5
My manager helps me understand how my job fits into the bigger picture.	1	2	3	4	5
My manager makes many decisions together with me.	1	2	3	4	5
My manager often consults me on strategic decisions	1	2	3	4	5
My manager solicits my opinion on decisions that may affect me.	1	2	3	4	5
My manager believes that I can handle demanding tasks.	1	2	3	4	5
My manager believes in my ability to improve even when I make mistakes.	1	2	3	4	5
My manager expresses confidence in my ability to perform at a high level.	1	2	3	4	5
My manager allows me to do my job my way.	1	2	3	4	5
My manager makes it more efficient for me to do my job by keeping the rules and regulations simple.	1	2	3	4	5
My manager allows me to make important decisions quickly to satisfy customer needs.	1	2	3	4	5

Abusive Supervision

Instructions: Please indicate, using the following scale, the frequency that your supervisor has engaged in each of the following behaviours over the past 3 months.

My supervisor…

	I can't remember him/her ever using this behavior with me	He/she very seldom uses this behavior with me	He/she occasionally uses this behavior with me	He/she uses this behavior moderately often with me	He/she uses this behavior very often with me
Ridicules me.	1	2	3	4	5
Tells me my thoughts or feelings are stupid.	1	2	3	4	5
Gives me the silent treatment.	1	2	3	4	5
Puts me down in front of others.	1	2	3	4	5
Invades my privacy.	1	2	3	4	5
Reminds me of my past mistakes and failures.	1	2	3	4	5
Doesn't give me credit for jobs requiring a lot of effort.	1	2	3	4	5
Blames me to save himself/herself embarrassment.	1	2	3	4	5
Breaks promises he/she makes.	1	2	3	4	5
Expresses anger at me when he/she is mad for another reason.	1	2	3	4	5
Makes negative comments about me to others.	1	2	3	4	5
Is rude to me.	1	2	3	4	5
Does not allow me to interact with my coworkers.	1	2	3	4	5
Tells me I'm incompetent.	1	2	3	4	5
Lies to me.	1	2	3	4	5

APPENDIX F: Standardized Path Coefficients with Participants that Changed Supervisors or Jobs During the Study Removed from the Sample (Essay 2)

Appendix F

Standardized Path Coefficients of All Constrained Models with Participants that Changed Supervisors or Jobs During the Study Removed from the Sample (n = 328)

	Constrained Models	
	Time 1 → Time 2	Time 2 → Time 3
Model 1a		
Temporal stability effects		
Psychological Empowerment → psychological empowerment	.71**	.73**
Empowering Leadership → empowering leadership	.65**	.71**
Cross-lagged effects		
Psychological Empowerment → empowering leadership	.20**	.22**
Empowering Leadership → psychological empowerment	.20**	.20**
Model 1b		
Temporal stability effects		
Psychological Empowerment → psychological empowerment	.79**	.77**
Positive Affect → positive affect	.64**	.66**
Empowering Leadership → empowering leadership	.74**	.81**
Cross-lagged effects		
Psychological Empowerment → positive affect	.26**	.27**
Positive Affect → psychological empowerment	.13*	.12*
Empowering Leadership → positive affect	-.04	-.04
Positive Affect → empowering leadership	.12**	.13**
Model 2a		
Temporal stability effects		
Psychological Empowerment → psychological empowerment	.84**	84**
Abusive Supervision → abusive supervision	.73**	.81**
Cross-lagged effects		
Psychological Empowerment → abusive supervision	-.07*	-.09*
Abusive Supervision → psychological empowerment	-.04	-.04

Model 2b

Temporal stability effects		
Psychological Empowerment → psychological empowerment	.84**	.84**
Negative Affect → negative affect	.76**	.74**
Abusive Supervision → abusive supervision	.71**	.79**
Cross-lagged effects		
Psychological Empowerment → negative affect	-.04	-.04
Negative Affect → psychological empowerment	-.03	-.03
Abusive Supervision → negative affect	.03	.02
Negative Affect → abusive supervision	.12**	.15**

Note. $n = 328$. Despite imposing constraints on unstandardized path estimates, standardized path coefficients will display slight variation across time intervals; $^{*}p < .05$, $^{**}p < .01$

In line with the study findings, positive affect was found to mediate the effect of psychological empowerment on ratings of empowering leadership (Indirect Effect = .033, 95% CI [.01, .07]), when participants that changed supervisors or jobs during the study were removed from the sample.