RUNNING HEAD: The hidden costs of abusive supervision

THE INFLUENCE OF ABUSIVE SUPERVISORS ON FOLLOWERS’
ORGANIZATIONAL CITIZENSHIP BEHAVIORS: THE HIDDEN COSTS OF ABUSIVE
SUPERVISION

Alannah E. Rafferty
School of Organization & Management
Australian School of Business
The University of New South Wales
a.rafferty@unsw.edu.au
Ph: +61 7 9385 9710

Simon Lloyd D. Restubog
Research School of Business & School of Management, Marketing, & International Business
The Australian National University

Alannah Rafferty is a Senior Lecturer in Organizational Behavior at the Australian School of Business at The University of New South Wales. Her research interests include organizational change, stress and coping, and constructive and destructive leadership. Her research has been published in journals such as the Journal of Applied Psychology, Journal of Management, Leadership Quarterly, and Work & Stress. She has extensive experience in applied research to inform leadership development and strategic change in organizations.

Simon Lloyd D. Restubog is an Associate Professor in Management at The Australian National University. His research focuses on antecedents and maintenance of psychological contracts and prediction of workplace deviance. His research has been published in journals such as the Journal of Applied Psychology, Journal of Management, Journal of Management Studies, Journal of Occupational Health Psychology, Journal of Vocational Behavior, Journal of Research in Personality, and Journal of Cross Cultural Psychology.

AUTHORS’ NOTE: This study was supported by an Australian Research Council Grant DP0984209 awarded to the first and second authors. We thank Patrick Garcia for his research assistance.
THE INFLUENCE OF ABUSIVE SUPERVISORS ON FOLLOWERS’ ORGANIZATIONAL CITIZENSHIP BEHAVIORS: THE HIDDEN COSTS OF ABUSIVE SUPERVISION

ABSTRACT

In this paper, we identified an expanded array of mediators including interactional justice, organizational-based self-esteem, and the meaning of work, which link abusive supervision to two organizational citizenship behaviors – prosocial silence and prosocial voice. Data from 175 employee-supervisor dyads in the Philippines were collected. Results of structural equation modeling revealed that abusive supervision was significantly negatively associated with followers’ perceptions of interactional justice, which in turn was negatively associated with supervisor-rated prosocial voice behaviors. In addition, abusive supervision was negatively associated with followers’ beliefs that they are engaged in meaningful work and with organizational-based self-esteem, which in turn negatively influenced self-rated prosocial silence. The discussion focuses on the implications of the hidden costs of abusive supervision in organizations.

KEYWORDS: Abusive supervision, organizational citizenship behaviors, interactional justice, meaning of work, organizational-based self-esteem
THE INFLUENCE OF ABUSIVE SUPERVISORS ON FOLLOWERS’ ORGANIZATIONAL CITIZENSHIP BEHAVIORS: THE HIDDEN COSTS OF ABUSIVE SUPERVISION

To date, a considerable body of research has examined the influence of constructive leadership on employees’ attitudes, performance, and well-being (e.g., Arnold, Turner, Barling, Kelloway, & McKee, 2007; Gilbreath & Benson, 2004). Increasingly, however, theorists have acknowledged the importance of destructive leadership in the workplace (e.g., Aasland, Skogstad, Nielsen, & Einarsen, 2010; Hoel, Glaso, Hetland, Cooper, & Einarsen, 2010). A destructive leader has been characterized as “an individual who repeatedly violates the legitimate interest of an organization by undermining or sabotaging the company’s goals, tasks, resources, and the motivation, well-being, or effectiveness of followers” (Einarsen, Aasland, & Skogstad, 2007: 208). One type of leader behavior that fits within this broad behavioral domain is abusive supervision, which Tepper (2000: 178) defined as “sustained hostile verbal and nonverbal behaviors from supervisors, excluding physical contact”. Abusive supervision is associated with a range of negative outcomes including poor employee attitudes towards their job and organization, greater work-family conflict and psychological distress, and stronger employee intentions to leave the organization compared to employees who do not work for an abusive supervisor (e.g., Tepper, 2000; Tepper, Duffy, Henle, & Lambert, 2006).

Despite growing interest in abusive supervision, Tepper (2007: 262) characterized our knowledge of this construct as “fragmented and poorly integrated”. We broaden our knowledge regarding the underlying mechanisms by which abusive supervisors influence two organizational citizenship behaviors (OCBs) – prosocial silence and prosocial voice. Organ (1988: 4) defined OCB as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system and that in the aggregate promotes the effective functioning of the organization”. Using social exchange theory (Blau, 1964) and power dependence theory (Emerson, 1962), we
identify withdrawal of OCBs as an important way by which subordinates restore the balance of their exchange relationship with their leader when they are treated poorly. We focus on prosocial silence and prosocial voice behaviors. These OCBs capture two distinctly different proactive behaviors, although both are motivated by employee altruism and a desire to cooperate (Van Dyne, Ang, & Botero, 2003). Prosocial silence occurs when “employees withhold work-related ideas, information, or opinions with the goal of benefiting other people or the organization” (Van Dyne et al., 2003: 1368). For example, employees may withhold proprietary information from competitors with the intention of benefiting the organization. In contrast, prosocial voice behavior emphasizes expression of change-oriented comments with a motive to improve rather than merely criticize a situation (LePine & Van Dyne, 2001; Van Dyne et al., 2003).

Two empirical studies (Aryee, Chen, Sun, & Debrah, 2007; Zellars, Tepper, & Duffy, 2002) have examined relationships among abusive supervision and OCBs. While these studies represent an important addition to our knowledge, they have a number of limitations that we address. First, authors have focused on employees’ perceptions of injustice as the key mediating variable when studying relationships among abusive supervision and OCBs. We argue, however, that abusive supervision will also negatively influence employee beliefs that their organization values their contributions (organizational-based self-esteem) and the meaning that individuals attach to their work. As a result, we examine multiple mediators of relationships among abusive supervision and OCBs. A second limitation of existing research is that global OCB measures have been studied. However, the use of such measures obscures important differences between the individual behaviors that comprise the global OCB construct. Specifically, theorists have argued that individual organizational citizenship behaviors are likely to be driven by different processes (Van Dyne, Kamdar, & Joireman, 2008). Despite this, research has not yet examined relationships among abusive supervision and individual organizational citizenship behaviors. We address this limitation in this study.
In summary, our study makes a number of contributions to the literature. First, we identify an expanded array of mediators that link abusive supervision to two OCBs and we explore the processes by which abusive supervision influences prosocial voice and prosocial silence. Second, we examine the implications of abusive supervision on two individual OCBs – prosocial silence and prosocial voice – which have not previously been considered as outcomes of abusive supervision. The proposed theoretical model is presented in Figure 1.

Theoretical Background

Social exchange theory is one of the most influential conceptual paradigms for understanding workplace behavior (Cropanzano & Mitchell, 2005; Molm, 1991). This theory suggests that different types of exchange relationships have important implications for employee behavior and, ultimately, organizational effectiveness (Cropanzano & Mitchell, 2005; Song, Tsui, & Law, 2009). Economic exchange relationships involve highly constrained, short-term exchanges focused on economic or material resources. In contrast, social exchange relationships develop over time as individuals begin to trust the other party to the exchange, invest in the relationship, and take a long-term view of exchanges (Blau, 1964). Such relationships are based on the norm of reciprocity that dictates that when one person does another a favor, there will be a future return although exactly when this will occur and in what form this return will occur is often unclear. The pattern of reciprocity over time determines the perceived balance of exchanges (Gouldner, 1960). Simply put, the treatment that people receive from others is returned in kind and this applies to both positive and negative behaviors (Molm, 1988).

Social exchange theory suggests that hostile treatment from one’s supervisor is likely to result in unfavorable behavior or responses from the subordinate due to the negative reciprocity norm
The hidden costs of abusive supervision

(Tepper et al., 2009; Thau, Bennett, Mitchell, & Marrs, 2009). Ashforth (1997: 129) suggested that employees are likely to “react (directly or indirectly) against perceived causes of frustration to restore the situation to what was expected”. However, power dependence theory (Emerson, 1962) suggests that in relationships characterized by a power differential – such as that between a leader and their subordinate – the less powerful individual is constrained in terms of what they can do in response to unfavorable treatment (Zellars et al., 2002). Application of these theories suggests that one way in which subordinates are likely to reciprocate negative treatment from their supervisor, so as to minimize or eliminate negative consequences, is by withdrawing organizational citizenship behaviors, which are voluntary and cannot be enforced. Below, we examine the organizational citizenship behavior construct in more detail.

Organizational Citizenship Behaviors

A competitive business environment necessitates considerable employee involvement and discretionary effort. As such, OCBs are becoming more and more important for organizations to maintain their competitive edge (Detert & Burris, 2007). In a meta-analytic study, Podsakoff and his colleagues (2009) reported that OCBs were related to a number of individual and organization outcomes such as manager’s ratings of job performance, employee turnover intentions, turnover, productivity, efficiency, reduced costs, and customer satisfaction. We focus on two OCBs that have been identified as manifestations of proactive behavior in the workplace. We describe these behaviors below.

Prosocial employee silence. To date, a number of researchers have emphasized that employee silence can have a number of costs. For example, employee silence can reduce the likelihood of successful change and development and also reduces the quality of decisions made in the organization by restricting the type and amount of information available to decision makers (Morrison & Milliken, 2000). In contrast, other authors have argued that some forms of employee silence can be strategic and proactive (Van Dyne et al., 2003). Specifically, prosocial employee
silence can have positive organizational consequences because an employee acts to protect confidential organizational information by withholding it from others. One challenge when considering silence is that while the suppression of communication may be fairly common at work, it is an internal and private state of employees and is therefore very difficult to observe or measure (Tangirala & Rangaraj, 2008). As such, when assessing employee silence, Tangirala and Ramanujam used a self-report measure. They argued that, by definition, this construct is a non-behavior and is therefore ambiguous for observers to interpret. We adopt this approach and use a self-report measure of prosocial employee silence.

**Prosocial employee voice.** Detert and Burris (2007) argued that employee comments and suggestions that are intended to improve organizational functioning are critical to organizational performance. In modern organizations, decision making can no longer be dependent on a few select individuals at the top of a firm. We examine prosocial employee voice behavior which involves expressing ideas, information, and opinions so as to improve the organization (Van Dyne et al., 2003). Examples of voice behaviors include employees’ expressing work-related ideas, information, or opinions. This type of behavior is change-oriented and represents a constructive challenge to the status quo and requires employees to take a risk for the firm (Van Dyne et al., 2003). Below, we examine evidence supporting direct relationships among abusive supervision and the two OCBs.

**Direct Relationships: Abusive Supervision and Prosocial Silence and Voice**

Thau et al. (2009) argued that poor treatment by one’s supervisor violates the social exchange between a leader and a follower, and as a result, abused subordinates may seek to restore a balance to the exchange by withholding OCBs. We argue that there will be a direct negative relationship between abusive supervision and prosocial voice behaviors. While researchers have not yet examined this issue, a number of empirical studies have examined relationships between leader-subordinate relationship quality and voice behavior (e.g., Ashford, Rothbard, Piderit, & Dutton, 1998; Detert & Burris, 2007; Van Dyne et al., 2008). Leader-member exchange quality may provide
an indication of the quality of the social exchange relationship that exists between a leader and their subordinate such that a higher-quality LMX relationship reflects a higher quality social exchange relationship. In two field studies, Van Dyne et al. reported that employees were more likely to engage in voice behaviors directed towards their supervisor and their organization when they had a high-quality leader-member exchange relationship. Building on this evidence, we argue that when employees work with an abusive supervisor and, therefore have a low quality exchange relationship, they will reciprocate negative treatment by reducing voice behaviors.

To date, researchers have not examined the relationship between abusive supervision and prosocial silence. However, we argue that subordinates may choose to reciprocate negative treatment from their supervisor by reducing voluntary contributions such as prosocial silence. In this way, an individual can restore the balance of their exchange relationship while also ensuring that they reduce the likelihood that their supervisor will retaliate. Thus, we propose that:

*Hypothesis 1: Abusive supervision will display a direct negative relationship with prosocial silence and prosocial voice behaviors.*

**Mediators: Interactional justice, Meaning of work, and OBSE**

Two studies have examined relationships among abusive supervision and OCBs (Aryee et al., 2007; Zellars et al., 2002), and have identified justice as mediating relationships. Aryee et al. found that abused subordinates reported reduced levels of affective commitment and OCBs directed towards individuals and OCBs directed towards the organization. These relationships were fully mediated by interactional injustice. Similarly, in a study of 373 National Guard members and their military supervisors, Zellars et al. reported that procedural justice mediated the relationships among abusive supervision and OCBs. This mediation effect was stronger when subordinates defined OCBs as extra-role behavior, providing evidence to support the argument that subordinates do withdraw voluntary behaviors when treated badly. Below, we develop hypotheses concerning the
relationships among abusive supervision, interactional justice, the meaning of work, and organizational-based self-esteem and prosocial silence and prosocial voice.

**Interactional Justice.** Interactional justice assesses the quality of the interpersonal treatment people receive from their supervisor when procedures are implemented (Bies & Moag, 1986; Cohen-Charash & Spector, 2001). Fairness theory (Folger & Cropanzano, 2001) suggests that when employees receive negative social cues from their supervisor (e.g., being yelled or humiliated at in front of others), they engage in sense-making processes. If the treatment they receive violates moral and social norms (e.g., “my supervisor should not have humiliated me in front of others”), then interactional injustice is likely to be perceived. Empirical research also indicates that employees who work with an abusive supervisor report a reduced sense of interactional justice compared to individuals who do not work with an abusive supervisor (Aryee et al., 2007). Thus, we propose that:

*Hypothesis 2a: There will be a significant negative relationship between abusive supervision and interactional justice.*

We also propose that interactional justice will mediate relationships among abusive supervision and prosocial silence and prosocial voice. We argue that a decrease in interpersonal fairness will result in employee efforts to restore the balance of their exchange with their leader by reducing the extent to which they protect the organization’s confidential information while also withholding ideas and opinions. Empirical research indicates that organizational justice is a robust predictor of OCBs (Fassina, Jones, & Uggerslev, 2008; Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Based on these theoretical arguments and empirical evidence, we argue that:

*Hypothesis 2b: Subordinates’ perceptions of interactional justice will mediate relationships among abusive supervision and prosocial silence and voice behaviors.*

**The Meaning of Work.** Individuals actively seek meaning in their work and the experience of job meaningfulness has been linked to a sense of engagement at work (May, Gilson, & Harter, 2004). Hackman and Oldham’s (1974) job characteristics model defines a meaningful job as one
that has five characteristics including autonomy, skill variety, task identity, task significance, and feedback from the job. Meaningless work has been associated with a sense of apathy and detachment from one’s work (Thomas & Velthouse, 1990). In such situations, individuals are unable to immerse themselves in their work, which reduces motivation and attachment to the organization (May et al., 2004). Leaders have a unique opportunity to create meaningful work for followers by modifying their perceptions of subordinates’ job characteristics (Kelloway & Day, 2005). Recently, Kelloway and Day (2005) discussed the theoretical negative influence of destructive leadership on followers’ perceptions of job meaningfulness. However, as yet, researchers have not examined the empirical associations between destructive leader behaviors and the meaning of work.

We argue that abusive supervision will reduce subordinates’ beliefs that they have a meaningful and important job by negatively influencing employees’ perceptions of their job’s characteristics. For example, when an abusive supervisor engages in activities such as reminding an individual of their past mistakes and failures or does not give an individual credit for a job that requires a lot of effort, then they are likely to feel a reduced sense of task significance. When an abusive supervisor does not allow followers to interact with their colleagues, they are likely to feel that their job provides less feedback than if they are free to interact with their workmates. Thus, we argue that abusive supervision will negatively influence subordinates’ perceptions that they are engaged in meaningful work. In addition, social information processing theory (Salancik & Pfeffer, 1978) suggests that individuals’ immediate social environment – including coworkers and leaders - provide cues that are used by people to construct and interpret events. When leaders treat subordinates negatively and act in a hostile fashion, they are conveying a lack of respect for the employee and for the work that they do in the organization. As a result, it is proposed that:

Hypothesis 3a: There will be a significant negative relationship between abusive supervision and the employees’ beliefs that they are engaged in meaningful work.
In addition, we also propose that employees’ perceptions of the meaning of their work will mediate relationships among abusive supervision and prosocial silence and prosocial voice. In particular, when employees experience hostile treatment from their supervision this will reduce their sense of job meaningfulness. One way in which subordinates may respond to a reduction in the meaning of their work is to rebalance the exchange with their supervisor by investing less in this relationship by withdrawing organizational citizenship behaviors. Thus, we propose that:

**Hypothesis 3b:** The meaning of work will mediate relationships among abusive supervision and prosocial silence and prosocial voice behavior.

**Organizational-Based Self-Esteem.** Self-esteem refers to an individual’s overall self-evaluation of his or her competencies (Rosenberg, 1965). Organizational settings have important implications for individuals’ self-esteem. Pierce, Gardner, Cummings, and Dunham (1989) introduced the construct of organization-based self-esteem (OBSE), which was defined as the extent to which “an individual believes him/herself to be capable, significant, and worthy as an organizational member” (Pierce & Gardner, 2004: 593). Individuals who have strong OBSE have a sense of having satisfied their needs through their organizational membership (Pierce et al., 1989). Experiences at work play an important role in determining OBSE (Pierce & Gardner, 2004; Pierce et al., 1989). For example, Pierce et al. (1989) argued that to the extent that others think an individual is able and competent, and communicate this through their words and behaviors over time, an individual will come to hold similar beliefs. When messages are internalized, they become part of the person’s conceptualization and evaluation of the self. We argue that abusive supervision will be negatively associated with OBSE as being treated in a hostile fashion by one’s direct leader will reduce employees’ sense that they are capable, significant and worthy. Thus, it is proposed that:

**Hypothesis 4a:** There will be a significant negative relationship between abusive supervision and OBSE.
We argue that OBSE will mediate relationships among abusive supervision and prosocial silence and prosocial voice. Specifically, research suggests that individuals match their leader’s characteristics with their implicit ideas about what a “leader” looks like (e.g., Den Hartog et al., 1999). This process plays a key role in subordinates’ attributions of leadership (e.g., Epitropaki & Martin, 2004). Den Hartog et al. identified a number of universally endorsed attributes of “outstanding” leadership including being encouraging, building confidence, and actively seeking to motivate followers. We argue that when leaders act in an abusive fashion and fail to build confidence in their subordinates, then they will be perceived as failing to fulfill key role responsibilities. One way in which subordinates may respond to this leadership failure is to rebalance the exchange with their supervisor by withdrawing organizational citizenship behaviors. Thus, we propose that:

Hypothesis 4b: OBSE will mediate the relationships among abusive supervision and prosocial silence and prosocial voice behavior.

METHOD

Participants and Procedure

We collected data from full-time employees and their leaders at a large bank head office in the Philippines. Both employees and their immediate supervisors completed questionnaires containing identity codes that allowed us to match employees’ responses with those of their supervisors. All participants were assured of anonymity and confidentiality. Surveys were sent directly to the research team using a reply postage envelope. We surveyed 311 full-time employees and received 191 surveys (60.8% response rate). Surveys were then disseminated to the supervisors of these employees and we received 177 completed surveys. This resulted in matched data for 175 employee-supervisor dyads. For our employee sample, gender was relatively evenly distributed (82 males, and 89 females, 4 people did not report their gender). Average age was 32.9 years (SD = 7.75). Approximately 91% of the participants had been working in the organization for at least a
year (8.6% tenure of less than a year, 4% did not report their organizational tenure). In terms of employee status, 80.6% were permanent, 7.4% probationary, and 10.9% were casually employed (5.7% did not report their employment status).

Fifty-two percent of supervisors were females. Approximately 93% of leaders were older than 26 years old. Seventy-six percent of supervisors had been working in the organization for at least six years. Supervisors had known and supervised their respective subordinates for an average of 3.99 years ($SD = 2.81$ years). Each supervisor rated between 1 to 4 subordinates ($M = 1.39$, $SD = .55$).

One-way analysis of variance (Bliese, 2000) was conducted to determine whether there were variations in perceptions of abusive supervision and supervisor ratings of voice behaviors across work groups. Supervisor ratings of voice behaviors, $F(124, 48) = .69$, n.s. and self-reported perceptions of abusive supervision, $F(125, 49)=.65$, n.s. did not differ significantly across groups. Given these findings, we analyzed data at the individual level of analysis (Bliese, 2000).

**Measures**

An English-based questionnaire was used as the vast majority of the population in the Philippines speaks the language (Bernardo, 2004). Unless otherwise specified, all variables were measured using a 7-point Likert-type scale (1 = strongly disagree to 7 = strongly agree) using established scales. Items were coded such that the higher the score, the greater the response to the focal construct. Employees provided ratings of abusive supervision, the meaning of work, interactional justice, organizational-based self-esteem, prosocial silence, and their tenure in the organization. Supervisors provided ratings of their employee’s prosocial voice behavior.

**Abusive supervision.** Employees completed the 15-item scale developed by Tepper (2000). An example item is, “My immediate supervisor puts me down in front of others”. Cronbach’s alpha was .98.
The meaning of work. This construct was assessed with 10 items (Idaszak & Drasgow, 1987). An example item was “My job is very significant and important in the broader scheme of things”. This scale had a Cronbach alpha of .95.

Interactional justice. We measured interactional justice using six items (Moorman, 1991). An example item includes, “When decisions are made about my job, my immediate supervisor explains decisions very clearly”. This scale had a Cronbach alpha of .97.

Organization-based self-esteem. We measured OBSE using a 10-item scale (Pierce et al., 1989). An example items is, “I count around here”. This scale yielded a coefficient alpha of .97.

Self-rated prosocial silence. Subordinates assessed silence using a 5-item scale (Van Dyne et al., 2003). An example item is: “I protect proprietary information in order to benefit the organization”. This scale had a coefficient alpha of .93.

Supervisor-rated voice. This construct was assessed with five items (Van Dyne et al., 2003). An example item is: “This employee develops and makes recommendations concerning issues that affect the organization”. This scale had a Cronbach alpha of .97.

Subordinate tenure. We assessed subordinate tenure in the organization (1 = less than 1 year, 2 = 1-5 years, 3 = 6-10 years, 4 = 11-15 years, 5 = 16-20 years, 6 = 21-25 years, 7 = 26-30 years, 8 = greater than 30 years). Forty percent of subordinates had worked for the organization between 1-5 years, followed by individuals who had worked for the organization for between 6-10 years (35.4%).

RESULTS

Descriptive Statistics

Table 1 displays the means, standard deviations, and zero-order correlations among the study variables. Subordinate tenure was significantly associated with the meaning of work, \( r = .20, p < .01 \), interactional justice, \( r = .16, p < .05 \), and organizational-based self-esteem, \( r = .26, p < .01 \). As a result, we control for subordinate tenure in all following analyses.
Overview of Analyses

We conducted a two-step procedure when estimating relationships amongst the study constructs (Anderson & Gerbing, 1988). First, we estimated a series of nested measurement models where we specified the relations of the observed measures to their posited underlying constructs, with the constructs allowed to intercorrelate freely. Next, we estimated a series of nested structural models to test hypotheses. The fit of the nested models was assessed using both absolute and incremental fit indexes. An absolute fit index assesses how well an a priori model reproduces the sample data. We focus on three absolute fit indexes – the Goodness-of-Fit Index (GFI), the root mean square error of approximation (RMSEA: Hu & Bentler, 1999) and the standardized root mean square residual (SRMR: Beauducel & Wittmann, 2009). An incremental fix index measures the proportionate improvement in fit by comparing a target model with a more restricted, baseline model (usually the null model in which all observed variables are uncorrelated). We use the Non-Normed Fit Index (NNFI) and the Comparative Fit Index (CFI; Hu & Bentler, 1999). A cut-off value of .06 or below for the RMSEA, a value less than .08 for the SRMR (Beauducel & Wittmann, 2009), and values above .90 for the other fit indices, are indicative of a good fitting model (Hu & Bentler, 1999).

Due to the small sample size, we sought to minimize the number of indicators per construct using item parcels. An item parcel is an aggregate-level indicator comprised of the average of two or more items (Little, Cunningham, Shahar, & Widaman, 2002). A great deal of discussion has occurred around the use of item parcels (e.g., Hau & Marsh, 2004; Little et al., 2002; Sass & Smith, 2006; Yang, Nay, & Hoyle, 2010). Hau and Marsh (2004) suggest that item parcels reduce the number of indicators in a structural equation model and substantially improve the ratio of N to the
number of estimated parameters. In addition, item parcels are more likely to conform to multivariate normality assumptions than are individual items (Sass & Smith, 2006), are more reliable than individual items (Yang et al., 2010), reduce the idiosyncratic influence of individual items, and can simplify interpretation of results (Yang et al., 2010).

However, a number of potential concerns have also been identified with using item parcels including the loss of information about the relative importance of individual items, and potentially underestimating the relations of the latent variables if the reliability of the scale is low (Yang et al., 2010). In addition, only unidimensional scales should be subject to item parceling (Hau & Marsh, 2004). Little et al. argue that it is important that researchers understand the nature of their data and the focus of the research when considering whether to use item parcels. In this study, we selected to use parcels because: 1) we are working with a small sample, 2) we are concerned with the relationships among constructs and are not focused on the loadings of specific items on latent constructs, and 3) we used pre-existing scales that have been shown to be reliable.

We used confirmatory factor analysis to determine which items should be allocated to parcels, and used a random approach to allocating items to a parcel (Little et al., 2002). With the exception of the single indicator measure of subordinate tenure, parcels were created to assess all of the constructs in the study. In particular, three parcels consisting of five items each were created to assess abusive supervision. The meaning of work and OBSE were each assessed with two parcels composed of five items per parcel. Two parcels, each consisting of three items, were used to assess interactional justice. Finally, self-rated silence and supervisor-rated voice were assessed with two parcels – one parcel consisted of three items while the other parcel was created from two items.

**Measurement Models**

To assess the factor structure of the measures in the study, we tested a series of confirmatory factor analysis (CFA) models (see Table 2). Analyses were conducted on the data provided by the 175 respondents. Each model included the 14 items from the seven constructs assessed and all
model tests were based on this matrix. Maximum likelihood estimation was used as implemented in LISREL 8.8. In all of the measurement models estimated, relationships were estimated among follower tenure and the substantive constructs. The first measurement model estimated, the 3-factor model (Model 1), was the most constrained model. In this model, a subordinate tenure factor, a second factor on which all of the remaining subordinate-rated survey indicators loaded, and a leader-rated prosocial voice factor were estimated. This model was not a good fit to the data, $\chi^2(75) = 1704.42, p < .001; \text{GFI} = .42, \text{CFI} = .47, \text{NNFI} = .35, \text{RMSEA} = .35, \text{SRMR} = .26$. The next model estimated was the 4-factor model, which distinguished among tenure, abusive supervision, a factor on which the remaining subordinate-rated indicators loaded, and a leader-rated prosocial voice factor. This model was not a good fit to the data, $\chi^2(72) = 816.42, p < .001; \text{GFI} = .60, \text{CFI} = .67, \text{NNFI} = .35, \text{RMSEA} = .35, \text{SRMR} = .15$. Application of a chi-square difference test revealed that Model 2 was a significantly better fit to the data than Model 1, $\Delta \chi^2 (3) = 887.95, p < .001$.

The next model estimated was a 5-factor model. In this model, tenure, an abusive supervision factor, a subordinate-rated prosocial silence factor, and a factor on which the remaining subordinate-rated parcels loaded, and a leader-rated prosocial voice factor were estimated. This model was not a good fit to the data, $\chi^2(68) = 633.14, p < .001; \text{GFI} = .66, \text{CFI} = .76, \text{NNFI} = .68, \text{RMSEA} = .22, \text{SRMR} = .15$. A chi-square difference test revealed that Model 3 was a significantly better fit to the data than Model 2, $\Delta \chi^2 (3) = 183.28, p < .001$. Next, a 6-factor model was estimated. In this model, a tenure factor, an abusive supervision factor, an interactional justice factor, a subordinate-rated prosocial silence factor, and a factor on which the remaining subordinate-rated item parcels loaded, and a leader-rated prosocial voice factor were estimated. This model was not a good fit to the data,
The hidden costs of abusive supervision

$\chi^2(63) = 318.26, p < .001; \text{GFI} = .79, \text{CFI} = .89, \text{NNFI} = .84, \text{RMSEA} = .15, \text{SRMR} = .09$. However, Model 4 was a significantly better fit to the data than Model 3, $\Delta \chi^2 (5) = 314.88, p < .001$.

Next, a 7-factor model was estimated. In this model, factors assessing tenure, abusive supervision, interactional justice, the meaning of work, OBSE, self-rated prosocial silence, and supervisor-rated voice behavior were estimated. This model was a good fit to the data, $\chi^2(57) = 112.78, p < .001; \text{GFI} = .92, \text{CFI} = .98, \text{NNFI} = .97, \text{RMSEA} = .07, \text{SRMR} = .03$. This model was a significantly better fit to the data than Model 4, $\Delta \chi^2 (6) = 205.51, p < .001$. In summary, the hypothesized 7-factor model (Model 5) was the best fit to the data. Table 3 displays the standardized parameter estimates for this model. All parameters loaded significantly onto their hypothesized latent factor at $p < .001$, and the latent factors explained substantial amounts of item variance ($R^2$ ranged from .81 to 1.00). Table 4 displays the correlations among the latent factors in this model.

Structural models

A series of nested structural models were estimated to test the hypothesized relationships. In all of the structural models, relationships were estimated among tenure and all of the study variables. We contrast models that distinguish between indirect and mediated relationships. Mathieu and Taylor (2006) argue that mediation refers to instances where the significant total relationship that exists between an independent and dependent variable is accounted for in part (partial mediation) or completely (full mediation) by a mediator variable. In contrast, indirect effects are a special form of intervening effect whereby the independent and dependent variable are not related directly, but are indirectly related through significant relationships with a linking mechanism.

The first structural model estimated was the saturated structural model. In this model, relationships were estimated among abusive supervision and all of the substantive constructs, which
were free to correlate with each other. This model was identical to the saturated measurement model, which was a good fit to the data, $\chi^2(57) = 112.78$, $p < .001$; GFI = .92, CFI = .98, NNFI = .97, RMSEA = .07, SRMR = .03. The next structural model estimated was the direct effects only model. In this model, the only structural relationships estimated were among abusive supervision and prosocial silence and prosocial voice. This model was a reasonable fit to the data, $\chi^2(60) = 171.18$, $p < .001$; GFI = .88, CFI = .96, NNFI = .94, RMSEA = .10, SRMR = .17. However, a chi-square difference test revealed that the saturated structural model was a significantly better fit to the data than the direct effects only model, $\Delta \chi^2 (3) = 58.43$, $p < .001$.

The third structural model estimated was the indirect effects only model. In this model, relationships among abusive supervision and the three intervening variables – the meaning of work, interactional justice, and organizational-based self-esteem - were estimated. Relationships among the three intervening variables and self-rated prosocial silence and supervisor-rated voice were also estimated. This model was a good fit to the data, $\chi^2(59) = 112.61$, $p < .001$; GFI = .92, CFI = .98, NNFI = .97, RMSEA = .07, SRMR = .03. Comparison of the saturated structural model and the indirect effects only model revealed no significant difference between the models, $\Delta \chi^2 (2) = .14$, n.s. Therefore, the more parsimonious model – the indirect effects only model – was selected as the best fit to the data. In summary, analyses revealed that the indirect effects model was a significantly better fit to the data than a series of theoretically viable alternative models. The structural relationships among the latent factors in the indirect effects model are displayed in Table 5 and shown in Figure 2. The indirect effects structural model explained 20% of the variance in OBSE, 12% of the variance in the meaning of work, 35% of the variance in interactional justice, 48% of the variance in subordinate-rated silence, and 9% of the variance in supervisor-rated voice behaviors.

INSERT TABLE 5 AND FIGURE 2 ABOUT HERE
Hypothesis Testing

Hypothesis 1 proposed that abusive supervision would display a direct negative relationship with prosocial silence and prosocial voice behaviors. This hypothesis was not supported as the best fitting structural model did not include direct relationships among abusive supervision and prosocial silence or prosocial voice. Hypothesis 2a proposed that there would be a significant negative relationship between abusive supervision and interactional justice, which was supported, $\beta = -0.57$, $p < .001$. Hypothesis 2b proposed that subordinates’ perceptions of interactional justice would mediate relationships among abusive supervision and prosocial silence and voice behaviors. This hypothesis was partially supported. That is, interactional justice was not significantly associated with subordinate-rated prosocial silence, $\beta = -0.07$, n.s. However, interactional justice was significantly positively associated with supervisor-rated prosocial voice behavior, $\beta = 0.22$, $p < .01$. The Sobel test (Sobel, 1982) was applied to examine the significance of the indirect relationships among abusive supervision, interactional justice, and prosocial voice, which were significant, $z = -2.64$, $p < .01$.

Hypothesis 3a proposed that there would be a significant negative relationship between abusive supervision and the meaning of work, which was supported, $\beta = -0.26$, $p < .001$. Hypothesis 3b proposed that the meaning of work would mediate relationships among abusive supervision and prosocial silence and prosocial voice. The meaning of work was significantly positively associated with subordinate-rated prosocial silence, $\beta = 0.50$, $p < .001$ but was not significantly associated with prosocial voice, $\beta = -0.03$, n.s. The Sobel test (Sobel, 1982) was applied to examine the significance of the indirect relationships among abusive supervision, the meaning of work, and prosocial silence. These indirect relationships were significant, $z = -3.11$, $p < .01$. As such, there was partial support for Hypothesis 3b.

Hypothesis 4a proposed that there would be a significant negative relationship between abusive supervision and OBSE, which was supported, $\beta = -0.29$, $p < .001$. Hypothesis 4b proposed that OBSE would mediate the relationships among abusive supervision and subordinate-rated...
prosocial silence and supervisor-rated voice behavior. OBSE was significantly positively associated with subordinate-rated prosocial silence, $\beta = .33$, $p < .001$ but was not significantly related to prosocial voice behavior, $\beta = .04$, n.s. The Sobel test (Sobel, 1982) significance of the indirect relationships among abusive supervision, OBSE, and subordinate-rated prosocial silence. These indirect relationships were significant, $z = -2.97$, $p < .01$. As such, there was partial support for Hypothesis 4b.

**DISCUSSION**

To date, researchers have primarily argued that abusive supervisory behaviors reduce interactional justice, which translates into negative employee and organizational outcomes. We broadened the focus of research by examining additional mediating mechanisms by which abusive supervisors influence followers. In addition, we also focused on two specific organizational citizenship behaviors rather than a global OCB factor. Results provided support for a model in which abusive supervision influenced prosocial voice and prosocial silence indirectly by affecting employees’ perceptions of interactional justice, the meaning of work, and OBSE. Overall, our findings suggest that when employees are treated poorly by their direct supervisor, they seek to restore a sense of autonomy and control and to rebalance the social exchange relationship by withholding voluntary citizenship behaviors. These results suggest that it is important to prevent abusive supervision from occurring because this destructive leadership style influences how employees feel about their work, how they feel about themselves as organizational members, and how they feel about their treatment from their leader, and this translates into reduced discretionary effort in the workplace.

Abusive supervision indirectly negatively influenced supervisor-rated prosocial voice by reducing follower perceptions of interactional justice. In other words, employee perceptions of supervisor abuse elicit a sense of interpersonal fairness. This in turn translates into a reduction in prosocial behavior, because employees seek to “even the score” with their supervisor by reducing
work-related suggestions and information which generally supports organizational improvement (Van Dyne et al., 2003). In addition, employees who work with an abusive supervisor reported that their work is less meaningful, and the reduction in the meaning of work, in turn, negatively influenced prosocial silence. Employees working with an abusive supervisor also reported that they did not feel themselves to be a significant, capable, and a worthy organizational member, which translated into a decrease in prosocial silence.

It is interesting to consider why interactional injustice was associated with voice behavior while the meaning of work and OBSE were associated with prosocial silence. These two OCBS differ in a number of ways including the visibility of these behaviors to other individuals in the workplace. In particular, voice behavior is a highly visible proactive behavior and reductions in this behavior are likely to be apparent to one’s team and one’s leader in the workplace. In contrast, prosocial silence, by its very nature, is difficult, if not impossible, for others to observe and monitor. If we take this issue into account, then we can start to unpack some of the potential processes that are in play in this study.

Specifically, research suggests that interpersonal mistreatment (interactional injustice) elicits the strongest emotional reactions in comparison to other forms of injustice (i.e., distributive and procedural justice: Bies, 1987). These emotional reactions, especially when combined with attributions of blame for an offense, motivate a desire for revenge (Bradfield & Aquino, 1999). In the case of abusive supervision, it is anticipated that a subordinate is likely to blame their supervisor for the hostile and negative treatment they have received. This combination of circumstances - strong negative emotions and attributions of blame directed toward the supervisor – may result in a desire to overtly retaliate against one’s supervisor. Subordinates may do so by reducing voice behaviors, which are clearly observable to others. In contrast, a reduction in the meaning of work and OBSE are less likely to result in strong negative emotions, although an individual may still attribute blame for these behaviors to the supervisor. As such, employees may engage in a more
rational sense-making process in such circumstances where they still seek to restore the balance of the exchange by withdrawing voluntary contributions but are more likely to do so covertly by reducing prosocial silence behaviors. In this case, individuals want to restore the balance of the exchange relationship but are not likely to have the same intense emotional desire to make it clear to the supervisors and others in the workplace that they are retaliating. We suggest that future research should examine the role of emotion in the abusive supervision process in order to explore these processes.

Examination of the findings reveals that the research model that was the best fit to the data explained 48% of the variance in subordinate-rated prosocial silence. In contrast, this model only explained 9% of the variance in supervisor-rated prosocial voice behaviors. One potential explanation for this finding is that common method variance artificially increased the amount of variance explained in self-rated prosocial silence compared to prosocial voice, which was rated by supervisors. However, we suggest that given the power differential between leaders and their subordinates, it is likely that subordinates will chose to restore the balance of their exchange relationship by withdrawing “hidden” organizational citizenship behaviors. If this is indeed the case, then we would expect prosocial silence to be more strongly indirectly associated with abusive supervision than more visible OCBs such as voice behaviors. Future research should continue to explore whether subordinates are more likely to withdraw “covert” voluntary behaviors when confronted with an abusive supervisor in the workplace.

**Theoretical and Practical Implications**

To date, theorists have focused on a fairly narrow range of mediators when studying the underlying processes by which abusive supervisors influence follower and organizational outcomes. We broadened this focus and examined not only justice, but also the meaning of work and OBSE. Our theoretical analysis highlighted that many of the costs of abusive supervision are likely to be “hidden” as employees seek to retaliate against abuse in a covert fashion that will reduce the
likelihood of further escalating negative supervisory behavior. A second theoretical contribution of our study was our focus on the relationships among abusive supervision and two specific organizational citizenship behaviors. Indeed, Van Dyne et al. (2008) argued that it is important to study individual organizational citizenship behaviors as these individual behaviors are likely to be driven by different processes. This was the case in our study as the meaning of work and OBSE influenced prosocial silence while interactional justice was associated with prosocial voice behaviors.

Practically, our findings are important because they demonstrate that at least some of the costs of destructive leadership are hidden in that employees withhold voluntary contributions that benefit the supervisor and the organization. In particular, we argue that our results provide preliminary evidence to suggest that employees do reciprocate negative treatment from supervisors in “hidden” ways. We argue that employees may choose to withdraw behaviors that are difficult for their supervisor to monitor. Therefore, many of the costs of abusive supervision may be difficult to track and measure for supervisors and organizations. As such, existing research may have greatly underestimated the organizational costs of abusive supervision.

Future Research

A number of additional areas for future research arise from this study. First, it would be productive for future research to further explore the relationships among abusive supervision and a wider range of organizational citizenship behaviors. In particular, Podsakoff et al. (2000) identify a number of OCBs that also appear to be less “visible” to external observers in the workplace such as employees’ decision to voluntarily develop their skills and abilities so that they can contribute to their organization, the extent to which an individual engages in actions to prevent problems such as providing advance notice of issues, and protecting the organization though voluntary acts to protect property. Withdrawing these types of behaviors may be difficult for supervisors to detect, and therefore, these behaviors may also be likely to be reduced when a subordinate is dealing with an
The hidden costs of abusive supervision

Another area for future research concerns identifying moderators that influence relationships among abusive supervision and the intervening variables identified in this study. For example, Rafferty, Restubog, and Jimmieson (2010) reported that subordinate self-esteem moderated the relationship between abusive supervision and subordinate psychological distress, such that this relationship was stronger for subordinates who had high self-esteem. These authors drew on behavioral plasticity theory (Brockner, 1983), which suggests that high self-esteem employees are predisposed to think about themselves in positive, self-aggrandizing ways, whereas people with low self-esteem are not. Thus, when external cues threaten a positive self-image, such as when an individual experiences abusive supervision from their direct leader, this experience may actually have a greater impact on individuals whose self-esteem is high rather than low. Future research could explore the role of individual personality in influencing the relationships identified in this study so as to determine what types of individuals are most likely to be negatively affected by abusive supervision.

Strengths and Limitations

A strength of this study is that data were collected in the Philippines, a country that has been characterized in multicultural comparative research as very high on power distance and low on individualism (Hofstede, 2001; Restubog & Bordia, 2006). In contrast, Western countries, such as the United States tend to be low on power distance and highly individualistic (Hofstede, 2001). Tepper et al. (2009) argued that the effects of abusive supervision may be less pronounced in higher power distance cultures because hostile supervisory behavior may be more normative and employees may be less outraged when they are subjected to hostile behavior. The results of this study suggest, however, that in a high power distance culture abusive supervision indirectly negatively influenced both prosocial voice behaviors and prosocial silence. These findings suggest that even where there is a high degree of power distance, abusive supervision still has considerable
negative implications for followers and organizations. A second strength of the study was that we collected ratings of subordinate voice behavior from supervisors in order to reduce the likelihood that results are due to the influence of common method variance effects (Podsakoff, MacKenzie, & Podsakoff, 2003). However, due to the nature of the prosocial silence construct we asked subordinates to self-report this behavior. While this approach is theoretically appropriate (Tangirala & Rangaraj, 2008), it does raise the possibility that common method effects are in operation when examining relationships among the study constructs and prosocial voice.

There are a number of limitations of our study that need to be acknowledged. First, we recognize the possibility that reverse causation could be in operation in our study. That is, while we hypothesized that abusive supervision as reported by subordinates’ influences the meaning of work, interactional justice, and OBSE, the reverse may in fact be occurring. For example, employees with low OBSE may be more likely to report that their leader displays abusive supervision. Future research needs to test these distinct processes by collecting data from multiple sources over time. A second limitation of our study was that we created a number of two-indicator factors due to the small sample size. Hau and Marsh (2004) reported, however, on the basis of two simulation studies, that when the sample size was small, two-indicator solutions resulted in poorer convergence behavior, and more biased parameter estimates. As such, we were unable to adopt the ideal approach when using items parcels, and as such, future research should address this limitation.

Conclusion

In summary, we found support for a model where abusive supervision displayed an indirect negative relationship with supervisor-reported prosocial voice by reducing follower perceptions of interactional justice. In contrast, there was an indirect relationship among abusive supervision, the meaning of work, OBSE, and self-rated prosocial silence. In particular, abusive supervision reduced prosocial silence by reducing followers’ perceptions that their work is meaningful and by reducing organizational-based self-esteem. We hope that our findings encourage further investigation on the
underlying mechanisms that link supervisory abuse and work outcomes as well as additional empirical attention that seeks to identify organizational strategies to curtail abusive supervisory behaviors.
REFERENCES


TABLE 1
DESCRIPTIVE STATISTICS AND CORRELATIONS AMONG THE STUDY VARIABLES

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std.</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Follower tenure</td>
<td>2.56</td>
<td>.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Abusive supervision</td>
<td>1.96</td>
<td>1.17</td>
<td>-.04</td>
<td></td>
<td>(.98)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The meaning of work</td>
<td>5.36</td>
<td>.95</td>
<td>.20**</td>
<td>-.30***</td>
<td>(.95)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Interactional justice</td>
<td>5.40</td>
<td>1.21</td>
<td>.16*</td>
<td>-.58***</td>
<td>.60***</td>
<td>(.97)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Organizational-based self-esteem</td>
<td>5.73</td>
<td>.97</td>
<td>.26**</td>
<td>-.31***</td>
<td>.58**</td>
<td>.52***</td>
<td>(.97)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Self-rated prosocial silence</td>
<td>5.50</td>
<td>1.17</td>
<td>.09</td>
<td>-.19*</td>
<td>.60***</td>
<td>.38***</td>
<td>.55***</td>
<td>(.93)</td>
<td></td>
</tr>
<tr>
<td>7. Supervisor-rated prosocial voice</td>
<td>5.13</td>
<td>1.13</td>
<td>.15</td>
<td>-.23**</td>
<td>.19*</td>
<td>.30***</td>
<td>.28***</td>
<td>.14</td>
<td>(.95)</td>
</tr>
</tbody>
</table>

Note: *p < .05, **p < .01, ***p < .001
Table 2
Model Comparisons of the Measurement and Structural Models

<table>
<thead>
<tr>
<th>Models</th>
<th>$\chi^2$</th>
<th>df</th>
<th>NNFI</th>
<th>RMSEA</th>
<th>CFI</th>
<th>GFI</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Measurement Model 1 – 3-factor model</td>
<td>1704.42</td>
<td>75</td>
<td>.35</td>
<td>.35</td>
<td>.47</td>
<td>.42</td>
<td>.26</td>
</tr>
<tr>
<td>2. Measurement Model 2 – 4-factor model</td>
<td>816.42</td>
<td>72</td>
<td>.35</td>
<td>.35</td>
<td>.67</td>
<td>.60</td>
<td>.15</td>
</tr>
<tr>
<td>3. Measurement Model 3 – 5-factor model</td>
<td>633.14</td>
<td>68</td>
<td>.68</td>
<td>.22</td>
<td>.76</td>
<td>.66</td>
<td>.15</td>
</tr>
<tr>
<td>4. Measurement Model 4 – 6-factor model</td>
<td>318.26</td>
<td>63</td>
<td>.84</td>
<td>.15</td>
<td>.89</td>
<td>.79</td>
<td>.09</td>
</tr>
<tr>
<td>5. Measurement Model 5 – 7-factor model</td>
<td>112.78</td>
<td>57</td>
<td>.97</td>
<td>.07</td>
<td>.98</td>
<td>.92</td>
<td>.03</td>
</tr>
<tr>
<td>6. Structural Model 1 – Saturated structural model</td>
<td>112.78</td>
<td>57</td>
<td>.97</td>
<td>.07</td>
<td>.98</td>
<td>.92</td>
<td>.03</td>
</tr>
<tr>
<td>7. Structural Model 1 – Direct effects model</td>
<td>171.18</td>
<td>60</td>
<td>.94</td>
<td>.10</td>
<td>.96</td>
<td>.88</td>
<td>.17</td>
</tr>
<tr>
<td>8. Structural Model 2 – Indirect effects only model</td>
<td>112.61</td>
<td>59</td>
<td>.97</td>
<td>.07</td>
<td>.98</td>
<td>.92</td>
<td>.03</td>
</tr>
</tbody>
</table>
TABLE 3
STANDARDIZED PARAMETER ESTIMATES IN THE 8-FACTOR MEASUREMENT MODEL

<table>
<thead>
<tr>
<th></th>
<th>Tenure</th>
<th>Abusive supervision</th>
<th>Meaning of work</th>
<th>Interactional justice</th>
<th>Organizational-based self-esteem</th>
<th>Self-rated prosocial silence</th>
<th>Supervisor-rated voice</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Follower tenure</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>2. Abusive supervision parcel 1</td>
<td>.97</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.95</td>
</tr>
<tr>
<td>3. Abusive supervision parcel 2</td>
<td>.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.98</td>
</tr>
<tr>
<td>4. Abusive supervision parcel 3</td>
<td>.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.85</td>
</tr>
<tr>
<td>5. Meaning parcel 1</td>
<td>.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.96</td>
</tr>
<tr>
<td>6. Meaning parcel 2</td>
<td>.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.85</td>
</tr>
<tr>
<td>7. Interactional justice parcel 1</td>
<td>.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.98</td>
</tr>
<tr>
<td>8. Interactional justice parcel 2</td>
<td>.96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.92</td>
</tr>
<tr>
<td>9. Organizational-based self-esteem parcel 1</td>
<td>.96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.92</td>
</tr>
<tr>
<td>11. Self-rated prosocial silence parcel 1</td>
<td>.97</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.94</td>
</tr>
<tr>
<td>12. Self-rated prosocial silence parcel 2</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.90</td>
</tr>
<tr>
<td>13. Supervisor-rated prosocial voice parcel 1</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>14. Supervisor-rated prosocial voice parcel 2</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.81</td>
</tr>
</tbody>
</table>

Note: p < .001 in all cases
### TABLE 4
RELATIONSHIPS AMONG THE LATENT FACTORS IN THE INDIRECT EFFECTS STRUCTURAL MODEL

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Follower tenure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Abusive supervision</td>
<td>-.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Meaning of work</td>
<td>.23**</td>
<td>-.28***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Interactional justice</td>
<td>.18**</td>
<td>-.58***</td>
<td>.60***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Organizational-based self-esteem</td>
<td>.34***</td>
<td>-.33***</td>
<td>.44***</td>
<td>.30***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Self-rated prosocial silence</td>
<td>.18**</td>
<td>-.20**</td>
<td>.65***</td>
<td>.40***</td>
<td>.58***</td>
<td></td>
</tr>
<tr>
<td>7. Supervisor-rated voice</td>
<td>.21**</td>
<td>-.15</td>
<td>.16*</td>
<td>.25***</td>
<td>.19**</td>
<td>-.03</td>
</tr>
</tbody>
</table>

*Note: * $p < .05$, ** $p < .01$, *** $p < .001$*
TABLE 5
STANDARDIZED PARAMETER ESTIMATES IN THE INDIRECT EFFECTS MODEL

<table>
<thead>
<tr>
<th></th>
<th>Follower tenure</th>
<th>Abusive supervision</th>
<th>Meaning of work</th>
<th>Interactional justice</th>
<th>Organizational-based self-esteem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Abusive supervision</td>
<td>-.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Meaning of work</td>
<td>.20**</td>
<td>-.26***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Interactional justice</td>
<td>.11</td>
<td>-.57***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Organizational-based self-esteem</td>
<td>.30***</td>
<td>-.29***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Self-rated prosocial silence</td>
<td>-.03</td>
<td>.50***</td>
<td>-.07</td>
<td>.33***</td>
<td></td>
</tr>
<tr>
<td>6. Supervisor-rated voice</td>
<td>.16*</td>
<td>-.03</td>
<td>.22**</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>Explained variance</td>
<td>-</td>
<td>.02</td>
<td>.12</td>
<td>.35</td>
<td>.20</td>
</tr>
</tbody>
</table>

Note: * p < .05, ** p < .01, ***p < .001
FIGURE 1
PROPOSED THEORETICAL MODEL
FIGURE 2
SIGNIFICANT RELATIONSHIPS IN THE INDIRECT EFFECTS STRUCTURAL MODEL

Note: * p < .05, ** p < .01, ***p < .001
The hidden costs of abusive supervision