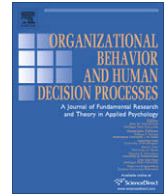




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Abusive supervision, intentions to quit, and employees' workplace deviance: A power/dependence analysis

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ABSTRACT

We conducted a two-study examination of relationships between abusive supervision and subordinates' workplace deviance. Consistent with predictions derived from power/dependence theory, the results of a cross-sectional study with employees from three organizations suggest that abusive supervision is more strongly associated with subordinates' organization deviance and supervisor-directed deviance when subordinates' intention to quit is higher. The results also support the prediction that when intention to quit is higher, abusive supervision is more strongly associated with supervisor-directed deviance than with organization-directed deviance. These results were replicated in a second study, a two-wave investigation of people employed in a variety of industries and occupations.

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Of the interpersonal relationships people develop at work none are more important than those employees have with their immediate supervisor. Indeed, supervisor-subordinate relationship quality has been linked with employees' well-being, performance, salary attainment, and career progress (Scandura & Schriesheim, 1994; Wayne, Shore, & Liden, 1997). Owing in part to their hierarchical position and power, supervisors are uniquely positioned to make available outcomes that many employees find attractive. However, supervisors inclined to exercise their power with hostility may produce decidedly negative outcomes for employees and employers. One example of this is abusive supervision, expressions of non-physical hostility supervisors perpetrate against their direct reports (e.g., derogation, explosive outbursts, and undermining; Tepper, 2000). Exposure to abusive supervision is associated with a variety of unwelcome outcomes including subordinates' dissatisfaction with the job, lack of commitment to the organization, psychological distress, and lower levels of in-role and extra-role performance (see Tepper, 2007, for a recent review). In several recent studies researchers have established links between abusive supervision and subordinates' performance of workplace deviance (e.g., Detert, Trevino, Burris, & Andiappan, 2007; Duffy, Ganster, & Pagon, 2002; Dupre, Inness, Connelly, Barling, & Hopton, 2006; Inness, Barling, & Turner,

2005; Mitchell & Ambrose, 2007; Tepper, Duffy, & Shaw, 2001; Tepper, Henle, Lambert, Giacalone, & Duffy, 2008; Thau, Bennett, Mitchell, & Marrs, 2009), actions that violate organizational norms and are intended to cause harm to the organization and/or other employees (e.g., theft, sabotage, and insubordination; Robinson & Bennett, 1995).

Interestingly, however, the literature that explores the occurrence of revenge and retaliation in organizations suggests that employees refrain from responding to perceived mistreatment with acts of deviance when they hold lower power positions relative to the perpetrator (e.g., when the perpetrator is the victim's immediate supervisor; Aquino, Tripp, & Bies, 2001). As we elaborate below, this line of work leads to the prediction that victims of hierarchical mistreatment such as abusive supervision will eschew workplace deviance because they have less power than the perpetrator and, consequently, performing acts of deviance may invite disciplinary reactions or evoke further downward hostility. But if abused subordinates lack the power to express their resentment through workplace deviance, what accounts for the evidence from extant research suggesting that abusive supervision is associated with subordinates' performance of overtly deviant acts?

We explored this question by conducting a fine-grained analysis of the relationship between abusive supervision and subordinates' workplace deviance. In the sections that follow we first develop the argument that some victims of abusive supervision are more

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inclined to execute acts of workplace deviance because they do not view themselves as powerless to pursue their self-interests. Specifically, we explore the possibility that victims of abusive supervision will perceive themselves to be more powerful and that they will be more likely to engage in deviant acts when they have stronger intentions to quit their jobs. Second, we explore the notion that when intention to quit is higher, abusive supervision will be more strongly associated with direct expressions of revenge (i.e., supervisor-directed deviance) than with indirect expressions (i.e., organization deviance). We then report the results of two studies in which we investigated these proposed relationships.

Theoretical background and hypotheses

In a growing number of studies, researchers have examined how individuals respond to perceived mistreatment in organizations. Much of this work has focused on revenge and retaliatory behaviors, actions that are designed to inflict injury or discomfort on the person who is judged responsible for having caused harm (Skarlicki & Folger, 1997). Gouldner's (1960) concept of negative reciprocity norms explains why victims of mistreatment may be motivated to retaliate. According to Gouldner, the treatment people experience creates an obligation to respond in kind – favorable treatment for favorable treatment (i.e., positive reciprocity) and unfavorable treatment for unfavorable treatment (i.e., negative reciprocity). Negative reciprocity can restore a sense of justice and inhibit further acts of mistreatment (Bies & Tripp, 2001). Hence, negative reciprocity in the wake of perceived mistreatment satisfies the victim's self-interests.

But the revenge and retaliation literature suggests that not all employees who experience mistreatment seek revenge. Indeed, victims who hold lower power positions relative to the perpetrator will eschew retaliatory acts. As Aquino, Tripp, and Bies (2006) have argued, “when harmed by a superior, a victim is likely to be inhibited from seeking revenge because the offender is well positioned for counter-revenge” (p. 654). The reluctance of subordinate victims to seek revenge may be explained by power-dependence theory (Emerson, 1972), according to which a person's dependence is inversely related to their power. In relationships characterized by power imbalance, exchanges in which one actor is more dependent on the other for valued resources, the actor with greater dependence/less power is constrained in terms of their ability to act in ways that satisfy their self-interests (Molm, 1988). Hence, although the norm of negative reciprocity produces motivation to seek revenge for mistreatment, subordinates' dependence/lack of power vis a vis their supervisor constrains their ability to do so.

These notions are also consistent with deterrence theory (Lawler, 1986; Morgan, 1977), which proposes that the risk of retaliation prevents low (or even equal) power actors from performing behaviors that may be construed by others as coercive and that they withhold such behavior when the costs are prohibitive. With respect to the manifestation of hierarchical mistreatment that was the focus of our research, abusive supervision, the costs of retaliation include sustaining the supervisor's hostile behavior pattern and relational decay (Tepper, Moss, Lockhart, & Carr, 2007). In addition, many of the actions that fall under the broad umbrella of workplace deviance (e.g., theft, sabotage, and performance disruption) may trigger disciplinary responses such as verbal or written reprimands, demotion, or reduction in work responsibilities, transfer to an undesirable location, or termination. Hence, from the perspective of the revenge/retaliation literature, negative reciprocity is not a viable option for victims of abusive supervision. Indeed, this body of work would lead to the prediction that subordinates will be more likely to respond to abusive supervision with (1) *reconciliation* behaviors that are designed to restore relationship quality, (2) *forgiveness* of

their anger and desire to get even with the perpetrator, or (3) *avoidance* of the abusive supervisor (Aquino et al., 2006).

In several studies of abusive supervision, researchers have taken an intermediate position arguing that victims may take revenge by performing retaliatory acts that are likely to go undetected or acts that may be observed, but which are unlikely to be punished. For example, three contributions to the abusive supervision literature suggest that abused subordinates will retaliate by withholding citizenship performance (Aryee, Chen, Sun, & Debrah, 2007; Burris, Detert, & Chiaburu, 2008; Zellars, Tepper, & Duffy, 2002), actions that benefit the organization but whose omission is not punishable (e.g., helping coworkers, behaving courteously, being a good sport by not complaining about trivial matters, talking up the organization to outsiders, and offering suggestions for improvement). Because these acts are discretionary, even employees who have relatively little power should be able to withhold them without fear of reprisals.

Intention to quit and subordinates' power/dependence

However, there may be instances in which victims of abusive supervision are not dependent on their supervisor and, consequently, do not lack the power to act in a self-interested fashion. One such circumstance may occur when subordinates have strong intentions to quit their job. The concept of intention to quit was first introduced as the proximal step in the chain of variables that links unfavorable attitudes toward the job and the decision to voluntarily leave one's employer (Mobley, 1977; Mobley, Horner, & Hollingsworth, 1978). As originally formulated, intention to quit referred to a person's subjective probability that they are permanently leaving their employer in the near future and captured the last in a series of withdrawal cognitions that also included thoughts about quitting and the search for alternative employment.

Of relevance to our work, intention to quit also captures employees' dependence on their supervisor and employer because employees who have formulated concrete plans to permanently leave their organization will be less reliant on their current supervisor and employment situation for the benefits they provide (e.g., compensation, advancement opportunities, and praise). The reduced levels of dependence experienced by those who intend to quit should be accompanied by a corresponding increase in their self-perceived power to pursue their self-interests; this is because as intention to quit increases, subordinates' power disadvantage should dissipate and they will have more to gain (and less to lose) by retaliating (Molm, 1997). The prospect of becoming the target of further supervisory abuse or organizational sanctions (either of which may be triggered by deviant responses to abusive supervision; Tepper et al., 2007) should not be as threatening to someone who has made the decision to cut ties with their employer and, of course, their supervisor. Undeterred by the possibility of counter-retaliation or of being disciplined for having performed deviant acts, abused subordinates who have higher intentions to quit should perform workplace deviance with higher frequency. By comparison, abused subordinates who have lower intentions to quit are more dependent on their employer, have more to lose by performing acts of workplace deviance, and should therefore perform such behavior with lower frequency than their high intention to quit counterparts. These arguments produce a moderation prediction; intention to quit should moderate the relationship between abusive supervision and subordinates' workplace deviance such that the relationship will be stronger when intention to quit is higher. We examined this notion with respect to two distinguishable forms of workplace deviance that have been studied in previous research: deviance directed at the organization such as theft, sabotage, arriving late to work or leaving early (i.e., organization deviance) and deviance directed against the supervisor such as undermining, ignoring, or gossiping about the supervisor (i.e., supervisor-directed deviance).

Hypothesis 1. Employees' intention to quit will moderate the positive relationship between abusive supervision and employees' organization deviance; the relationship will be stronger when intention to quit is higher rather than lower.

Hypothesis 2. Employees' intention to quit will moderate the positive relationship between abusive supervision and employees' supervisor-directed deviance; the relationship will be stronger when intention to quit is higher rather than lower.

Differential predictions for organization- and supervisor-directed deviance

Based on power/dependence theory, we further expected that the form of the interaction effect would differ in subtle but important ways for organization deviance and supervisor-directed deviance. Recent work suggests that people with greater power are more likely to act in ways that are consistent with desired end states compared to those who have less power (Galinsky, Gruenfeld, & Magee, 2003). Essentially, power evokes behavioral disinhibition in that more powerful individuals are freer to take goal directed action (compared to those who have less power). Given the evidence suggesting that direct expressions of revenge are preferable to indirect expressions (Tripp, Bies, & Aquino, 2002), we can expect that the reluctance to retaliate directly will abate to a greater extent (compared to the reluctance to retaliate indirectly) as the victims' power increases. Hence, when abused subordinates' power disadvantage diminishes (i.e., when their intention to quit increases), they should be less inhibited in their ability to execute acts of deviance against the actual source of their frustration – the supervisor. Abused subordinates may hold their employer partly responsible for their supervisors' behavior (Tepper et al., 2008), but primary responsibility should reside with the perpetrator (Hershcovis et al., 2007; Mitchell & Ambrose, 2007; Thau et al., 2009). We therefore propose that when intention to quit is higher, abused subordinates' reluctance to retaliate directly should be lower than their reluctance to retaliate indirectly – this should, in turn, produce a stronger, positive relationship between abusive supervision and subordinates' supervisor-directed deviance. Stated formally:

Hypothesis 3. When subordinates' intention to quit is higher, abusive supervision will be more strongly related to supervisor-directed deviance than to organization deviance.

Overview of the research

We explored our hypotheses in two studies of supervised employees. The first study consisted of 797 people from three cross-sectional samples: 491 fast-food restaurant managers, 182 hospital employees, and 124 employees of a federal law enforcement agency. Study 2 was a two-wave investigation of 356 people who were employed in a variety of occupations. The participants in each study completed survey questionnaires that contained measures of the substantive variables, abusive supervision, intentions to quit, organization deviance, and supervisor-directed deviance, as well as several control variables that could be related to the predictors and/or the dependent variables.

Study 1

Method

Samples and procedures

Sample 1. Store managers of a large fast-food restaurant chain completed surveys while they attended a regional, company-sponsored conference in the US. A member of the research team administered surveys to all 521 managers who attended the conference,

491 of whom agreed to participate and completed the questionnaire. This produced a useable response rate of 94% (491/521). The participants were responsible for the entire operation of the restaurant where they worked – this involved hiring, firing, training, and supervising hourly employees, cooking, unloading trucks, policing the parking lot, handling complaints, monitoring inventory, and bookkeeping. Fifty seven percent were men and the average age of the participants was 27 years old.

Sample 2. The data for Sample 2 were collected from workers at a large Southern US hospital. All 364 non-supervisory employees were invited to participate, 182 (50%) of whom agreed to do so and provided complete data. Respondents were employed as staff assistant physicians, administrative staff, registered nurses, medical assistants, and other clinic workers. Thirty-five percent of the participants were men and the average age was 40 years old.

Sample 3. The data for Sample 3 were collected from employees of a Federal law enforcement agency in the Southwestern United States. A member of the research team administered surveys to all 157 people the agency employed. One hundred twenty-four (79%) people completed surveys in large sessions at different locations. The agency chief encouraged participation through a written memo that accompanied the survey, but participation was not mandatory and all respondents completed surveys anonymously. The respondents were employed as administrators, law enforcement officers, and support personnel. Sixty-five percent of the participants were men and the average age was 43 years old.

Measures

Abusive supervision. The respondents completed Mitchell and Ambrose's (2007) five-item version of Tepper's (2000) abusive supervision scale. Illustrative items are "my boss ridicules me" and "my boss tells me that my thoughts and feelings are stupid". The respondents used a five-point response format to report how often their supervisor performed the behavior described in each item: 1 = "never" to 5 = "very often".

Intention to quit. Respondents completed a three-item measure of intention to quit. The items read: "I plan on leaving this organization very soon", "I expect to change jobs in the next few months", and "I will look to change jobs very soon" (1 = "strongly disagree" to 5 = "strongly agree"). It should be noted that many measures of intention to quit conflate this construct with other withdrawal cognitions such as thinking of quitting and intention to search for alternative employment (Tett & Meyer, 1993). For our purposes, it was critically important that our measure of intention to quit cleanly capture "the culmination of the decision process regarding turnover" (Crossley, Bennett, Jex, & Burnfield, 2007, p. 1033) and that it not be contaminated with withdrawal cognitions that play important, albeit, distal roles in the withdrawal process.

Workplace deviance. We measured organization and supervisor-directed deviance using the appropriate items from Skarlicki and Folger's (1997) 17-item measure of organizational retaliation behavior. We excluded three items from Skarlicki and Folger's instrument that capture deviant behavior directed against one's coworkers. The resulting measures consisted of 11 items that reference workplace deviance directed against one's employer (e.g., "took supplies home without permission", "called in sick when not ill", and "intentionally worked slower") and three items that capture deviance directed against one's immediate supervisor ("disobeyed my supervisor's instructions", "gossiped about my boss", and "talked back to my boss"). Respondents reported the frequency with which they performed each behavior in the previous

month using a five-point scale that ranged from 1 = “never over the past month” to 5 = “6 or more times over the past month”.

Control variables. Prior to testing the hypotheses, we controlled for several variables which could, in theory, be related to the substantive variables. The control variables were employee sex, age, tenure with the supervisor, negative affectivity, job satisfaction, and organizational commitment. Sex was coded as follows: 1 = male, 2 = female. Age was coded as follows: 18–25 = 1, 26–35 = 2, 36–45 = 3, 46–55 = 4, 56–65 = 5, and over 65 = 6. The measure of tenure asked respondents to report how many years that they had worked for their employer. We measured negative affectivity using the appropriate ten items from Watson, Clark, and Tellegen’s (1988) PANAS scales. This measure asks respondents to use a five-point scale, which ranges from 1 = not at all to 5 = extremely, to report how often they generally experience ten emotional states comprising the negative affectivity content domain (e.g., distressed, upset, afraid, and jittery). We measured job satisfaction using three items (“In general, I like my job”, “I am satisfied with my job”, and “All in all, I like working at my job”) and we measured organizational commitment using Meyer, Allen, and Smith’s (1993) six-item affective commitment scale (e.g., “I really feel as if my organization’s problems are my own”). For both of these measures the respondents reported their level of agreement with each item using a 5-point scale that ranged from 1 = “strongly disagree” to 5 = “strongly agree”. We also controlled for sample by creating two dummy-coded variables: Sample 1 (coded such that 1 = member of sample 1 and 0 = member of sample 2 or sample 3) and Sample 2 (coded such that 1 = member of sample 2 and 0 = member of sample 1 or sample 3).

Results and discussion

Confirmatory factor analysis results

We examined responses to the survey items using confirmatory factor analysis. A seven-factor model, in which the items that were designed to measure abusive supervision, intention to quit, negative affectivity, job satisfaction, organizational commitment, organization deviance, and supervisor-directed deviance loaded on separate correlated factors had a significant chi-square test $\chi^2(758) = 3527.23, p < .01$, but otherwise exhibited good fit (CFI = .95, RMSEA = .06; Hu & Bentler, 1999). Moreover, the seven-factor model’s standardized loadings were strong and significant, ranging from .40 to .94 (all $p < .01$). We compared the hypothesized measurement model to a one-factor model in which all the items loaded on a common factor ($\chi^2 [779] = 14215.52, p < .01, CFI = .78, RMSEA = .18$) and a six-factor model which was specified the same as the seven-factor model except that the organization deviance and supervisor-directed deviance items loaded

on the same factor ($\chi^2 [764] = 3683.87, p < .01, CFI = .94, RMSEA = .07$). The seven-factor model fit the data better than the one-factor model ($\Delta\chi^2 [21] = 10688.29, p < .01$) and the six-factor model ($\Delta\chi^2 [6] = 156.64, p < .01$), which suggests that the hypothesized model fit the data better than the alternatives (Schumacker & Lomax, 1996).

We further assessed the items’ discriminant validity following the procedures described by Fornell and Larcker (1981). The average variance extracted ranged from .62 to .89 and averaged .75, which suggests that for each construct the explained variance exceeded the amount of measurement error associated with that construct’s items. Moreover, the average variance extracted for any given pair of constructs exceeded the squared correlation between them, suggesting that the measures capture distinct constructs. We therefore averaged the appropriate item scores to form total scores for abusive supervision, intention to quit, negative affectivity, job satisfaction, organizational commitment, organization deviance, and supervisor-directed deviance.

Descriptive statistics

Table 1 shows descriptive statistics and inter-correlations for the study variables. There was evidence of sample differences on the control variables and the substantive variables. The variable, Sample 1, correlated negatively with age ($r = -.54, p < .01$), job satisfaction ($r = -.16, p < .01$), and commitment ($r = -.29, p < .01$), and positively with intention to quit ($r = .28, p < .01$), organization deviance ($r = .33, p < .01$), and supervisor-directed deviance ($r = .20, p < .01$). The signs on these correlations suggest that, compared to the respondents from Samples 2 and 3 combined, Sample 1 respondents reported lower levels of age, tenure, job satisfaction, and organizational commitment, and higher levels of intention to quit, organization deviance, and supervisor-directed deviance. Table 1 also shows that Sample 2 correlated positively with sex ($r = .14, p < .01$), age ($r = .30, p < .01$), tenure with the supervisor ($r = .08, p < .05$), job satisfaction ($r = .07, p < .05$), and organizational commitment ($r = .32, p < .01$), and negatively with intention to quit ($r = -.19, p < .01$), organization deviance ($r = -.25, p < .01$), and supervisor-directed deviance ($r = -.12, p < .01$). These correlations suggest that the proportion of women, age, tenure with the supervisor, job satisfaction, and organizational commitment were higher in Sample 2 compared to Samples 1 and 3 combined, and that intention to quit and the two forms of workplace deviance were lower in Sample 2 compared to Samples 1 and 3 combined.

Hypothesis tests

We tested the hypotheses by regressing workplace deviance scores on the control variables (Step 1), the main effects of abusive supervision and intention to quit (Step 2), and an interaction term

Table 1
Descriptive statistics and variable inter-correlations for Study 1.

	M	S	1	2	3	4	5	6	7	8	9	10	11	12
1. Sample 1	.62	.49												
2. Sample 2	.23	.42	-.69**											
3. Sex	1.47	.50	-.07	.14**										
4. Age	2.24	1.26	-.54**	.30**	.12**									
5. Tenure with supervisor	4.12	5.23	-.01	.08*	.11**	.42**								
6. Negative affectivity	2.00	.71	.03	.00	-.03	-.04	.00	(.85)						
7. Job satisfaction	3.76	.95	-.16**	.07*	.12**	.16**	.04	-.22**	(.91)					
8. Commitment	3.18	.95	-.29**	.32**	.17**	.27**	.13**	-.11**	.56**	(.89)				
9. Abusive supervision	1.36	.70	.00	.07	-.11**	-.09*	.02	.32**	-.30**	-.17**	(.90)			
10. Intention to quit	2.61	1.11	.28**	-.19**	-.13**	-.29**	-.14**	.15**	-.56**	-.48**	.18**	(.85)		
11. Organization deviance	1.50	.60	.33**	-.25**	-.17**	-.31**	-.07	.23**	-.40**	-.36**	.36**	.37**	(.87)	
12. Sup-directed deviance	1.34	.67	.20**	-.12**	-.14**	-.19**	-.05	.23**	-.31**	-.24**	.44**	.29**	.70**	(.79)

N = 797. Sample 1 is coded such that membership in Sample 1 = 1 and membership in Samples 2 and 3 = 0; Sample 2 is coded such that membership in Sample 2 = 1 and membership in Samples 1 and 3 = 0. Alpha coefficients appear on the main diagonal.

* $p < .05$.
** $p < .01$.

consisting of the abusive supervision x intention to quit cross-product (Step 3). We centered the predictors prior to forming the interaction term. The regression results for organization deviance and for supervisor-directed deviance appear in Tables 2 and 3, respectively. The control variables explained 28% of the variance in organization deviance [$F(8788) = 39.29, p < .01$] and 16% of the variance in supervisor-directed deviance [$F(8788) = 18.69, p < .01$]. For organization deviance, zero did not fall within the 95% confidence interval associated with Sample 1 ($b = .16, p < .01$), sex ($b = -.10, p < .01$), age ($b = -.07, p < .01$), negative affectivity ($b = .12, p < .01$), job satisfaction ($b = -.16, p < .01$), and organizational commitment ($b = -.06, p < .05$). The corresponding beta weights suggest that organization deviance was higher when the employee was a member of Sample 1 (rather than Samples 2 or 3), male, younger, higher in negative affectivity, lower in job satisfaction, and lower in organizational commitment. For supervisor-directed deviance, the 95% confidence intervals associated with Sample 1 ($b = .18, p < .01$), sex ($b = -.12, p < .05$), negative affectiv-

ity ($b = .16, p < .01$), and job satisfaction ($b = -.15, p < .01$), did not contain zero and the signs on the corresponding beta weights suggest that supervisor-directed deviance was higher when the employee was a member of Sample 1 (rather than Samples 2 or 3), male, higher in negative affectivity, and lower in job satisfaction.

At Step 2, the main effects of abusive supervision and intention to quit explained an additional 6% of the variance in organization deviance [$\Delta F(2786) = 31.53, p < .01$] and 12% of the variance in supervisor-directed deviance [$\Delta F(2786) = 63.54, p < .01$]. For both dependent variables, zero did not fall within the 95% confidence intervals associated with abusive supervision ($b = .20, p < .01$ for organization deviance; $b = .35, p < .01$ for supervisor-directed deviance) or intention to quit ($b = .06, p < .01$, for both forms of deviance). The signs on the beta weights suggest that abusive supervision and intention to quit were positively related to organization deviance and supervisor-directed deviance.

At Step 3, the abusive supervision x intention to quit cross-product explained an additional 4% of the variance in organization deviance [$\Delta F(1785) = 52.52, b = .15, p < .01$] and supervisor-directed deviance [$\Delta F(1785) = 45.34, b = .16, p < .01$]. We plotted the interactions and tested the significance of the simple slopes (at higher and lower levels of intention to quit) following the procedures described by Aiken and West (1991). As predicted in Hypothesis 1 and depicted in Fig. 1, abusive supervision was more strongly related to subordinates' organization deviance when intention to quit was higher ($b = .31, CI_{.95} [.19, .42], p < .01$) compared to when intention to quit was lower ($b = -.01, CI_{.95} [-.10, .09], p < .01$). As predicted in Hypothesis 2 and depicted in Fig. 2, abusive supervision was more strongly related to supervisor-directed deviance when intention to quit was higher ($b = .47, CI_{.95} [.34, .58], p < .01$) compared to when intention to quit was lower ($b = .12, CI_{.95} [.01, .23], p < .01$).

We tested Hypothesis 3 by comparing the simple slopes representing the relationships between (a) abusive supervision and organization deviance and (b) abusive supervision and supervisor-directed deviance when intention to quit was higher. To evaluate the difference between these simple slopes we constructed bias-corrected confidence intervals using the estimates from 1000 bootstrapped samples (Mooney & Duval, 1993). Bootstrapping is the preferred approach to constructing confidence intervals when an underlying distribution is non-normal, which occurs when distributions are derived from product terms (e.g., the interaction terms that are used to calculate and plot the simple slopes associated with moderated regression). The results of this analysis, shown in Table 4, reveal that when intention to quit was higher,

Table 2
Regression results for organization deviance in Study 1.

Predictor	Step 1 <i>b</i> (95% CI)	Step 2 <i>b</i> (95% CI)	Step 3 <i>b</i> (95% CI)
Sample 1	.16 (.03, .28)**	.15 (.04, .27)**	.14 (.02, .25)*
Sample 2	-.08 (-.20, .04)	-.11 (-.23, .01)	-.09 (-.21, .03)
Sex	-.10 (-.18, -.03)**	-.08 (-.15, -.01)*	-.09 (-.16, -.02)*
Age	-.07 (-.11, -.04)**	-.06 (-.10, -.02)**	-.06 (-.10, -.02)**
Tenure with supervisor	.00 (.00, .01)	.00 (-.01, .01)	.00 (.00, .01)
Negative affectivity	.12 (.07, .18)**	.07 (.02, .12)*	.07 (.02, .12)**
Job satisfaction	-.16 (-.21, -.12)**	-.10 (-.15, -.05)**	-.10 (-.14, -.05)**
Commitment	-.06 (-.11, -.01)*	-.04 (-.09, .01)	-.04 (-.09, .01)
Abusive supervision		.20 (.15, .26)**	.15 (.10, .21)**
Intention to quit		.06 (.02, .10)**	.06 (.02, .10)**
Abusive supervision x intention to quit			.15 (.11, .19)**
Equation <i>F</i>	$F(8788) = 39.29^{**}$	$F(10,786) = 40.18^{**}$	$F(11,785) = 43.69^{**}$
Equation R^2	.28**	.34**	.38**
R^2 change	.28**	.06**	.04**

N = 797. Tabled values are unstandardized beta weights and 95% confidence intervals.
* $p < .05$.
** $p < .01$.

Table 3
Regression results for supervisor-directed deviance in Study 1.

Predictor	Step 1 <i>b</i> (95% CI)	Step 2 <i>b</i> (95% CI)	Step 3 <i>b</i> (95% CI)
Sample 1	.18 (.03, .32)**	.18 (.04, .32)**	.16 (.03, .29)**
Sample 2	.04 (-.11, .19)	-.02 (-.16, .12)	.01 (-.13, .15)
Sex	-.12 (-.21, -.03)*	-.07 (-.16, .01)	-.08 (-.17, -.01)*
Age	-.03 (-.08, .02)	-.00 (-.05, .04)	-.01 (-.05, .04)
Tenure with supervisor	.00 (-.01, .01)	.00 (-.01, .01)	.00 (-.01, .01)
Negative affectivity	.16 (.10, .22)**	.06 (.01, .12)*	.06 (.01, .12)*
Job satisfaction	-.15 (-.20, -.09)**	-.06 (-.12, .00)	-.05 (-.11, .00)
Commitment	-.03 (-.09, .03)	-.01 (-.07, .04)	-.01 (-.07, .04)
Abusive supervision		.35 (.29, .41)**	.30 (.23, .36)**
Intention to quit		.06 (.02, .11)**	.07 (.02, .11)**
Abusive supervision x intention to quit			.16 (.11, .21)**
Equation <i>F</i>	$F(8788) = 18.69^{**}$	$F(10,786) = 30.04^{**}$	$F(11,785) = 32.97^{**}$
Equation R^2	.16**	.28**	.32**
R^2 change	.16**	.12**	.04**

N = 797. Tabled values are unstandardized beta weights and 95% confidence intervals.
* $p < .05$.
** $p < .01$.

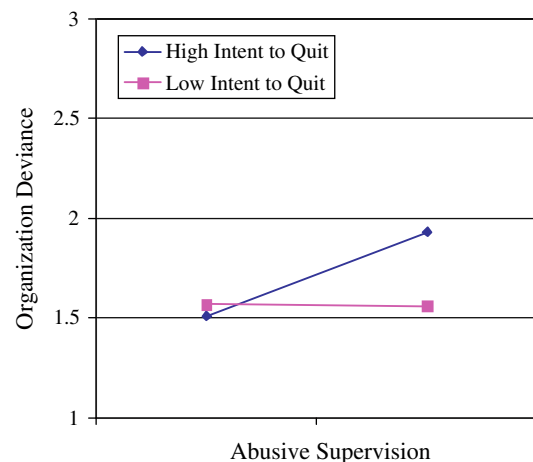


Fig. 1. Interaction between abusive supervision and intent to quit on employees' organization deviance in Study 1.

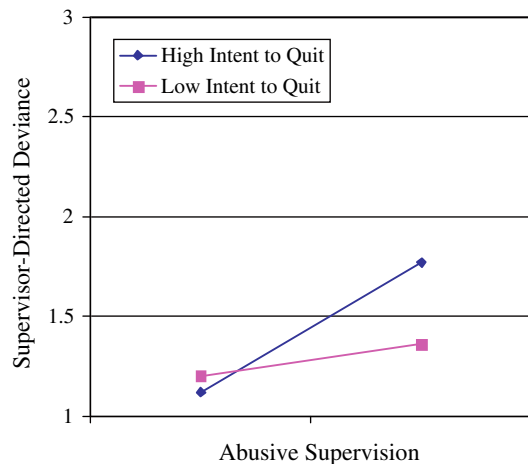


Fig. 2. Interaction between abusive supervision and intent to quit on employees' supervisor-directed deviance in Study 1.

Table 4

Comparison of the effects of abusive supervision on organization- and supervisor-directed deviance at high and low levels of intention to quit in Studies 1 and 2.

	Organization deviance	Supervisor-directed deviance	<i>d</i>
<i>Study 1</i>			
High intent to quit	.31 (.19, .41)**	.47 (.33, .60)**	.16 (.01, .33)**
Low intent to quit	-.01 (-.09, .09)	.12 (.01, .26)**	.13 (.05, .24)**
<i>Study 2</i>			
High intent to quit	.22 (.09, .33)**	.42 (.28, .57)**	.20 (.01, .35)**
Low intent to quit	.04 (-.09, .15)	.25 (.10, .40)**	.21 (.05, .38)**

Tabled values are simple slopes and 95% bias-corrected confidence intervals. *d* refers to the difference in the magnitude of the simple slopes for organization deviance and supervisor-directed deviance (within levels of intention to quit).

** $p < .01$.

the difference between the effect of abusive supervision on organization deviance ($b = .31$) and the effect of abusive supervision on supervisor-directed deviance ($b = .47$) was significant ($d = .16$, $CI_{.95} [.01, .33]$, $p < .01$). Hence, consistent with Hypothesis 3, when intention to quit was higher, abusive supervision was more strongly related to supervisor-directed deviance than to organization deviance. Table 4 also shows that when intention to quit was lower, the difference between the effect of abusive supervision on organization deviance ($b = -.01$) and the effect of abusive supervision on supervisor-directed deviance ($b = .12$) was significant ($d = .13$, $CI_{.95} [.05, .24]$, $p < .01$). Hence, when intention to quit was lower, abusive supervision was also more strongly related to supervisor-directed deviance than to organization deviance.

We conducted supplemental analyses in order to determine whether the moderated effects of intention to quit varied by sample. To explore these possibilities we created interaction terms consisting of cross-products between the dummy-coded sample variables and abusive supervision, intention to quit, and abusive supervision \times intention to quit. We then entered the four, two-way interaction terms (i.e., Sample 1 \times abusive supervision, Sample 2 \times abusive supervision, Sample 1 \times intention to quit, and Sample 2 \times intention to quit) in a fourth regression step, and we entered the two three-way interaction terms (i.e., Sample 1 \times abusive supervision \times intention to quit and Sample 2 \times abusive supervision \times intention to quit) in a fifth regression step. At Steps 4 and 5 there was no change in the variance explained by the model. Hence, there is no evidence of sample variation associated with the main effects of abusive supervision and intention to quit or the moderating effects of intention to quit.

Although Study 1 results provided support for our hypotheses, the use of a cross-sectional research design is a limitation of the work. We therefore conducted a second study that involved time separated measurement of our substantive predictors (i.e., abusive supervision and intention to quit) and dependent variables (i.e., organization- and supervisor-directed deviance).

Study 2

Method

Sample and procedure

To collect the data for Study 2 we used StudyResponse, a non-profit academic research center at Syracuse University that manages a panel of online participants for research projects initiated by academics at institutions around the world. Benefits associated with the service include the ability to maintain complete anonymity of panelists' identities and the use of strict Institutional Review Board protocols. Recent organization research has demonstrated the efficacy of using the StudyResponse service as a reliable means of collecting data (e.g., Judge, Ilies, & Scott, 2006; Piccolo & Colquitt, 2006). As of December, 2007, the panel consisted of 57,682 people who were registered for participation.

The first phase of data collection involved pre-screening in which a random sample of 8000 panelists were contacted by email and asked whether they were currently supervised at work and whether they would be interested in participating in a study of supervised working people. They were also told that panelists who participated would be entered in a lottery to receive 10 cash prizes. The results of the pre-screen yielded an initial sample of 949 people who met the participation criteria and who were directed to a website that housed the Time 1 survey. Panelists who did not respond to the Time 1 survey after one week were sent a reminder email. This data collection process produced useable responses from 537 panelists. Three weeks later, panelists who participated at Time 1 were sent an email inviting them to complete a second survey. Reminder emails were sent to those who did not respond after one week. In total, 356 people provided useable data at both Time periods. This comes to 4.5% (356/8000) of those who were initially contacted and 37.5% (356/949) of those who were both eligible for the study and interested in participating. The three week time lag allowed us to examine time-separated effects of abusive supervision on subordinates' workplace deviance while minimizing the number of respondents that might be lost due to attrition; longer lags can reduce the number of useable Time 2 responses particularly among subordinates whose supervisors are more abusive (Tepper, 2000).

Sixty-five percent of the sample was female and the average age was 45 years. Eighteen percent of the sample was employed in service and 18% in education, and 14%, 12%, and 5% were employed in government, manufacturing and retail, respectively. The remaining 33% were employed in small businesses and other. Thirty-six percent of the sample had been employed in their current position for more than 11 years, 66% had been employed for between 2 and 10 years, and 8% for 1 year or less.

Measures

At Time 1, the participants completed measures of abusive supervision and intention to quit; at Time 2 they completed measures of organization and supervisor-directed deviance. Unless otherwise indicated, participants employed a seven-point response format to report their level of agreement with each item: 1 = "very strongly disagree" to 7 = "very strongly agree".

Abusive supervision and Intention to quit. At Time 1, the respondents in Study 2 completed Tepper's (2000) 15-item abusive

supervision scale and the same three-item measure of intention to quit that was used in Study 1.

Workplace deviance. At Time 2, we measured organization and supervisor-directed deviance using items taken from Skarlicki and Folger's (1997) measure of organizational retaliation behavior and Bennett and Robinson's (2000) measure of workplace deviance. The resulting instrument consisted of eight items that reference deviance directed against one's employer (e.g., "taken an extended coffee break or lunch", "spoken poorly about the company to others", "taking supplies home without permission", "spending time on personal matters at work", "intentionally worked slower", "purposely damaging equipment or supplies", "deliberately wasting company supplies", and "trying to look busy while wasting time") and eleven items that capture deviant behavior directed against one's immediate supervisor ("giving my supervisor the silent treatment", "gossiping about my supervisor", "leaving the work area when my supervisor enters", "disobeying my supervisor's instructions", "belittling my supervisor's opinions to others", "acting in a condescending way toward my supervisor", "interrupting my supervisor when he/she is speaking", "talking back to my supervisor", "failing to return calls, etc. from my supervisor", "showing up late for meetings run by my supervisor", "interfering with or blocking my supervisor's work"). The instrument that we used in Study 2 allowed us to examine a broader range of supervisor-directed deviance behaviors compared to the measure that we used in Study 1 (which consisted of 3 items). Respondents reported the frequency with which they performed each behavior in the previous month using a seven point scale that ranged from 1 = "never over the past month" to 7 = "daily".

Control variables. As in Study 1, we controlled for the effects of employee sex, age, tenure with the supervisor, job satisfaction, and organizational commitment. Although we were unable to control for negative affectivity in Study 2, we were able to control for employees' core self-evaluations, a broad personality trait that captures the fundamental appraisal people make of their own worthiness and capability (Judge, Locke, & Durham, 1997). Core self-evaluations consist of four core traits, self-esteem (i.e., the overall value that one places oneself as a person), generalized self-efficacy (i.e., the evaluation of how well one is able to perform across situations), locus of control (i.e., beliefs about the extent to which events in one's life are caused by factors internal or external to the person), and neuroticism (i.e., the tendency to focus on the negative aspects of oneself and the environment), each of which have been linked with the pessimistic causal reasoning processes that produce workplace deviance (Martinko, Douglas, Harvey, & Gundlach, 2007). In a study of individuals' reactions to an anticipated layoff, Blau (2007) found that employees' core self-evaluations were negatively related to organization deviance (he did not examine the link between core self-evaluations and supervisor-directed deviance). We measured core self-evaluations at Time 1 using Judge, Erez, Bono, and Thoresen's (2003) twelve-item scale. Illustrative items are: "I am confident I get the success I deserve in life" and "I am filled with doubts about my competence" (reverse-scored). Sex was coded as follows: 1 = male, 2 = female. Age was coded as follows: 18–25 = 1, 26–35 = 2, 36–45 = 3, 46–55 = 4, 56–65 = 5, and over 65 = 6. The measure of tenure with the supervisor asked respondents to report how many years that they had worked for their immediate supervisor. At Time 2, the respondents completed the same job satisfaction and organizational commitment scales that were used in Study 1.

Results and discussion

Confirmatory factor analysis results

As in Study 1 we assessed responses to the survey items using confirmatory factor analysis. A seven-factor model, in which the

items that were designed to measure abusive supervision, intention to quit, core self-evaluations, job satisfaction, organizational commitment, organization deviance, and supervisor-directed deviance loaded on separate correlated factors exhibited adequate fit: $\chi^2(1574) = 6424.00, p < .01, CFI = .95, RMSEA = .10$. The seven-factor model's standardized loadings were significant, ranging from .40 to .95 (all $p < .01$). We again compared the hypothesized measurement model to a one-factor model in which all the items loaded on a common factor ($\chi^2[1595] = 17676.74, p < .01, CFI = .80, RMSEA = .24$) and a six-factor model which was specified the same as the seven-factor model except that the organization deviance and supervisor-directed deviance items loaded on the same factor ($\chi^2[1580] = 6575.32, p < .01, CFI = .94, RMSEA = .11$). The seven-factor model fit the data better than the one-factor model ($\Delta\chi^2[21] = 11252.74, p < .01$) and the six-factor model ($\Delta\chi^2[6] = 151.32, p < .01$), which suggests that the hypothesized model fit the data better than the alternatives (Schumacker & Lomax, 1996).

Further analyses provided support for the items' discriminant validity (Fornell & Larcker, 1981). The average variance extracted ranged from .63 to .95 and averaged .81, which suggests that for each construct the explained variance exceeded the level of measurement error. In addition, the average variance extracted for any given pair of constructs exceeded the squared correlation between them, which suggests that the measures capture distinct constructs. We therefore averaged the appropriate item scores to form total scores for abusive supervision, intention to quit, core self-evaluations, job satisfaction, organizational commitment, organization deviance, and supervisor-directed deviance.

Descriptive statistics

Table 5 shows descriptive statistics and inter-correlations for the study variables.

Hypothesis tests

We tested the hypotheses using the same procedures that we used in Study 1. Tables 6 and 7 present the regression results for organization deviance and supervisor-directed deviance, respectively. The control variables explained 19% of the variance in organization deviance [$F(6349) = 13.69, p < .01$] and 12% of the variance in supervisor-directed deviance [$F(6349) = 8.05, p < .01$]. For organization deviance, zero did not fall within the 95% confidence interval associated with age ($b = -.03, p < .01$), tenure with the supervisor ($b = .04, p < .01$), and core self-evaluations ($b = -.25, p < .01$). The corresponding beta weights suggest that organization deviance was higher when subordinates were older, had longer tenure with their supervisor, and had lower core self-evaluations. For supervisor-directed deviance, the 95% confidence intervals associated with sex ($b = -.39, p < .01$), age ($b = -.02, p < .01$), tenure with the supervisor ($b = .03, p < .05$), and core self-evaluations ($b = -.27, p < .01$), did not contain zero and the signs on the corresponding beta weights suggest that supervisor-directed deviance was higher when the employee was male, younger, had longer tenure with the supervisor, and had lower core self-evaluations.

At Step 2, the main effects of abusive supervision and intention to quit explained an additional 9% of the variance in organization deviance [$\Delta F(2347) = 20.48, p < .01$] and 27% of the variance in supervisor-directed deviance [$\Delta F(2347) = 77.89, p < .01$]. For both dependent variables, the 95% confidence intervals associated with abusive supervision and intention to quit did not contain zero. The signs on the beta weights suggest that abusive supervision and intention to quit were positively related to organization deviance and supervisor-directed deviance.

At Step 3, the abusive supervision \times intention to quit cross-product explained an additional 1% of the variance in both organization deviance [$\Delta F(1346) = 5.62, p < .05$] and supervisor-directed

Table 5
Descriptive statistics and variable inter-correlations for Study 2.

	M	S	1	2	3	4	5	6	7	8	9	10
1. Sex	1.67	.47										
2. Age	39.94	9.92	-.16*									
3. Tenure with supervisor	3.76	3.99	-.08	.30**								
4. Core self-evaluations	4.89	.87	-.01	.18**	.10	(.87)						
5. Job satisfaction	5.32	1.31	.14**	.03	.04	.43**	(.96)					
6. Commitment	4.51	1.57	.04	.07	.16**	.33**	.74**	(.95)				
7. Abusive supervision	2.06	1.42	-.08	-.09	.08	-.21**	-.24**	-.19**	(.97)			
8. Intention to quit	2.79	1.92	-.14**	-.15**	.01	-.21**	-.51**	-.49**	.37**	(.96)		
9. Organization deviance	2.27	1.04	-.03	-.31**	.01	-.30**	-.21**	-.21**	.36**	.33**	(.84)	
10. Supervisor-directed deviance	1.70	1.09	-.16**	-.14**	.07	-.25**	-.17**	-.10	.58**	.34**	.76**	(.94)

N = 356. Core self-evaluations, abusive supervision, and intention to quit were measured at Time 1. Job satisfaction, organizational commitment, organization deviance, and supervisor-directed deviance were measured at Time 2. Alpha internal consistency reliability coefficients appear in parentheses along the main diagonal.

* $p < .05$.
** $p < .01$.

Table 6
Regression Results for organization deviance in Study 2.

Predictor	Step 1 <i>b</i> (95% CI)	Step 2 <i>b</i> (95% CI)	Step 3 <i>b</i> (95% CI)
Sex	-.14 (-.36, .07)	-.07 (-.27, .14)	-.04 (-.25, .17)
Age	-.03 (-.04, -.02)**	-.03 (-.04, -.02)**	-.03 (-.04, -.02)**
Tenure with supervisor	.04 (.01, .06)**	.02 (.00, .04)	.03 (.00, .05)
Core self-evaluations	-.25 (-.38, -.12)**	-.22 (-.35, -.10)**	-.23 (-.36, -.11)**
Job satisfaction	.00 (-.12, .12)	.06 (-.05, .18)	.05 (-.07, .16)
Commitment	-.09 (-.18, .01)	-.05 (-.14, .05)	-.05 (-.14, .04)
Abusive supervision		.17 (.10, .25)**	.13 (.05, .21)**
Intention to quit		.09 (.03, .15)**	.09 (.03, .15)**
Abusive supervision × intention to quit			.05 (.01, .08)*
Equation <i>F</i>	<i>F</i> (6349) = 13.69**	<i>F</i> (8347) = 16.53**	<i>F</i> (9346) = 15.51**
Equation <i>R</i> ²	.19**	.28**	.29**
<i>R</i> ² change	.19**	.09**	.01*

N = 356. Tabled values are unstandardized beta weights and 95% confidence intervals.

* $p < .05$.
** $p < .01$.

deviance [$\Delta F(1346) = 5.92, p < .05$]. Figs. 3 and 4 show the interaction plots for organization deviance and supervisor-directed deviance, respectively. As was the case with Study 1, the form of the interactions was consistent with our hypotheses. As predicted in Hypothesis 1, abusive supervision was more strongly related to organization deviance when intention to quit was higher ($b = .22, 95\% \text{ CI } [.09, .33], p < .01$) compared to when intention to quit was

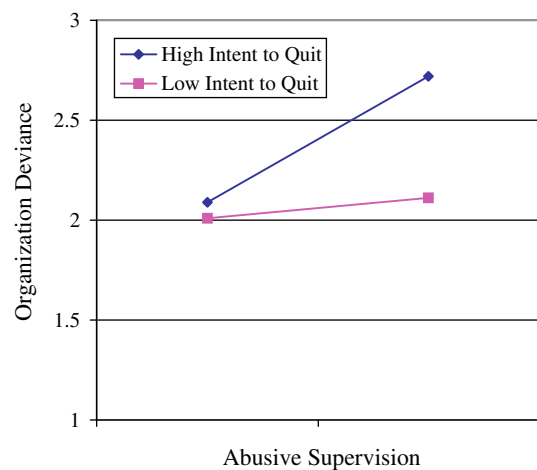


Fig. 3. Interaction between abusive supervision and intent to quit on employees' organization deviance in Study 2.

lower ($b = .04, 95\% \text{ CI } [-.09, .15], n.s.$). As predicted in Hypothesis 2, abusive supervision was more strongly related to supervisor-directed deviance when intention to quit was higher ($b = .42, 95\% \text{ CI } [.28, .57], p < .01$) compared to when intention to quit was lower ($b = .25, 95\% \text{ CI } [.10, .40], p < .01$).

As in Study 1, we bootstrapped 1000 samples in order to construct bias-corrected confidence intervals for the test of Hypothesis 3. The 95% confidence interval for the difference between the effect

Table 7
Regression results for supervisor-directed deviance in Study 2.

Predictor	Step 1 <i>b</i> (95% CI)	Step 2 <i>b</i> (95% CI)	Step 3 <i>b</i> (95% CI)
Sex	-.39 (-.62, -.15)**	-.27 (-.47, -.08)**	-.25 (-.44, -.05)*
Age	-.02 (-.03, -.01)**	-.01 (-.02, .00)	-.01 (-.02, .00)
Tenure with supervisor	.03 (.01, .06)*	.01 (-.01, .04)	.01 (-.01, .04)
Core self-evaluations	-.27 (-.41, -.13)**	-.20 (-.31, -.08)**	-.21 (-.32, -.09)**
Job satisfaction	-.06 (-.19, .08)	.04 (-.07, .16)	.03 (-.09, .14)
Commitment	.01 (-.09, .12)	.06 (-.03, .15)	.06 (-.03, .15)
Abusive supervision		.38 (.31, .45)**	.34 (.26, .41)**
Intention to quit		.10 (.04, .16)**	.09 (.03, .15)**
Abusive supervision × intention to quit			.04 (.01, .08)*
Equation <i>F</i>	<i>F</i> (6349) = 8.05**	<i>F</i> (8347) = 28.17**	<i>F</i> (9346) = 26.05**
Equation <i>R</i> ²	.12**	.39**	.40**
<i>R</i> ² change	.12**	.27**	.01*

N = 356. Tabled values are unstandardized beta weights and 95% confidence intervals.

* $p < .05$.
** $p < .01$.

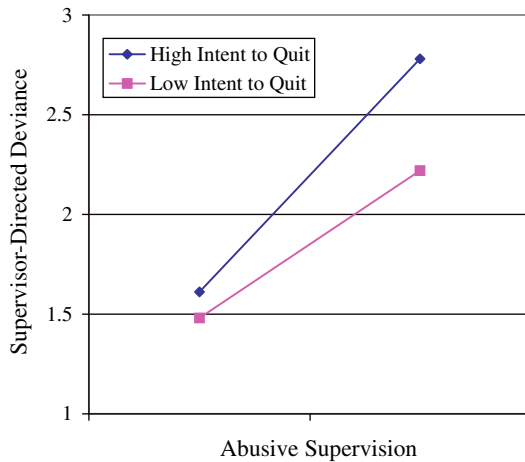


Fig. 4. Interaction between abusive supervision and intent to quit on employees' supervisor-directed deviance in Study 2.

of abusive supervision on organization deviance and supervisor-directed deviance ($d = .20, p < .01$) did not contain zero (.01, .35). Hence, consistent with Hypothesis 3, when intention to quit was higher, abusive supervision was more strongly related to supervisor-directed deviance than organization deviance. Similar to what we found in Study 1, the 95% confidence interval for the corresponding comparison at lower levels of intention to quit ($d = .21, p < .01$) did not contain zero (.05, .38). Hence, as in Study 1, when intention to quit was lower, abusive supervision was more strongly related to supervisor-directed deviance than organization deviance.

We retested the hypotheses using Mitchell and Ambrose's (2007) shortened version of Tepper's (2000) abusive supervision scale (i.e., the version that we used in Study 1). The results were unchanged when we eliminated the ten items from Tepper's scale that Mitchell and Ambrose (2007) did not use.

General discussion

In several studies, abusive supervision has been linked with subordinates' workplace deviance. Our aim was to bring this work in line with evidence from the revenge and retaliation literature which suggests that targets of hierarchical mistreatment refrain from responding with deviant acts. Drawing on power/dependence theory (Emerson, 1972), we attempted to address this research agenda by exploring subordinates' intention to quit as a moderator of the relationship between abusive supervision and subordinates' workplace deviance.

As theorized, we found that when subordinates' intention to quit was higher rather than lower abusive supervision was more strongly associated with deviance directed at the organization and at the supervisor. These effects emerged in a cross-sectional study of employees from three different industries and in a two-wave study of employees representing a broad range of occupations and industries. We reason that subordinates' power disadvantage is diminished when they have higher intentions to quit because they are less dependent on their supervisor and organization for the rewards they provide. This, in turn, affords abused subordinates the capacity to act in ways that satisfy their self-interests, including executing acts of revenge for perceived mistreatment. We do not mean to imply that those who intend to quit have no dependence on their current employer and therefore perceive no costs whatsoever to performing deviant behaviors. There may be costs to workplace deviance that transcend one's current working arrangement such as feelings of guilt (Tangney & Dearing, 2003), and it is

conceivable that a person could damage their reputation and future job prospects if their history of workplace deviance were to become public. Hence, even for subordinates who have strong intentions to quit, there may remain important dependencies that constrain their ability to execute acts of workplace deviance with impunity. Still, it is reasonable to conclude that those who have higher intentions to quit believe that they have less to lose by performing workplace deviance compared to those who do not intend to quit.

Although the conceptual link between intention to quit and power/dependence has not been proposed in previous research, Thau, Bennett, Stahlberg, and Werner (2004) invoked a similar framework to explore the effects of perceived job alternatives and the attractiveness of those alternatives as predictors of employees' organizational citizenship behavior. As the researchers predicted, employees performed fewer OCBs when they perceived greater ease in finding alternative employment and when they rated their employment alternatives to be more attractive. Thau et al. argued that employees' dependence decreases (and their power increases) when they have attractive alternative job prospects and that higher power employees feel freer to withdraw cooperative behaviors such as OCBs. We take the position that, as a proxy for employees' perceived power to express resentment through workplace deviance, intention to quit should be at least as useful as having attractive alternative employment possibilities. This is because even employees who have attractive employment alternatives may see themselves as relatively dependent on their current job if they have not yet leveraged those job prospects (i.e., they have yet to formulate strong intentions to quit).

We also found that when intention to quit was higher, abusive supervision was more strongly related to supervisor-directed deviance than to organization deviance. These results are consistent with the argument that the power advantage afforded subordinates who have stronger intentions to quit evokes freedom to choose how they wish to retaliate for perceived supervisor mistreatment. The behavioral disinhibition afforded high intention to quit subordinates translates into a stronger link with more direct forms of retaliation (supervisor-directed deviance) than with less direct forms of retaliation (organization deviance). Interestingly, however, we found that when intention to quit was lower, abusive supervision was also more strongly related to supervisor-directed deviance than to organization deviance. Indeed, for low intention to quit subordinates, abusive supervision was unrelated to organization deviance and positively related to supervisor-directed deviance in both studies. These results suggest that abused subordinates who have lower intentions to quit may be discouraged from performing acts of deviance against their employer, but that it does not discourage them from performing acts of deviance against their supervisor. That is, even when abused subordinates are dependent and have less power (i.e., when intention to quit is low), they may nevertheless perform acts of deviance against their supervisor, although not as much as their abused/high intention to quit counterparts.

What explains the results for low intentions to quit? Tripp et al. (2002) argue that failing to take revenge against a perpetrator may be viewed as aesthetically unappealing as taking revenge in an inappropriate fashion (e.g., performing retaliatory acts that are too severe or directed against innocent parties). As Tripp et al. put it, "in the eyes of business people, a person is seen in a negative light if he or she is unwilling to inflict proportional harm upon a harmdoer... if they will not stand up to workplace bullies, then they may not only bring more unjust, bullying behavior upon themselves, but also upon others" (p. 978). Abused subordinates who are unwilling to "give as good as they get" may be viewed negatively by others. An important implication of this is that even though abused subordinates who have low intentions to quit have relatively low power, they may nevertheless perform acts of

supervisor-directed deviance because doing so is normative and just. It is also important to note that physiological evidence suggests that retaliation is personally satisfying. Avenging perceived injustices activates the dorsal striatum, a region of the brain that is involved in enjoyment, and this effect occurs even when taking revenge may be personally costly (Knutson, 2004). Hence, it appears that at a physiological level, revenge may be “sweet” even when perpetrators have something to lose.

We turn now to practical implications, although we note at the outset that we must render our recommendations with some caution given that our studies were correlational and we therefore cannot empirically establish the temporal primacy of abusive supervision vis a vis subordinates’ workplace deviance. Still, it is fair to say that our findings are not heartening for organizations because they suggest that abused subordinates who are close to quitting may be particularly likely to perform acts of deviance. This complicates an already difficult problem – that of discouraging disgruntled and resentful employees from performing deviant acts. When it comes to discouraging workplace deviance on the part of those who intend to quit, many of the usual practical implications (e.g., punishing perpetrators) do not apply because these employees should not be threatened by the prospect of disciplinary consequences. In addition, our results suggest that even employees whose dependence makes them vulnerable to punishment (i.e., those who have lower intentions to quit) may not be discouraged from performing acts of supervisor-directed deviance when they are abused. It would appear then that the most efficacious response of top management should be to discourage the frequency of abusive supervision. We concur with Sutton’s (2007) position that organizational authorities should adopt a zero-tolerance policy when it comes to abusive supervision. Of course because abusive supervision is a perception, authorities should thoroughly investigate and substantiate charges of abuse prior to implementing disciplinary measures. There may also be value in training employees to respond constructively to hierarchical mistreatment rather than performing deviant acts. For example, recent empirical evidence suggests that expressive writing buffers the effects of perceived injustice on workers’ psychological distress and intentions to retaliate (Barclay & Skarlicki, 2009). Writing about injustice allows victims to safely confront their experiences and avail themselves of an emotional release (Barclay & Skarlicki, 2008) and may offer abused subordinates a constructive alternative to performing acts of deviance.

Study limitations

One limitation of our research is that in both studies, all data were collected from a common source. Consequently, we cannot completely rule out the possibility that common-method variance explains the findings. That said, we can argue that common-method variance is an unlikely explanation for our findings given the consistent evidence of interaction patterns that conformed to our predictions. As Evans (1985) has shown, common-method bias has the effect of decreasing the sensitivity of tests of moderation and therefore does not provide a compelling explanation for higher-order effects. In addition, common-method bias does not constitute a compelling explanation for relationships among variables that are collected at different points in time as was the case in Study 2 (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

A second limitation is that we did not measure or model employees’ perceptions of their power/dependency. Our argument that abused subordinates will perform workplace deviance with greater frequency when they intend to quit is predicated on the notion that those who intend to quit perceive themselves to be less dependent on their employer and supervisor and to have greater power to behave in ways that satisfy their self-interests (compared

to their low intention to quit counterparts). Consequently, self-perceived power/dependency constitutes an unmeasured mechanism in our work.

A limitation of Study 2 is that the useable response rate was low. In total 8000 people were initially contacted but the useable sample size was 355 after eliminating those who (a) did not respond within a two-week time frame, (b) responded but were ineligible to participate either because they did not have a job or did not have a supervisor when they were invited to join the study, (c) were eligible but declined to participate, (d) agreed to participate at Time 1 but did not follow through, (e) participated at Time 1 but did not participate at Time 2, and (f) participated at Time 1 and Time 2, but did not provide complete data. Still, it is a strength of our research that the hypothesized effects emerged in independent studies that made use of different methods and which involved respondents who collectively held a diverse portfolio of job duties. Given the difficulty of detecting moderating effects when conducting survey research (Aguinis, 1995), the consistent support for our interaction prediction across samples and methods suggests that our results are robust. As Sitkin (2007) recently argued, there is much to be gained by replicating findings “using the same measures and even the same design, but varying the population or one measure so we can better assess if seemingly important findings really hold up” (p. 846). Although Sitkin was lamenting the dearth of replication of previously published work, we echo his sentiment that there can be tremendous value in conducting multiple tests of the same phenomenon with independent samples.

A final limitation is that we were not able to control for employees’ perceptions of psychological contract breach. Previous work suggests that employees perform more acts of deviance when they perceive that their employer has not fulfilled its end of the psychological contract (Bordia, Restubog, & Tang, 2008). On the plus-side, our hypotheses were supported after statistically accounting for a battery of demographic, personality, and attitudinal control variables including job satisfaction, which may be a more immediate cause of workplace deviance compared to psychological contract breach (Turnley & Feldman, 2000).

Recommendations for future research

Research that addresses the limitations of our work is warranted. In addition, future research should explore other factors that speak to the role that subordinates’ power plays in the relationship between abusive supervision and subordinates’ workplace deviance. It is conceivable, for example, that employees’ personality may predict whether they redress mistreatment with deviance even when they are dependent on their job and supervisor. As examples, employees who are high in trait hostility (i.e., an enduring tendency to view others as sources of frustration and to be characteristically suspicious, cynical, and resentful; Guyll & Madon, 2003) or impulsivity (i.e., the dispositional tendency to act rashly in response to stress; Whiteside & Lynam, 2001) may perform acts of workplace deviance without carefully reflecting on the consequences that follow. Of relevance to the research reported here, it is conceivable that employees with these dispositional characteristics are willing to perform higher levels of organization and supervisor-directed deviance even when they do not intend to quit their jobs. That is, the form of the two-way interactions we uncovered may not hold for employees who are high in trait hostility or impulsivity.

It is also conceivable that the effects observed here vary across cultures. A cultural value that may be particularly relevant is power distance, which captures the extent to which hierarchical distinctions and the exploitative use of power are perceived to be acceptable (Hofstede, 2001). Tepper (2007) has 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 victims may therefore be less angered and outraged when they experience it. It is also possible that when employees in high power distance countries do experience outrage toward their boss they are less likely to express it through acts of workplace deviance because they are more dependent/have less relative power compared to employees in lower power distance countries. It would therefore be worthwhile to conduct cross-cultural studies that systematically compare the results from US samples with those from higher power distance cultures (e.g., Malaysia, Guatemala, Philippines) and lower power distance cultures (e.g., Israel, Denmark, New Zealand) to determine whether the results reported here generalize or are culture-bound.

A final recommendation for future research is to use the power/dependency framework to explore responses to abusive supervision besides workplace deviance. As we noted at the outset, the revenge/retaliation literature suggests that when targets of mistreatment have low power relative to the perpetrator they eschew acts of revenge and are more likely to engage in acts of reconciliation, forgiveness, and avoidance (Aquino et al., 2006). Although we found some evidence that abused subordinates who have low power nevertheless engage in acts of supervisor-directed deviance, power/dependency theory would predict that these subordinates prefer responses that are more conciliatory and less confrontational. Hence, a promising direction for future research involves exploring the notion that abusive supervision is more strongly associated with subordinates' reconciliation, forgiveness, and avoidance when their intention to quit is lower.

Conclusion

By taking into account issues of power/dependency, our examination of the relationship between abusive supervision and subordinates' workplace deviance brings the abusive supervision literature in line with recent work on revenge and retaliation in the workplace. There is clearly more work to be done in this area, but our research takes a much-needed step toward exploring the important role that subordinates' power plays in explaining responses to abusive supervision.

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