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SUFFERING IN SILENCE: INVESTIGATING THE ROLE OF FEAR IN THE RELATIONSHIP BETWEEN ABUSIVE SUPERVISION AND DEFENSIVE SILENCE

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ABSTRACT

Drawing from an approach-avoidance perspective, we examine the relationships between subordinates' perceptions of abusive supervision, fear, defensive silence, and ultimately abusive supervision at a later time point. We also account for the effects of subordinates' assertiveness and individual perceptions of a climate of fear on these predicted mediated relationships. We test this moderated mediation model with data from three studies involving different sources collected across various measurement periods. Results corroborated our predictions by showing:

1) a significant association between abusive supervision and subordinates' fear; 2) second-stage moderation effects of subordinates' assertiveness and their individual perceptions of a climate of fear in the abusive supervision–fear–defensive silence relationship (with lower assertiveness and higher levels of climate-of-fear perceptions exacerbating the detrimental effects of fear resulting from abusive supervision); and 3) first-stage moderation effects of subordinates' assertiveness and climate-of-fear perceptions in a model linking fear to defensive silence and abusive supervision at a later time. Theoretical and practical implications are discussed.

Keywords: Abusive Supervision, Anger, Assertiveness, Climate of Fear, Defensive Silence, Fear, Interpersonal Mistreatment, Workplace Victimization

SUFFERING IN SILENCE: INVESTIGATING THE ROLE OF FEAR IN THE RELATIONSHIP BETWEEN ABUSIVE SUPERVISION AND DEFENSIVE SILENCE

Abusive supervision — defined as sustained, hostile, non-physical behavior directed against subordinates (Tepper, 2000) — remains an ubiquitous problem in organizations (Kiewitz et al., 2012; Mitchell & Ambrose, 2012). A decade of research has shown that targets of supervisory hostility not only experience diminished organizational commitment, psychological well-being, job and life satisfaction but also exhibit increased interpersonally and organizationally harmful behaviors (reviews in Martinko, Harvey, Brees, & Mackey, 2013; Tepper, 2007). From a theoretical standpoint, it is instructive to consider these divergent attitudinal, affective, and behavioral outcomes through the lens of an approach-avoidance perspective (Carver & Scheier, 1998). Accordingly, most empirical studies to date have in one way or another examined approach-oriented reactions to abusive supervision (e.g., retaliatory behaviors; Inness, Barling, & Turner, 2005; Restubog, Scott & Zagenczyk, 2011). As an unintended consequence, the extant body of works thus appears to suggest that subordinates prototypically respond to abusive supervision by engaging in harmful approach behaviors towards their supervisor and/or others (cf. Martinko et al., 2013).

This representation in the literature stands in marked contrast to our little knowledge about subordinates responding to abusive supervision with avoidance reactions, such as misusing alcohol or engaging in avoidance coping strategies (Nandkeolyar, Shaffer, Li, Ekkirala, & Bagger, 2013; Schat, Frone, & Kelloway, 2006). Our lack of insight into why subordinates might respond with avoidance is an important omission in light of evidence indicating that individuals do not always engage in retaliation (Lian et al., 2012) and are less likely to do so against those with authority (Tepper, Moss, Lockhart, & Carr, 2007). Thus, our first goal is to contribute to the

literature by examining the relationship between abusive supervision and avoidance-based behavior in the form of employee silence. We focus on employee silence behavior not only because of its potentially severe consequences (e.g., accidents, deaths; Lowy, 2014), but also because the emerging silence literature has repeatedly pointed to dysfunctional relationships with superiors as *the* cause for employees' decision to withhold organizationally relevant information (Greenberg & Edwards, 2009; Morrison, 2014). Importantly, an employee's decision to remain silent is very often motivated by fear of their immediate superior (e.g., Milliken, Morrison, & Hewlin, 2003; Ryan & Oestreich, 1991; Van Dyne, Ang, & Botero, 2003). Yet, we are not aware of empirical tests of this relationship in the context of abusive supervision research to date. In addition, arguing for a link between supervisor abuse and subordinates' fear highlights another gap in the literature: little research exists that has explicitly investigated the role of discrete emotions in abusive supervision processes.

As a second goal, we also investigate how dispositional and contextual factors affect the conditional indirect relationship between abusive supervision and employee silence via fear. For example, not all subordinates who experience fear due to abusive supervision will engage in defensive silence. Drawing upon Ames' (2008) assertiveness expectancy perspective, we posit that subordinates' levels of assertiveness influence the strength of the indirect relationship. Similarly, we examine individual perceptions of a climate of fear (Ashkanasy & Nicholson, 2003) as a contextual moderator in order to gain additional insights into the role of perceived environmental factors that might perpetuate the consequences of abusive supervision.

Guided by Keltner, Gruenfeld, and Anderson's (2003) approach-avoidance model of power, we investigate the strength of our research model in three studies. In Study 1, we use multi-source data collected at three measurement periods to examine a moderated mediation

model that links abusive supervision to fear and in turn to fear-based defensive silence while accounting for subordinates' assertiveness. Study 2 extends our base model by incorporating individual perceptions of a climate of fear as a contextual moderator, involving a baseline measurement of defensive silence at Time 1, and employing a longer time lag between the independent and dependent variable measures. Finally, Study 3 replicates and extends Study 2 with a three-wave design intended to examine the consequences of defensive silence by linking it to abuse supervision at a later point in time. We also test subordinates' anger — an approach-oriented reaction to abusive supervision — as an alternative mechanism to the avoidance-oriented reaction of fear. In the following sections, we explicate our research model, formally test our hypotheses, and discuss key findings and implications for theory and practice.

THEORETICAL FOUNDATION AND HYPOTHESES DEVELOPMENT

At its most basic level, human behavior can be understood as expressing either approach or avoidance tendencies (Carver, Sutton, & Scheier, 2000). As outlined in Gray's (1981) theory of biologically-based motivational systems and augmented by Carver and colleagues (Carver, 2001; Carver et al., 2000), approach and avoidance behaviors are managed by two largely independent motivational systems that are activated by different stimuli and involve different affective qualities. Signals of reward activate the approach system, stimulate approach-related emotions and motivate approach-type behavior. In contrast, signals of threat and punishment stimulate the avoidance or inhibition system, including the affective experience of fear and anxiety, which subsequently motivate increased vigilance and behavior aimed at avoiding such threats.

The work environment can trigger approach or avoidance tendencies due to the inherent power asymmetries created through organizational hierarchies (Anderson & Brion, 2014; Magee & Galinsky, 2008) — such as those existing between supervisors and subordinates. That is, the

degree of power one holds in a given situation significantly influences the distribution of cues related to either reward or punishment (Carver & White, 1994). Higher power is associated with greater resources and freedom involving actions and thus promotes approach-related cognitions, emotions, and behaviors. In contrast, low-power parties depend on more powerful others for obtaining resources and avoiding punishment, thus rendering the former highly attentive to signals of potential threats and more likely to experience avoidance-related cognitions, emotions, and behaviors (Keltner et al., 2003; Morrison & Rothman, 2009).

Our present interest lies with abuses in supervisor-subordinate configurations that take the form of abusive supervision (Tepper, 2000, 2007), wherein abusive supervisors utilize power asymmetries to routinely intimidate and manipulate subordinates (Tepper et al., 2009). Although such supervisors pose a threat which subordinates decidedly seek to avoid (Nifadkar, Tsui, & Ashforth, 2012), most cannot act accordingly due to the supervisor's sanctioning powers (cf. Cortina & Magley, 2009). Instead, their lower-power position leaves subordinates constantly vulnerable to acts of abuse, rendering them likely to fear and subsequently avoid any (re)actions that might trigger further abuse (Kish-Gephart, Detert, Treviño, & Edmondson, 2009).

Based on the above arguments, we posit that the experience of abusive supervision typically evokes emotion and action tendencies related to avoidance and self-protection in subordinates. Building on Keltner et al.'s (2003) notions in particular, we argue that when a supervisor is abusive to a subordinate, the respective employee will likely perceive high and persistent signals of threat and experience concomitant high-intensity emotions such as fear (e.g., Lutgen-Sandvik, 2003). The notion that abusive supervision likely triggers fear in subordinates has received robust support from evolutionary psychology and emotions research (e.g., Kish-Gephart et al., 2009). Accordingly, fear constitutes one of most fundamental human emotions (Frijda, 1986)

that arises because one perceives an existential threat (Lazarus, 1991) and uncertainty and danger to the self (Shaver, Schwartz, Kirson, & O'Connor, 1987). In the context of abusive supervision, fear can be understood as an avoidance emotion that is generated by signals of undesired threats to the self, therefore motivating employees' efforts to avoid such threats.

Hypothesis 1: Abusive supervision is positively associated with fear.

The experience of abuse is likely to motivate subordinates to move away from the fear-inducing stimulus (Kish-Gephart et al., 2009). Yet while individuals generally react to fear with behaviors aiding self-protection and avoidance, avoiding one's supervisor is seldom an option in the long run (cf. Porath & Pearson, 2010). Because most employees depend on superiors for resources to meet basic needs, it is no surprise that "fear of offending those above us is both natural and widespread" (Edmondson and Detert as cited in Gilbert, 2006, para. 14).

As a consequence, subordinates tend to behave in ways that either do not provoke abuse or help minimize further abuse (Detert & Edmondson, 2011). An avoidance behavior that seems ubiquitous in this regard is remaining silent (Morrison & Milliken, 2000). Defined as "withholding relevant ideas, information, or opinions as a form of self-protection, based on fear" (Van Dyne et al., 2003, p. 1367), we focus on defensive silence because it is a highly prevalent form of avoidance behavior in organizations with significant consequences for organizational functioning (Milliken et al., 2003; Morrison, 2014; Ryan & Oestreich, 1991). We posit that fear is likely to intensify the desire to engage in defensive silence based on cost-benefit considerations (Gundlach, Douglas, & Martinko, 2003). Subordinates may choose to remain silent for fear of further damaging the relationship with their supervisor or triggering more abuse if not other severe sanctions. Given that fear tends to evoke "pessimistic judgments about risks

and future outcomes" (Kish-Gephart et al., 2009, p. 164), it seems plausible that subordinates would rather *play it safe* by remaining silent.

In an effort to better understand the boundary conditions of the abusive supervision–fear– silence relationship, we now turn to factors that potentially enhance or mitigate these relationships. Building on Tepper's (2007) theorizing that the impact of abusive supervision is moderated by characteristics of the subordinates and their work environments, we acknowledge that not all employees who experience fear as a result of abusive supervision remain silent. In particular, assertiveness is likely to influence whether an employee engages in defensive silence (cf. Van Dyne et al., 2003). Assertiveness refers to an individual's "tendency to stand up and speak out for their own interests and concerns, such as voicing opinions, making offers and concessions, and attempting to coerce or intimidate others" (Ames, 2008, p. 1542). Further, the assertiveness expectancy perspective (Ames, 2008) suggests that differences in assertiveness emanate from varying expectations about the outcomes of engaging in assertive behavior. Lowassertive individuals tend to not expect positive outcomes from highly assertive behavior, instead fearing that such behavior may damage existing relationships and aggravate unpleasant situations. To this end, we posit that low-assertive subordinates who experience fear as a result of supervisor hostility will engage in more defensive silence due to the expected relational and instrumental costs associated with asserting themselves (e.g., further abuse from the supervisor). We also note that it is not that low-assertive subordinates experience any more fear than assertive ones; rather, they are particularly likely to respond to fear with avoidance behaviors. In sum, we propose that:

Hypothesis 2: The conditional indirect relationship between abusive supervision and defensive silence via fear is stronger for subordinates with lower as opposed to higher levels of assertiveness.

The approach-avoidance perspective further suggests that avoidance behavior may also be influenced by the context in which the behavior occurs (Carver & White, 1994). Social and emotional cues arising from the environmental context are influential because they guide individuals' attention to move towards or away from aspects of the work environment. For example, noting that a perpetrator's power "lies in making people remain silent through fear," Beasley and Rayner (1997) observed that the "insidious and persistent" nature of the abuse often causes "other employees [to] generally remain completely silent for fear of becoming victims" (p. 178). To this end, we propose a perceived climate of fear as a contextual moderator which influences the likelihood that individuals engage in silence behavior (cf. Lutgen-Sandvik, 2003).

Climate of fear involves a generalized feeling of apprehension in a workplace (Ashkanasy & Nicholson, 2003; Ryan & Oestreich, 1991), which reflects the negative emotive perceptions prevalent in that work environment. As Ashkanasy and Nicholson (2003) explain: "because communication occurs through social networks and involves sharing of meaning ..., personal displays of emotion lead to a shared perception of emotion among organizational members – an emotional climate" (p. 24). It is important to note that we do not suggest the existence of a single emotional climate in a given organization. Instead, a climate of fear emerges through the social perception processes within a cohesive work group and hence should be understood as "a localized phenomenon, determined in part by the management practices adopted at specific work sites" (Ashkanasy & Nicholson, 2003, p. 27). In the context of our research, we hence propose that the extent to which fearful individuals who experience abusive supervision engage in silence

will be contingent upon their individual perceptions of a climate of fear. That is, high as opposed to low perceptions of a climate of fear will intensify fearful reactions towards abusive supervisors, and this may further motivate employees to engage in defensive silence.

Hypothesis 3: The conditional indirect relationship between abusive supervision and defensive silence via fear is stronger when subordinates perceive higher as opposed to lower levels of a climate of fear.

Drawing from research on abuse cycles (Lutgen-Sandvik, 2003), we further suggest that when abusive behavior is met with fear-based emotion and silence by subordinates, the abuse likely continues. That is, given the various motives for sustaining abusive supervision (e.g., Mooijman, van Dijk, Ellemers, & van Dijk, 2015), we assume that such abuse generally continues unless significant interventions are undertaken (e.g., upper management formally intervenes or a "concerted audience" voices concerns; Lutgen-Sandvik, 2003, p. 495). Hence, individuals who are fearful as a result of abusive supervision and thus engage in defensive silence will likely experience further supervisory hostility in the future, especially if they do not stand up and speak out for their own interests. Similarly, perceptions of a climate of fear in the work environment are indicative of persistent abusive management practices. To this end, we propose that abusive supervision at a later point in time will continue to persist among fearful individuals who experienced abuse and respond with silence, especially for those who perceive high as opposed to low levels of a climate of fear.

Hypotheses 4 and 5: The conditional indirect relationship between fear and abusive supervision at a later point in time via defensive silence is stronger: (H4) for subordinates exhibiting lower as opposed to higher levels of assertiveness; (H5) when subordinates perceive higher as opposed to lower levels of a climate of fear.

METHOD

Participants and Procedure

Study 1. Data were collected via surveys distributed to employees of a large manufacturing organization in the Philippines. At Time 1, a survey assessing perceptions of abusive supervision, assertiveness, and demographic characteristics was sent to 310 employees. In total, 264 employees returned completed surveys, yielding a response rate of 85.16%. Two weeks later (Time 2), employees received a survey on employee emotions to be passed on to their significant other/spouse. We received a total of 239 spouse surveys (77.09% response rate). At Time 3 (three months after Time 2), we administered a third survey to the initial 264 employees, of which 190 returned surveys (71.97% response rate). The 264 employees also had been instructed to nominate a close peer/coworker with whom they had directly interacted for work purposes for at least six months. We requested the focal employee to pass on the behavioral rating form along with a letter explaining the nature of the research to the peer. The peer rating form contained questions about the extent to which the focal employee engaged in silence behavior. We received a total of 164 peer survey forms. After removal of unusable data, the three waves of data collection from focal employees along with spouse- and peer-ratings resulted in 143 matches.

The sample was 57.3% male. The employees' mean age was 30.03 years, ranging between 22-55 years. Organizational tenure was grouped into bands: 6-12 months = 9.1%; 1-5 years = 58%; 6-10 years = 11.9%; 11-15 years = 11.9%; 16-20 years = 7%; and 21-25 years = 2.1%. Concerning spouses, 42.7% were women who were on average 30.67 years old. Of the peer participants, 50.3% were men and over three quarters of them (77.6%) were 20-30 years old.

Study 2. We obtained data from full-time employees enrolled in part-time MBA/Masters in Business programs at two large universities in the Philippines. The Time 1 survey assessed all

variables. Of the 495 distributed surveys, 471 were returned. Yet 22 had substantial data missing, yielding 449 useable surveys (90.10% response rate). A second survey kit – disseminated to the 449 participants six months later (Time 2) – asked participants to complete a survey assessing defensive silence before mailing it to the research team using a prepared envelope. Only data from those who completed both surveys were included in the analyses. The final sample consisted of 158 females and 109 males (n = 267), with an overall mean age of 27.06 years. The majority of participants (92.9%) had been working in their organization between 1-5 years.

Study 3. At Time 1 (T1), self-report questionnaires were distributed to 289 postbaccalaureate, diploma and postgraduate students from two large universities in the Philippines. These self-report surveys assessed demographic characteristics, perceptions of abusive supervision, associated emotional reactions (i.e., fear and anger), and individual perceptions of a climate of fear. We specified that the participants had to be employed full-time and working under the direct guidance of a supervisor. In addition, they were requested to pass on a survey (assessing a perceived climate of fear) to a co-worker with whom they had regular interactions at work. We received 263 surveys from the focal employees and 187 from the corresponding coworkers, for a response rate of 91% and 64.71%, respectively. Time 2 (T2) data were collected three months after the T1 data collection. In this period, participants were asked to report their level of assertiveness and the extent to which they engage in defensive silence. We received 190 surveys. At Time 3 (T3), 12 months after T2 data collection, we surveyed the T2 participants to assess their perceptions of abusive supervision and received 171 surveys. After excluding surveys that lacked a co-worker form, showed a large number of missing responses, or included inaccurate or missing code identifiers, the three waves resulted in 162-166 matched survey sets.

The final sample was 53.6% male. Average age and average organizational tenure were 38.83 years and 11.15 years, respectively. Participants worked in a variety of occupations, including accounting and finance (18.7%), customer service (8.4%), legal services (3.6%), general management and office administration (7.8%), human resources and development (10.2%), manufacturing, production and engineering (12.7%), media, communication and public relations (61%), sales and marketing (26.3%), information technology (10%), education (2.3%), sales (9.6%), research and development (4.8%), information systems and technology (10.2%), education (5.4%), and others (e.g., healthcare, 2.4%). Among the co-worker participants, 50.6% were men, with an average age of 38.16 years and an average organizational tenure of 9.88 years.

Measures

Unless otherwise specified, all variables were presented in English and measured using a seven-point Likert-type scale (1 = Strongly disagree to 7 = Strongly agree) at Time 1 (T1).

Abusive supervision (Study 1 α = .96; Study 2 α = .94, Study 3 α = .97; Study 3_{T3} α = .97). Using Tepper's (2000) scale, employees reported their perceptions of abusive supervision in all three studies at Time 1 and additionally at a later point in time in Study 3 (T3 = 15 months later).

Fear (Study 1_{T2} α = .75; Study 2 α = .92; Study 3 α = .82). In Study 1, we asked spouses to report employees' fear at Time 2 using three items from the Negative Affect Schedule (Watson & Clark, 1994) and one item from the short version of Derogatis' (1993) scale. Items assessed the extent to which the focal employee experienced fear in relation to their immediate supervisor on a seven-point scale ranging from 1 (*Very slightly*) to 7 (*Very much so*). Specifically, spouses reported to what extent the focal employee had been feeling "nervous", "scared", "afraid", and "fearful." In Studies 2 and 3, employees responded to the same items used in Study 1 at Time 1.

Assertiveness (Study 1 α = .86; Study 2 α = .68; Study 3_{T2} α = .71). In Study 1, we assessed assertiveness at Time 1 with a 30-item scale developed by Rathus' (1973). Employees responded to items such as "I am quick to express an opinion" using a seven-point scale (1 = Extremely not descriptive of me to 7 = Extremely descriptive of me). In Study 2, given the constraints imposed by the course coordinators with respect to survey length, assertiveness was assessed at Time 1 with the nine highest-loading items from the 19-item Simple Rathus Assertiveness Schedule¹ (Jenerette & Dixon, 2010). In Study 3, assertiveness was measured at Time 2 (three months after T1 data collection) using the same 9-item scale utilized in Study 2.

Individual perceptions of a climate of fear (Study 2 α = .83; Study 3 α = .96). In Study 2, individual perceptions of a climate of fear were measured at Time 1 using a 4-item scale from Ashkanasy and Nicholson (2007). An example item is: "In this organization, I feel fearful or anxious when I'm at work." In Study 3, using the same scale, we measured climate-of-fear perceptions from the focal employee and their corresponding co-worker at Time 1. Because the climate-of-fear ratings of both the focal employee and co-worker were highly correlated (r = .88), we averaged both ratings to serve as an indicator of perceptions of a climate of fear².

Defensive silence (Study 1_{T3} employee rating $\alpha = .87$, peer rating $\alpha = .92$; Study 2_{T2} $\alpha = .92$; Study 3_{T2} $\alpha = .85$). In Study 1, silence was measured at Time 3 using Van Dyne et al.'s (2003) five-item defensive silence scale (for both employee and peer ratings). In Studies 2 and 3, silence was measured at Time 2 using three items³ from Van Dyne et al.'s (2003) scale.

Control variables. We controlled for Time 1 silence in Study 2 in order to ascertain a baseline measure of silence using the 3-item version of the scale (Van Dyne et al., 2003; α = .91). We also measured anger, an approach-oriented emotion, in Study 3 to test an alternative

mediator to the fear-based avoidance perspective. Anger was measured using four items from the Negative Affect Schedule (Watson & Clark, 1994, $\alpha = .96$).

RESULTS

Table 1 shows descriptive statistics and inter-correlations for the study variables. To address concerns about non-random sampling bias due to participant attrition across the three studies (Goodman & Blum, 1996), we conducted a series of multiple logistic regression analyses. All logistic regression coefficients were non-significant thus indicating no systematic sampling bias in our data. Consistent with Hypothesis 1, abusive supervision was positively associated with fear as reported by spouses in Study 1 (r = .38, p < .001) as well as by employees in Study 2 (r = .17, p < .01) and Study 3 (r = .38, p < .001). We used Hayes' (2013) *Process* macro for SPSS to test H2 to H5. H2 and H3 reflect a second-stage moderation model in which employee fear mediates the relationship between abusive supervision and defensive silence, with assertiveness (H2) and climate of fear (H3) moderating the path from fear to silence. Regression results for H1, H2, and H3 are displayed in Table 2. H4 and H5 reflect a first-stage moderation model in which silence mediates the relationship between fear and abusive supervision at a later point in time, with assertiveness (H4) and climate of fear (H5) moderating the path between fear and further abusive supervision. Regression results for H4 and H5 are displayed in Table 3.

As seen from the estimates and bias-corrected bootstrapped 95% confidence intervals in Table 4, for Study 1, we found significant conditional indirect relationships between T1 abusive supervision and both T3 employee- and peer-reported silence via T2 spouse-reported fear for low levels of employee assertiveness (employee-reported silence B = .20, 95% CI: .07 to .40; peer-reported silence B = .29, 95% CI: .14 to .50) but not at high levels of assertiveness (employee-reported silence B = .05, 95% CI: -.04 to .21;

see Figures 2 and 3). Mirroring these results, the conditional indirect effects of T1 abusive supervision on silence at T2 via T1 fear in Studies 2 and 3 were significant when employees reported low (Study 2 B = .11, 95% CI: .01 to .31; Study 3 B = .24, 95% CI: .12 to .39) as opposed to high levels of assertiveness (Study 2 B = -.02, 95% CI: -.18 to .13; Study 3 B = .04, 95% CI: .00 to .11; Figure 4). Overall, Hypothesis 2 was supported. Table 4 also shows that, in Studies 2 and 3, the conditional indirect relationships between T1 abusive supervision and T2 employee silence via fear was stronger for high climate-of-fear levels (Study 2 B = .09, 95% CI: .003 to .33; Study 3 B = .24, 95% CI: .11 to .40) than for low levels (Study 2 B = .01, 95% CI: -.16 to .11; Study 3 B = .10, 95% CI: .03 to .21; Figure 5). Hence, H3 was supported.

Regarding the fear–silence–further abuse relationship (H4 and H5), Table 4 shows that, after controlling for T1 abusive supervision and T1 anger, the conditional indirect effects of T1 fear on T3 further abusive supervision were stronger when assertiveness was low (B = .20, 95% CI: .09 to .35) and climate of fear was high (B = .15, 95% CI: .07 to .28; Figure 6) as opposed to when assertiveness was high (B = .04, 95% CI: .01 to .11) and climate of fear was low (B = .08, 95% CI: .03 to .18; Figure 7). Thus, Hypotheses 4 and 5 were supported. Finally, testing anger as an alternative process in Study 3, results indicated that the conditional indirect effects within the abusive supervision–anger–silence mediated relationship were not significant for low or high levels of either assertiveness (high assertiveness B = .01, 95% CI: .00 to .03; low assertiveness B = .01, 95% CI: -.01 to .06) or climate of fear (high climate of fear B = .00, 95% CI: -.05 to .03; low climate of fear B = .00, 95% CI: -.02 to .03).

DISCUSSION

Across three studies, we found support for our predictions. Our research contributes to the literature by indicating that abusive supervision results not only in approach-oriented reactions,

such as retaliatory behaviors (Mitchell & Ambrose, 2007), but also in affective, cognitive, and behavioral reactions that are avoidance-oriented in nature, such as fear and defensive silence. From an approach-avoidance perspective, the latter outcomes can be understood as resulting from positive feedback loops that aim to increase one's distance from an undesired state (e.g., being ridiculed), or what Carver and Scheier (1998) described as movement away from an antigoal. Highlighting its versatility, this perspective not only accounts for cognitive and behavioral reactions but also integrates affective ones, thus overcoming limitations of abusive supervision research relying on rational exchange reasoning while neglecting affective processes (cf. Thau & Mitchell, 2010). For instance, the feeling of relief would indicate that one is doing well in the avoidance process (i.e., successfully avoiding further abuse), whereas fear indicates the presence of potential threats that one must endeavor to avoid. Fear thus functions as an avoidance emotion that motivates efforts designed to avoid threats; for instance, by remaining silent.

To this effect, our results support theoretical arguments regarding the pivotal role of fear in employee abuse and silence processes put forth in the literature, namely that it is fear of abusive superiors which compels employees to remain silent (e.g., Morrison & Milliken, 2003; Ryan & Oestreich, 1991; Van Dyne et al., 2003). Moreover, our findings that a) perceiving a climate of fear enhances employees' tendencies to engage in defensive silence and that b) defensive silence in turn was significantly related to perceived abusive supervision a year later corroborates the enabling role of fear-based silence for abusive supervision processes suggested in the literature.

Ours is one of few studies examining a discrete emotional reaction to abusive supervision, especially an emotion we deem to be key in this context. Yet as Nifadkar et al. (2012) note, interactions with one's supervisor may trigger not only positive and negative emotions at times but also various emotions at the same time. It is thus plausible that subordinates of abusive

supervisors not only experience fear but also simultaneously other negative emotions, such as anger. In our study, while there was a positive relationship between abusive supervision and anger, the conditional indirect effects of abusive supervision in predicting silence via anger at low or high levels of assertiveness or climate of fear were non-significant. It should be noted, however, that the approach-avoidance framework does not constitute an either-or system but allows for both tendencies being activated simultaneously (Carver & Harmon-Jones, 2009). This in turn raises the question of when employees respond to abusive supervision with an avoidancerelated reaction such as defensive silence as opposed to an approach one such as aggression. We believe that the answer to this question lies with the extent of the power differential between supervisor and subordinate. In some cases, the power gap between supervisor and subordinate becomes an enabler of abusive supervision in that power overrides any circumstances that might mitigate or rectify the abuse (e.g., interventions by supervisor's superiors), thus evoking cognitions, emotions, and behaviors that are more avoidance-oriented in nature. At a certain threshold, however, intensely felt anger might override any regulatory processes and may lead to more approach-oriented reactions (cf. Geddes & Callister, 2007).

With regard to practical implications, the significance of the abusive supervision-silence relationship for organizational functioning and human well-being cannot be overstated, as the costs of silence due to intimidating superiors range from dysfunctional top management dynamics (Perlow & Repenning, 2009) to loss of human life (Lowy, 2014; Tarkan, 2008). What it takes, then, to counter the effects of fear-based silence is twofold. From those who are "ruled" (i.e., organizational members at all levels), it necessitates becoming "courageous followers" (Chaleff, 2009). Although frequently a risky proposition, silence ultimately amounts to collusion, which eventually enables abuse and victimization (cf. Aquino & Lamertz, 2004). From those

who "rule" (i.e., superiors at all levels and especially upper management), it necessitates creating supportive and psychologically safe work settings that embrace employee input and diversity in opinions in the interest of safety and productivity (e.g., Edmondson, 1999, 2003).

Limitations. Our research is subject to several limitations. First, our work can be criticized as being too narrowly focused on defensive silence. While it would have been informative to contrast defensive silence with defensive voice (Van Dyne et al., 2003), we were unable to include defensive voice due to survey length restrictions by the participating organizations that allowed us to only test a subset of constructs. Second, the fact that our data were collected from the Philippines may raise questions regarding the generalizability of our model. However, given the objectionable nature of supervisory abuse, we are cautiously optimistic that the results may also apply in other cultural contexts (Vogel et al., 2015).

Future Research. The abusive supervision literature stands to benefit from theoretical works that speak to the importance of considering power and status differentials when conceptualizing the reasons underlying silence phenomena at work (e.g., Kish-Gephart et al., 2009; Morrison & Rothman, 2009). Relating back to Pearson and Porath's (2005) observation that powerfulness affects "the nature and movement of incivility" (p. 11), we suggest that the role of power – while previously acknowledged (e.g., Tepper, 2007; Tepper et al., 2009) – could be better theoretically developed, especially with regard to the sustained quality of abusive supervision. As an example, by drawing from extant work on the effects of power in social interactions (Keltner et al., 2003; Morrison & Rothman, 2009), one could argue that a supervisor's unchecked abuse of power lies at the core of abusive supervision processes. That is, abusive supervision occurs when supervisors abuse their relative capacity emanating from their formal job position and the organization fails to control such abuses, with failure stemming from either passive neglect (e.g.,

culture of non-accountability) or active reinforcement (e.g., via aggressive norms; Restubog, Scott, & Zagenczyk, 2011). As an important ramification, if the failure to control supervisors' abusive behaviors becomes a recurring feature of an organizational environment (e.g., the administration's standard response), it is this systemic failure that enables the sustained quality of abusive supervision in the first place. In support of this notion, abuse cycles can be interrupted when upper-level managers intervene (Lutgen-Sandvik, 2003), plus workplace aggression can be mitigated when organizations enforce policies sanctioning such behavior (Dupré & Barling, 2006), provide instrumental or informational support (Schat & Kelloway, 2003), or increase employees' perceived work control (Schat & Kelloway, 2000).

Several additional factors may propagate such systemic abuse cycles. For example, Hershcovis and colleagues (2012) found that while victims were more likely to retaliate against high- than low-powered perpetrators, their inclination dropped significantly when they were highly task interdependent with the perpetrator. Applied to our research, task interdependence may thus function as an additional factor which increases the likelihood that subordinates will remain silent because they fear harming the relationship with a powerful authority on whom they depend (also see Beasley & Rayner, 1997; Lutgen-Sandvik, 2003).

Future research could also examine conditions under which followers who are highly task interdependent and lack assertiveness break their silence *despite* their fear. For example, could subscribing to values that place greater importance on protecting others than oneself (De Dreu & Van Lange, 1995) aid employees in breaking the cycle of silence? Finally, we deem it notable that prior research highlighting the benefits of organizational support in reducing negative psychological health consequences and somatic symptoms did not find such support to moderate the relationship between workplace violence and fear of future workplace violence (Schat &

Kelloway, 2003). In reflecting on our results, we understand this finding to attest to the powerful role of fear in organizations and encourage scholars to conduct further research in this area.

REFERENCES

- Ames, D. R. (2008). Assertiveness expectancies: How hard people push depends on the consequences they predict. *Journal of Personality and Social Psychology*, *95*, 1541-1557. doi: 10.1037/a0013334
- Anderson, C., & Brion, S. (2014). Perspectives on power in organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 67-97. doi: 10.1146/annurevorgpsych-031413-091259
- Aquino, K., & Lamertz, K. (2004). A relational model of workplace victimization. *Journal of Applied Psychology*, 89, 1023-1034. doi: 10.1037/0021-9010.89.6.1023
- Ashkanasy, N. M., & Nicholson, G. J. (2003). Climate of fear in organisational settings:

 Construct definition, measurement and a test of theory. *Australian Journal of Psychology*, *55*, 24-29. doi: 10.1080/00049530412331312834
- Beasley, J., & Rayner, C. (1997). Bullying at work (after Andrea Adams). *Journal of Community* & *Applied Social Psychology, 7*, 177-180. doi: 10.1002/(SICI)1099-1298(199706)7:3<177::AID-CASP415>3.0.CO;2-Y
- Carver, C. S. (2001). Affect and the functional bases of behavior: On the dimensional structure of affective experience. *Personality & Social Psychology Review, 5*, 345-356. doi: 10.1207/S15327957PSPR0504 4
- Carver, C. S., & Harmon-Jones, E. (2009). Anger is an approach-related affect: Evidence and implications. *Psychological Bulletin*, *135*, 183-204. doi: 10.1037/a0013965
- Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. Cambridge, UK: Cambridge University Press.

- Carver, C. S., Sutton, S. K., & Scheier, M. F. (2000). Action, emotion, and personality:
 Emerging conceptual integration. *Personality and Social Psychology Bulletin*, 26, 741-751.
 doi: 10.1177/0146167200268008
- Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment. *Journal of Personality and Social Psychology*, 67, 319-333. doi: 10.1037/0022-3514.67.2.319
- Chaleff, I. (2009). *The courageous follower: Standing up to & for our leaders* (3rd ed.). San Francisco: Berrett-Koehler.
- Cortina, L. M., & Magley, V. J. (2009). Patterns and profiles of response to incivility in the workplace. *Journal of Occupational Health Psychology*, *14*, 272-288. doi: 10.1037/a0014934
- De Dreu, C. K. W., & Van Lange, P. A. M. (1995). The impact of social value orientations on negotiator cognition and behavior. *Personality and Social Psychology Bulletin*, *21*, 1178-1188. doi: 10.1177/01461672952111006
- Derogatis, L. R. (1993). *BSI Brief Symptom Inventory. Administration, scoring, and procedures manual* (4th ed.). Minneapolis, MN: National Computer Systems.
- Detert, J. R., & Edmondson, A. C. (2011). Implicit voice theories: Taken-for-granted rules of self-censorship at work. *Academy of Management Journal*, *54*, 461-488. doi: 10.5465/AMJ.2011.61967925
- Dupré, K. E., & Barling, J. (2006). Predicting and preventing supervisory workplace aggression. *Journal of Occupational Health Psychology, 11*, 13-26.
- Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. Administrative Science Quarterly, 44, 350-383.

- Edmondson, A. C. (2003). Speaking up in the Operating Room: How team leaders promote learning in interdisciplinary action teams. *Journal of Management Studies*, 40, 1419-1452. doi:10.1111/1467-6486.00386
- Frijda, N. H. (1986). The emotions. Cambridge, UK: Cambridge University Press.
- Geddes, D., & Callister, R. R. (2007). Crossing the line(s): A dual threshold model of anger in organizations. *Academy of Management Review*, *32*, 721-746. doi: 10.5465/AMR.2007.25275495
- Gilbert, S. J. (2006). Do I dare say something? *HBS Working Knowledge*. Retrieved from http://hbswk.hbs.edu/item/5261.html
- Goodman, J. S., & Blum, T. C. (1996). Assessing the non-random sampling effects of subject attrition in longitudinal research. *Journal of Management*, *22*, 627–652. doi:10.1177/014920639602200405
- Gray, J. A. (1981). A model for personality. In H. J. Eysenck (Ed.), *A model for personality* (pp. 246-276). New York: Springer.
- Greenberg, J., & Edwards, M. S. (2009). *Voice and silence in organizations*. Bingley, UK: Emerald.
- Gundlach, M. J., Douglas, S. C., & Martinko, M. J. (2003). The decision to blow the whistle: A social information processing framework. *Academy of Management Review, 28*, 107-123. doi: 10.5465/AMR.2003.8925239
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford.

- Hershcovis, M. S., Reich, T. C., Parker, S. K., & Bozeman, J. (2012). The relationship between workplace aggression and target deviant behaviour: The moderating roles of power and task interdependence. *Work & Stress*, *26*, 1-20. doi: 10.1080/02678373.2012.660770
- Inness, M., Barling, J., & Turner, N. (2005). Understanding supervisor-targeted aggression: A within-person, between-jobs design. *Journal of Applied Psychology*, 90, 731-739. doi: 10.1037/0021-9010.90.4.731
- Jenerette, C., & Dixon, J. (2010). Developing a short form of the Simple Rathus Assertiveness Schedule using a sample of adults with sickle cell disease. *Journal of Transcultural Nursing*, 21, 314-324. doi: 10.1177/1043659609360712
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review, 110*, 265-284. doi: 10.1037/0033-295x.110.2.265
- Kiewitz, C., Restubog, S. L. D., Zagenczyk, T. J., Scott, K. D., Garcia, P. R. J. M., & Tang, R. L. (2012). Sins of the parents: Self-control as a buffer between supervisors' previous experience of family undermining and subordinates' perceptions of abusive supervision. *Leadership Quarterly*, 23, 869–882. doi:10.1016/j.leaqua.2012.05.005
- Kish-Gephart, J. J., Detert, J. R., Treviño, L. K., & Edmondson, A. C. (2009). Silenced by fear:

 The nature, sources, and consequences of fear at work. *Research in Organizational Behavior*,

 29, 163-193. doi: 10.1016/j.riob.2009.07.002
- Lazarus, R. S. (1991). Emotion and adaptation. New York: Oxford University Press.
- Lian, H., Brown, D., Ferris, D. L., Liang, L., Keeping, L., & Morrison, R. (2012). Abusive supervision and retaliation: A self-control framework. *Academy of Management Journal*. doi: 10.5465/amj.2011.0977

- Lowy, J. (2014, May 16). 'Silence can kill': GM is fined a record \$35 million for not disclosing deadly ignition defect. *StarTribune*. Retrieved from http://www.startribune.com/business/259520861.html?page=all&prepage=1&c=y continue
- Lutgen-Sandvik, P. (2003). The communicative cycle of employee emotional abuse: Generation and regeneration of workplace mistreatment. *Management Communication Quarterly*, 16, 471-501. doi: 10.1177/0893318903251627
- Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self-reinforcing nature of power and status. *Academy of Management Annals*, *2*, 351-398. doi: 10.1080/19416520802211628
- Martinko, M. J., Harvey, P., Brees, J. R., & Mackey, J. (2013). A review of abusive supervision research. *Journal of Organizational Behavior*, *34*, S120-S137. doi: 10.1002/job.1888
- Milliken, F. J., Morrison, E. W., & Hewlin, P. F. (2003). An exploratory study of employee silence: Issues that employees don't communicate upward and why. *Journal of Management Studies*, 40, 1453-1476. doi: 10.1111/1467-6486.00387
- Mitchell, M. S., & Ambrose, M. L. (2007). Abusive supervision and workplace deviance and the moderating effects of negative reciprocity beliefs. *Journal of Applied Psychology*, *92*, 1159-1168. doi: 10.1037/0021-9010.92.4.1159
- Mitchell, M. S., & Ambrose, M. L. (2012). Employees' behavioral reactions to supervisor aggression. *Journal of Applied Psychology*, *97*, 1148-1170. doi: 10.1037/a0029452
- Mooijman, M., van Dijk, W. W., Ellemers, N., & van Dijk, E. (2015). Why leaders punish: A power perspective. *Journal of Personality and Social Psychology, 109*, 75-89. doi: 10.1037/pspi0000021

- Morrison, E. W. (2014). Employee voice and silence. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*, 173-197. doi:10.1146/annurev-orgpsych-031413-091328
- Morrison, E. W., & Milliken, F. J. (2000). Organizational silence: A barrier to change and development in a pluralistic world. *Academy of Management Review*, 25, 706-725. doi: 10.5465/AMR.2000.3707697
- Morrison, E. W., & Milliken, F. J. (2003). Guest editors' introduction: Speaking up, remaining silent: The dynamics of voice and silence in organizations. *Journal of Management Studies*, 40, 1353-1358. doi: 10.1111/1467-6486.00383
- Morrison, E. W., & Rothman, N. B. (2009). Silence and the dynamics of power. In J. Greenberg & M. S. Edwards (Eds.), *Voice and silence in organizations* (pp. 111-133). Bingley, UK: Emerald.
- Nandkeolyar, A. K., Shaffer, J. A., Li, A., Ekkirala, S., & Bagger, J. (2013). Surviving an abusive supervisor: The joint roles of conscientiousness and coping strategies. *Journal of Applied Psychology*, No Pagination Specified. doi: 10.1037/a0034262
- Nifadkar, S., Tsui, A. S., & Ashforth, B. E. (2012). The way you make me feel and behave: Supervisor-triggered newcomer affect and approach-avoidance behavior. *Academy of Management Journal*, *55*, 1146-1168. doi: 10.5465/amj.2010.0133
- Pearson, C. M., & Porath, C. L. (2005). On the nature, consequences and remedies of workplace incivility: No time for "nice"? Think again. *Academy of Management Executive*, 19(1), 7-18. doi: 10.5465/AME.2005.15841946
- Perlow, L. A., & Repenning, N. P. (2009). The dynamics of silencing conflict. *Research in Organizational Behavior*, 29, 195-223. doi: 10.1016/j.riob.2009.06.007

- Porath, C. L., & Pearson, C. M. (2010). The cost of bad behavior. *Organizational Dynamics*, 39, 64-71. doi: 10.1016/j.orgdyn.2009.10.006
- Rathus, S. A. (1973). A 30-item schedule for assessing assertive behavior. *Behavior Therapy*, 4, 398-406. doi: 10.1016/S0005-7894(73)80120-0
- Restubog, S. L. D., Scott, K. L., & Zagenczyk, T. J. (2011). When distress hits home: The role of contextual factors and psychological distress in predicting employees' responses to abusive supervision. *Journal of Applied Psychology*, *96*, 713-729. doi: 10.1037/a0021593
- Ryan, K. D., & Oestreich, D. K. (1991). *Driving fear out of the workplace: How to overcome the invisible barriers to quality, productivity, and innovation*. San Francisco: Jossey-Bass Publishers.
- Schat, A. C. H., & Kelloway, E. K. (2000). Effects of perceived control on the outcomes of workplace aggression and violence. *Journal of Occupational Health Psychology*, *5*, 386-402. doi: 10.1037/1076-8998.5.3.386
- Schat, A. C. H., & Kelloway, E. K. (2003). Reducing the adverse consequences of workplace aggression and violence: The buffering effects of organizational support. *Journal of Occupational Health Psychology*, 8, 110-122. doi: 10.1037/1076-8998.8.2.110
- Schat, A. C. H., Frone, M. R., & Kelloway, E. K. (2006). Prevalence of workplace aggression in the U.S. workforce: Findings from a national study. In E. K. Kelloway, J. Barling & J. J. Hurrell, Jr. (Eds.), *Handbook of workplace violence* (pp. 47-89). Thousand Oaks, CA: Sage.
- Shaver, P., Schwartz, J., Kirson, D., & O'Connor, C. (1987). Emotion knowledge: Further exploration of a prototype approach. *Journal of Personality and Social Psychology*, *52*, 1061-1086. doi: 10.1037/0022-3514.52.6.1061

- Tarkan, L. (2008, December 2). Arrogant, abusive and disruptive and a doctor, *New York Times*, pp. D1, D6.
- Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal*, 43, 178-190. doi: 10.2307/1556375
- Tepper, B. J. (2007). Abusive supervision in work organizations: Review, synthesis, and research agenda. *Journal of Management*, *33*, 261-289. doi: 10.1177/0149206307300812
- Tepper, B. J., Carr, J. C., Breaux, D. M., Geider, S., Hu, C., & Hua, W. (2009). Abusive supervision, intentions to quit, and employees' workplace deviance: A power/dependence analysis. *Organizational Behavior and Human Decision Processes*, 109, 156-167. doi: 10.1016/j.obhdp.2009.03.004
- Tepper, B. J., Moss, S. E., Lockhart, D. E., & Carr, J. C. (2007). Abusive supervision, upward maintenance communication, and subordinates' psychological distress. *Academy of Management Journal*, *50*, 1169-1180. doi: 10.2307/20159918
- Thau, S., & Mitchell, M. S. (2010). Self-gain or self-regulation impairment? Tests of competing explanations of the supervisor abuse and employee deviance relationship through perceptions of distributive justice. *Journal of Applied Psychology*, 95, 1009-1031. doi: 10.1037/a0020540
- Van Dyne, L., Ang, S., & Botero, I. C. (2003). Conceptualizing employee silence and employee voice as multidimensional constructs. *Journal of Management Studies*, 40, 1359-1392. doi: 10.1111/1467-6486.00384
- Vogel, R. M., Mitchell, M. S., Tepper, B. J., Restubog, S., Hu, C., Hua, W., & Huang, J. C. (2015). A cross-cultural examination of subordinates' perceptions of and reactions to abusive supervision. *Journal of Organizational Behavior*, 36, 720-745. doi: 10.1002/job.1984

Watson, D., & Clark, L. A. (1994). *The PANAS-X: Manual for the Positive and Negative Affect Schedule - Expanded Form.* University of Iowa, Iowa City, IA. Retrieved from http://ir.uiowa.edu/psychology_pubs/11/

TABLE 1

Means, Standard Deviations, and Bivariate Correlations for Variables in Studies 1, 2, and 3

Variable	Mean	SD	1	2	3	4	5	6	7
			Study 1 (7	V = 143)					
1. T1 Abusive supervision	2.08	1.06	_						
2. T2 Spouse-reported fear	3.19	1.07	.38***	_					
3. T1 Assertiveness	4.30	0.67	25**	11	-				
4. T3 Employee-reported silence	3.12	1.31	.38***	.34***	33***	_			
5. T3 Peer-reported silence	2.94	1.40	.45***	.48***	36***	.66***	_		

Variable	Mean	SD	1	2	3	4	5	6	7
			Study 2 (N	v = 267)					
1. T1 Employee-reported silence	3.14	1.34	_						
2. T1 Abusive supervision	1.27	0.46	.14*	-					
3. T1 Fear	2.06	1.17	.22***	.17**	_				
4. T1 Assertiveness	4.33	0.97	26***	12	34***	_			
5. T1 Climate of Fear	3.14	1.43	.29***	.10	.31***	62***	_		
5. T2 Employee-reported silence	2.67	1.52	.58***	.13*	.37***	26***	.29***	_	

Variable	Mean	SD	1	2	3	4	5	6	7
Study 3 $(N = 162-166)$									
1. T1 Abusive supervision	2.94	1.33	_						
2. T1 Fear	3.17	1.21	.38***	_					
3. T1 Anger	3.99	1.73	.17*	.01	_				
4. T1 Climate of fear	3.92	1.48	.24**	.44***	.07	_			
5. T2 Assertiveness	3.95	0.85	24**	42***	.06	26**	_		
6. T2 Employee-reported silence	3.33	1.20	.31***	.59***	.01	.30***	65***	_	
7. T3 Abusive supervision	2.83	1.16	.20**	.31***	.08	.18*	28***	.38***	_

Note. T1 = Time 1, T2 = Time 2, and T3 = Time 3.

^{*} p < .05. ** p < .01. *** p < .001.

TABLE 2

Regression Results Testing Hypotheses 1, 2, and 3

	S	tudy 1 $(N = 14)$	43)	Study 2	(N = 267)				
Model Number	I	II	III	IV	V	VI	VII	VIII	IX
Variables	Fear	Silence (SR)	Silence (PR)	Fear	Silence	Fear	Anger	Silence	Silence
Abusive Supervision	.38 (.08)**	.25 (.10)*	.28 (.10)**	.43 (.15)**	.08 (.16)	.34 (.07)**	.23 (.10)*	.01 (.05)	.09 (.06)
Fear		.26 (.10)**	.45 (.09)**		.09 (.08)			.41 (.06)**	.49 (.08)**
Assertiveness		57 (.15)**	65 (.15)**		10 (.10)			72 (.08)**	
Fear × Assertiveness		42 (.20)*	46 (.19)*		16 (.08)*			35 (.06)**	
Climate of Fear (COF)					.05 (.06)				.08 (.06)
Fear × COF					.09 (.04)*				.13 (.05)*
T1 Silence					.55 (.06)**				
Anger								.05 (.04)	01 (.05)
Anger × Assertiveness								01 (.04)	
$\mathbf{Anger} \times \mathbf{COF}$									01 (.03)
R^2	.14**	.27**	.40**	.03**	.44**	.15**	.03*	.62**	.37**

Note. SR = Self-Report. PR = Peer-Report. Standard errors are reported in parentheses.

^{*}*p* < .05. ***p* < .01.

TABLE 3

Regression Results Testing Hypotheses 4 and 5 in Study 3

Variable	T2 Silence	T3 Abusive Supervision
Abusive Supervision		.04 (.07)
T1 Fear	.42 (.06)**	.13 (.09)
Assertiveness	71 (.08)**	
Fear × Assertiveness	34 (.06)**	
Climate of Fear (COF)	.00 (.05)	
Fear × COF	.08 (.05)*	
T2 Silence		.28 (.09)**
T1 Anger		.05 (.05)
R^2	.62**	.17**

Note. N = 161. Standard errors are reported in parentheses.

^{*}*p* < .05. ***p* < .01.

TABLE 4

Estimates of Conditional Indirect Effects for Studies 1, 2, and 3

Study Variables	Conditional Indirect Effects	Effect	SE	95% CI
Study 1 $DV = T3 Silence$ $Mediator = T2 Fear$	Conditional indirect effect of T1 abusive supervision for low assertiveness (self-reported silence)	.20	.09	.07 to .40
	Conditional indirect effect of T1 abusive supervision for high assertiveness (self-reported silence)	01	.06	12 to .14
	Conditional indirect effect of T1 abusive supervision for low assertiveness (peer-reported silence)	.29	.09	.14 to .50
	Conditional indirect effect of T1 abusive supervision for high assertiveness (peer-reported silence)	.05	.06	04 to .21
Study 2^a DV = T2 Silence Mediator = T1 Fear	Conditional indirect effect of T1 abusive supervision for low assertiveness	.11	.07	.01 to .31
	Conditional indirect effect of T1 abusive supervision for high assertiveness	02	.07	18 to .13
	Conditional indirect effect of T1 abusive supervision for low climate of fear	01	.07	16 to .11
	Conditional indirect effect of T1 abusive supervision for high climate of fear	.09	.08	.00 to .33
Study 3 $DV = T2 Silence$ $Mediator = T1 Fear$	Conditional indirect effect of T1 abusive supervision for low assertiveness	.24	.07	.12 to .39

Study Variables	Conditional Indirect Effects	Effect	SE	95% CI
	Conditional indirect effect of T1 abusive supervision for high assertiveness	.04	.03	.00 to .11
	Conditional indirect effect of T1 abusive supervision for low climate of fear	.10	.05	.03 to .21
	Conditional indirect effect of T1 abusive supervision for high climate of fear	.24	.08	.11 to .40
DV = T2 Silence Mediator = $T1$ Anger	Conditional indirect effect of T1 abusive supervision for low assertiveness	.01	.02	01 to .06
	Conditional indirect effect of T1 abusive supervision for high assertiveness	.01	.01	.00 to .03
	Conditional indirect effect of T1 abusive supervision for low climate of fear	.00	.01	02 to .03
	Conditional indirect effect of T1 abusive supervision for high climate of fear	.00	.02	05 to .03
DV = T3 Abusive Supervision ^b Mediator = T2 Silence	Conditional indirect effect of T1 fear for low assertiveness	.20	.07	.09 to .35
Mediator – 12 Stience	Conditional indirect effect of T1 fear for high assertiveness	.04	.02	.01 to .11
	Conditional indirect effect of T1 fear for low climate of fear	.08	.04	.03 to .18
	Conditional indirect effect of T1 fear for high climate of fear	.15	.05	.07 to .28

Note. Standard errors (SE) and confidence intervals (CI) reflect bias corrected bootstrap estimates based on 5000 bootstrap samples.

^a Model estimated controlling for Time 1 silence.

^b Model estimated controlling for Time 1 abusive supervision and Time 1 anger.

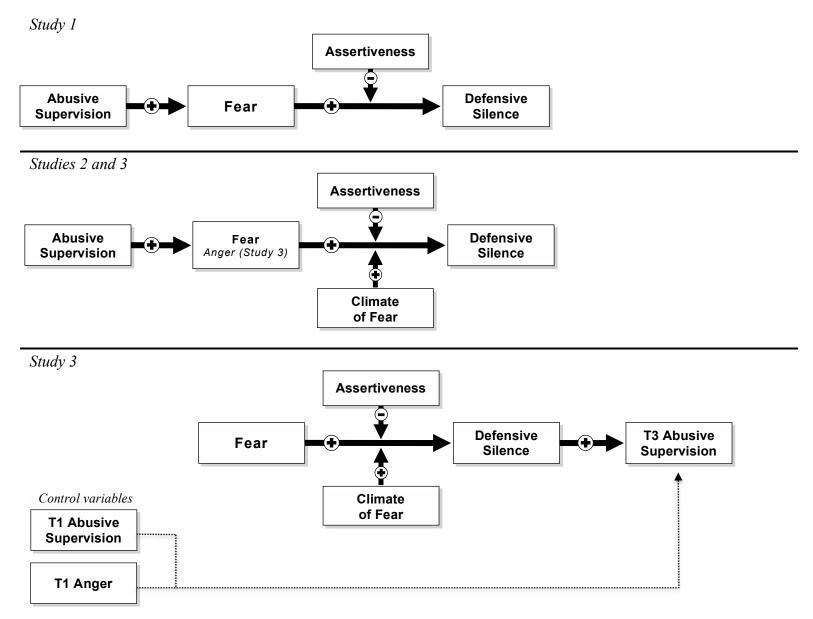


Figure 1. Theoretical models showing hypothesized directions of effects.

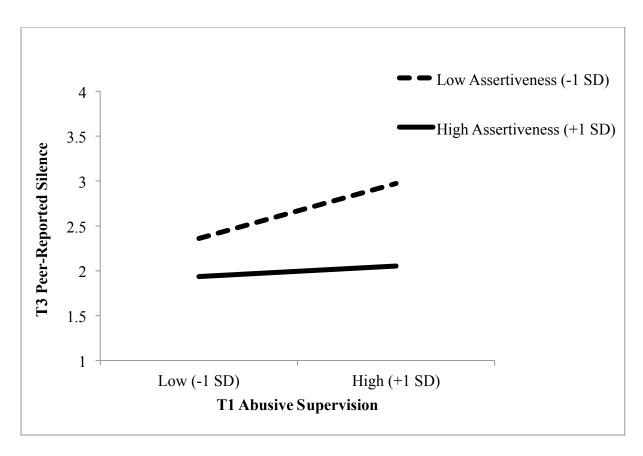


Figure 2. Conditional indirect effect of time 1 abusive supervision on time 3 peer-reported defensive silence via time 2 spouse-reported fear at low and high levels of employee assertiveness in Study 1.

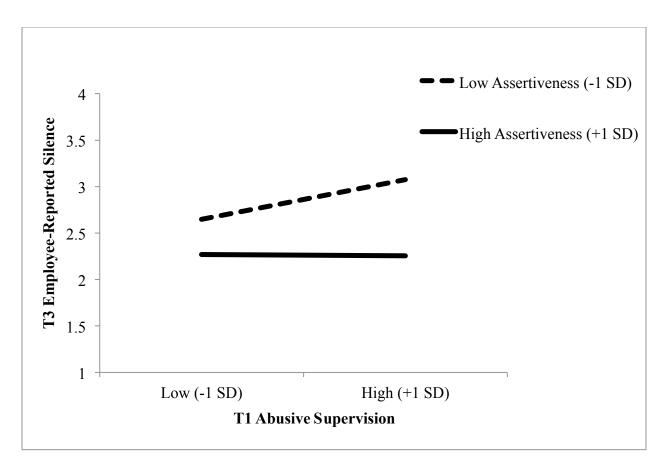


Figure 3. Conditional indirect effect of time 1 abusive supervision on time 3 employee-reported defensive silence via time 2 spouse-reported fear at low and high levels of employee assertiveness in Study 1.

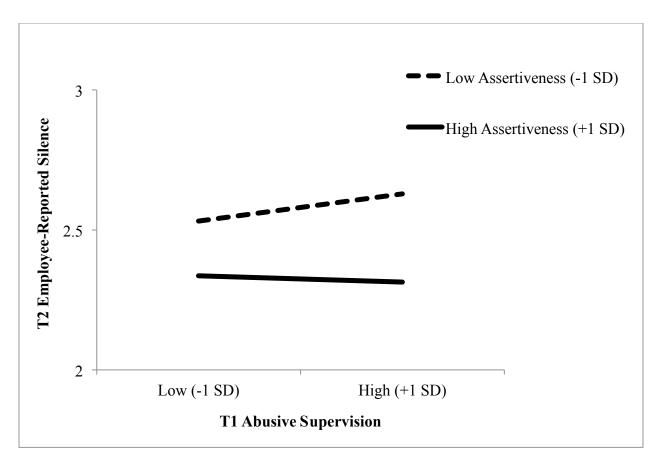


Figure 4. Conditional indirect effect of time 1 abusive supervision on time 2 employee-reported defensive silence via time 1 employee-reported fear at high and low levels of assertiveness in Study 2.

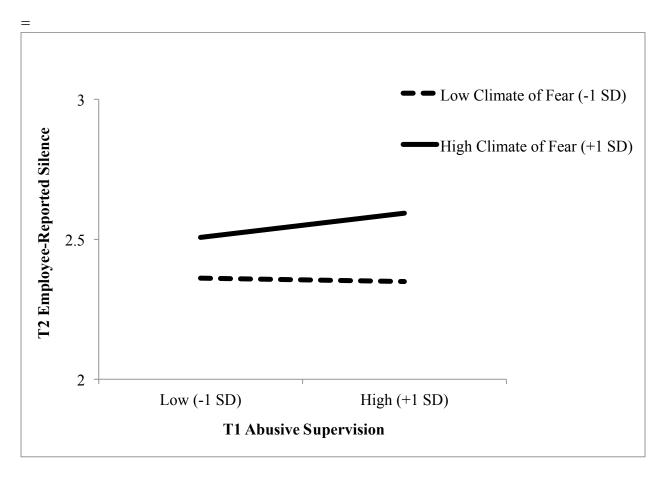


Figure 5. Conditional indirect effect of time 1 abusive supervision on time 2 employee-reported defensive silence via time 1 employee-reported fear at high and low levels of climate of fear in Study 2.

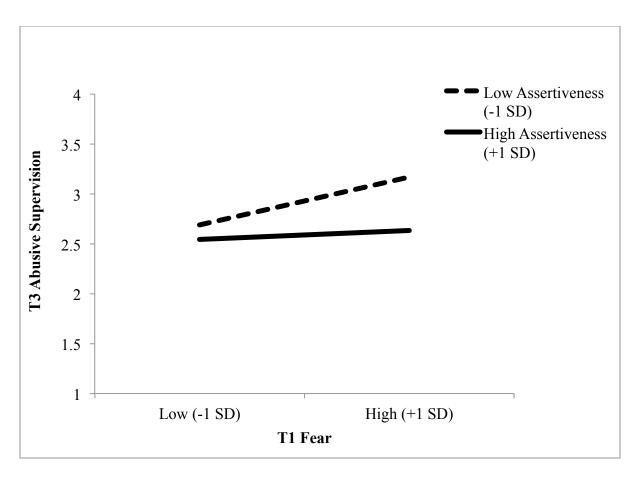


Figure 6. Conditional indirect effect of employee-reported time 1 fear on time 3 abusive supervision via time 2 employee-reported defensive silence at low and high levels of assertiveness in Study 3.

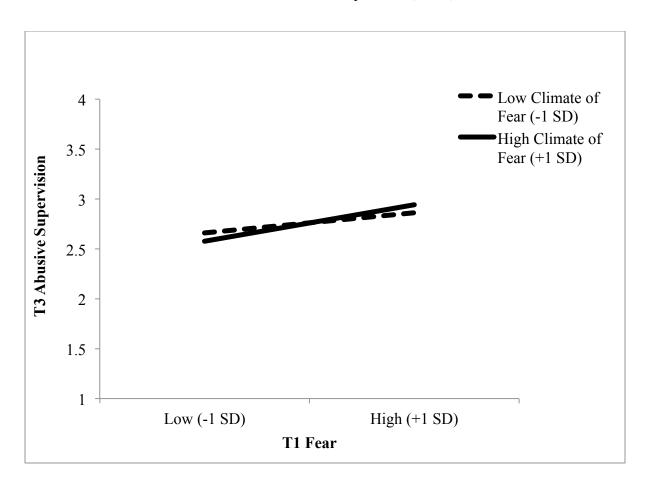


Figure 7. Conditional indirect effect of time 1 employee-reported fear on time 3 abusive supervision via time 2 employee-reported defensive silence at high and low levels of climate of fear in Study 3.

FOOTNOTES

In order to examine whether the 9-item measure was equivalent to the 19-item scale, we collected data from an independent sample of 100 university students. Analysis showed a significant correlation between the 9-item and 19-item scales (r = .95, p < .001).

We undertook two studies in order to validate the 4-item climate-of-fear measure. First, to examine whether the 4-item measure was equivalent to the 13-item scale, we collected data from an independent sample of 172 full-time employees in the Philippines. Correlational analysis showed a significant relationship between the 4-item and 13-item scales (r = .75, p < .001). In the second study, we collected data from an independent sample of 189 full-time employees and their co-workers. We assessed the association of the 4-item measure with other theoretically relevant constructs, namely psychological distress, avoidance coping, silence (co-worker rated), and turnover intentions (co-worker rated). Results suggest that climate of fear was positively associated with psychological distress (r = .69, p < .001), avoidance focused coping (r = .57, p < .001), co-worker reported silence (r = .45, p < .001), and co-worker reported turnover intentions (r = .52, p < .001). Based on these results, we conclude that 1) the 4-item climate-of-fear scale represents the 13-item version sufficiently well and 2) that the 4-item scale is significantly associated with other theoretically relevant constructs.

To examine whether the 3-item measure was equivalent to the 5-item scale, we collected data from an independent sample of 169 full-time workers. Analysis showed that the 3-item and 5-item scales were highly correlated (r = .93, p < .001).

We also conducted supplementary analyses for Studies 2 and 3 to examine the three-way interactions among fear, assertiveness, and climate of fear in predicting defensive silence. Results indicated that the inclusion of the three-way interaction term was non-significant for both Study 2 (*B* = -.03, 95% *CI*: -.11 to .05) and Study 3 (*B* = .08, 95% *CI*: -.02 to .18).