Roots Run Deep: Investigating Psychological Mechanisms Between History of Family Aggression and Abusive Supervision

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In this article, we examine the relationships between supervisor-level factors and abusive supervision. Drawing from social learning theory (Bandura, 1973), we argue that supervisors’ history of family aggression indirectly impacts abusive supervision via hostile cognitions and hostile affect, with angry rumination functioning as a first-stage moderator. Using multisource data, we tested the proposed relationships in a series of 4 studies, each providing evidence of constructive replication. In Study 1, we found positive relationships between supervisors’ history of family aggression, hostile affect, explicit hostile cognitions, and abusive supervision. We obtained the same pattern of results in Studies 2, 3, and 4 using an implicit measure of hostile cognitions and controlling for previously established antecedents of abusive supervision. Angry rumination moderated the indirect relationship between supervisors’ history of family aggression and abusive supervision via hostile affect only. Overall, the results highlight the important role of supervisor-level factors in the abusive supervision dynamics.

Keywords: abusive supervision, family aggression, implicit measure, social learning, workplace aggression

Abusive supervision is generally understood as “subordinates’ perceptions of the extent to which supervisors engage in the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact” (Tepper, 2000, p. 178). Because the phenomenon involves behaviors such as repeated scapegoating, angry outbursts, and public criticism toward subordinates (Bies, 2001), it has negative implications for a wide variety of work and nonwork attitudes (e.g., meaning of work, job, and life satisfaction; Rafferty & Restubog, 2011; Tepper, 2007) and behaviors (e.g., in-work and extra-role job performance, workplace deviance, spousal undermining; Lian, Ferris, & Brown, 2012; Mitchell & Ambrose, 2007; Restubog, Scott, & Zagenczyk, 2011; Shoss, Eisenberger, Restubog, & Zagenczyk, 2013). Although research to date has yielded important insights, we know only little about supervisor-specific factors that engender perceived abuse (a notable exception is work on deep-level dissimilarity by Tepper, Moss, & Duffy, 2011). In reaction, Tepper’s (2007) critical appraisal of the abusive supervision literature urges researchers to consider supervisors’ characteristics in their studies because leaders’ attitudes and behaviors are profoundly influenced by their personality and prior experiences (House, Shane, & Herold, 1996). Indeed, empirical evidence suggests that individual differences directly influence the occurrence of workplace aggression in general (Aquino & Bradford, 2000; Douglas & Martinko, 2001; Garcia, Restubog, & Denson, 2010; Inness, Barling, & Turner, 2005) and of abusive supervision in particular (Kiazad, Restubog, Zagenczyk, Kiewitz, & Tang, 2010). Undoubtedly, a better understanding of the supervisor-specific factors that enable abusive supervision is crucial for the development of more targeted policies and interventions aimed at reducing its occurrence.

To address this issue, we adopt a social learning perspective in investigating the psychological mechanisms associated with abusive supervision (Bandura, 1973). Given the highly influential role of parents in their child’s social development, we specifically investigate the impact of supervisors’ history of family aggression—operationalized as observed interparental aggression—on abusive supervision. On the basis of social learning theory (Ban-
dura, 1973) and ancillary research (Eisenberg, Cumberland, & Spinrad, 1998; Huesmann, 1988), we propose that a history of family aggression predisposes supervisors to engage in abusive supervision because repeated exposure to family aggression facilitates the development of and chronic accessibility to hostile cognitions and affect (i.e., the retention of aggressive concepts in memory as well as the expressivity of hostile affect). Moreover, we posit that the relationships between supervisors’ history of family aggression, hostile cognitions, hostile affect, and abusive supervision are strengthened by supervisors’ predisposition to engage in angry rumination.

We make three important contributions to the abusive supervision literature. First, by adopting the social learning theory (Bandura, 1973), we offer an alternative lens by which to examine the factors that influence abusive supervision. By framing it as a form of learned aggressive behavior, we are able to extend the known antecedents of abusive supervision to include important nonwork-related experiences (e.g., history of family aggression). Indeed, most studies have utilized a justice-based approach focusing on the role of organizational mistreatment as antecedents of abuse (Tepper, 2007). It should be noted that we are not proposing that a social learning approach is better compared to displaced aggression or equity theories. However, we believe that utilizing an alternative theoretical approach may lead to additional insights as to the possible reasons why supervisors abuse their subordinates.

Second, our article examines psychological factors that influence abusive supervision. Unlike prior work, it links previous experience (i.e., history of family aggression) and abusive supervision by implicating hostility-related cognitions (i.e., explicit and implicit hostile cognitions, angry rumination) and hostility-related affect. We argue that a distal antecedent such as an individual’s history of family aggression influences how that individual thinks and feels about hostility. This in turn is associated with a predisposition toward aggressive behavior (e.g., abusive supervision). Lastly, to our knowledge, our study is the first to examine the role of implicit social cognitions in abusive supervision research. The inclusion of implicit hostile cognitions extends the nomological net of abusive supervision as well as takes into account mounting evidence that aggressive cognitions are composed of both explicit and implicit components (Bing et al., 2007; Frost, Ko, & James, 2007). In the sections that follow, we further elaborate on these theoretical linkages.

**Supervisors’ History of Family Aggression, Explicit and Implicit Hostile Cognitions**

Individuals learn aggressive behaviors not only via direct experience (Bandura, 1973; Kiewitz et al., 2012) but also vicariously by observing and modeling authority figures (e.g., parents). One context that has been identified to provide ample opportunity for exposure to aggression and to be highly influential in learning aggressive behavior is the family environment (Cappell & Heiner, 1990; Chermack & Walton, 1999). Parents, in particular, are highly influential agents in social learning processes because children regard them as authority figures and depend on them for care and nurturance (Bandura, 1973). In this study, we focus on observed interparental aggression (i.e., the extent to which supervisors observed their parents aggress toward each other during childhood) as an indicator of family aggression history. Empirical studies support the salience of observational learning in acquiring aggressive tendencies. In a series of experiments, Bandura and colleagues (Bandura, 1965; Bandura, Ross, & Ross, 1963) found that exposure to human and filmed aggressive models doubled aggressive behavior in children relative to those who were not exposed to aggressive models. Furthermore, children are more likely to imitate the behavior of a model who had been nurturing and had power over resources important to a child (e.g., parents).

According to social learning theory (Bandura, 1973), observational learning contributes to long-term aggressiveness through the retention and symbolic representation of stimuli in memory. Specifically, humans have the ability to encode and transform information into functional verbal symbols that subsequently guide social behavior. In the case of aggression, verbal representations in the form of aggressive concepts are later synthesized to form memory codes that reflect specific behavioral patterns. Huesmann (1988) further elaborated on these propositions through his work on aggressive scripts, which refer to sets of particularly well-rehearsed, highly associated concepts in memory, often involving causal links, goals, and action plans. Notably, aggressive scripts guide how individuals approach social interactions, as they comprise information about what environmental cues to process, types of behavioral strategy to use (e.g., in conflicts), and expected outcomes of chosen behaviors (Huesmann, 1988).

Besides contributing to the development of aggressive concepts in memory, social learning theory also suggests that repeated exposure to family aggression strengthens individuals’ beliefs about the acceptability of aggressive behavior (Bandura, 1973; Huesmann, 1988). That is, exposure to aggression during childhood fosters the notion that aggressive behavior is acceptable and useful in settling interpersonal conflicts. This belief is further reinforced when a child observes that aggressive behaviors result in positive consequences (e.g., obedience and control) because the child learns to expect similar positive outcomes by enacting aggressive behaviors (Bandura, 1973). Indeed, empirical evidence in the form of a longitudinal survey-based study suggests that exposure to aggression during childhood is positively related to long-term increases in hostile cognitions (i.e., aggressive scripts and normative beliefs about aggression; Guerra, Huesmann, & Spindler, 2003). On the basis of these arguments, we suggest that individuals who previously and repeatedly observed interparental aggression may have learned that aggression constitutes acceptable and useful behavior in relationships and hence may be more inclined to behave aggressively in other contexts as well (e.g., at work with subordinates). This claim is supported by research demonstrating that social learning of aggression generalizes across contexts and is not limited to where it was learned (e.g., the family setting; Huesmann, Eron, Lefkowitz, & Walder, 1984; Straus, 1990).

Complementing the above notions is the realization in recent social learning research that human cognition involves both conscious and unconscious processes (Anderson & Bushman, 2002). On the one hand, individuals are consciously aware of their beliefs in the appropriateness of and preference for aggressive behavior (Huesmann, 1988). On the other hand, they are unaware of how accessible and strongly associated such aggressive concepts are in memory (Anderson & Bushman, 2002). As a consequence, there is growing consensus among personality theorists that researchers need to tap into both explicit and implicit social cognitions in order
to fully account for the influence of social cognitions on behavior (Bing et al., 2007; Greenwald & Banaji, 1995). Notably, research has shown that implicit cognitions account for a significant amount of variance over and above explicit cognitions in predicting experimental task performance (e.g., word-maze and word-recall tasks; McClelland, Koestner, & Weinberger, 1989). In light of these arguments, we propose that supervisors’ observation of interparental aggression (i.e., their history of family aggression) is associated with both explicit and implicit hostile cognitions.

Hypothesis 1A: History of family aggression is positively related to explicit hostile cognitions.

Hypothesis 1B: History of family aggression is positively related to implicit hostile cognitions.

Supervisors’ History of Family Aggression and Hostile Affect

In our research model, we further propose that supervisors’ history of family aggression increases the likelihood of developing highly accessible hostile affect. According to social learning theory (Bandura, 1973), emotional learning can occur when people, places, and events acquire emotion-eliciting properties through repeated associations with painful experiences (e.g., family aggression). These conditioned associations increase the variety of environmental cues that can trigger the experience of hostile emotions. That is, hostile affect witnessed during interparental aggression becomes symbolically encoded as part of a child’s aggressive scripts (Abelson, 1981; Huesmann, 1988). Given the psychological parallels that exist between parent–child and supervisor–subordinate relationships (Game, 2008), it is plausible that conditioned negative emotions learned in the family context will also be triggered in the workplace.

Further support for the relationship between history of family aggression and hostile affect comes from ancillary research on emotional socialization, particularly on the influence of parental expressivity of emotion (Eisenberg et al., 1998; Fredrickson, 1998; Kim, Conger, Lorenz, & Elder, 2001). According to this line of work, exposure to emotional expressions of hostility may influence children’s arousal through contagion, vicarious processes, or the meaning associated with the emotional displays (Eisenberg et al., 1998). For instance, when asked to report what they felt after observing live expressions of hostile affect, participants aged 4–5 years old described having negative feelings similar to the emotions exhibited by the adult models (Cummings, 1987). Moreover, repeated exposure to hostile emotional displays during family interactions may signal to children that such behavior is not only appropriate and functional in social interactions (Dusek & Danko, 1994) but also justified (Eisenberg et al., 1998). These propositions are supported by studies examining the relationship between parent-child emotional expressivity and emotional regulation among children and adults (Burrowes & Halberstadt, 1987; Eisenberg et al., 2001). For example, in a cross-sectional study, college students from negatively expressive families reported less control over feelings of anger compared to their peers even after controlling for anger intensity (Burrowes & Halberstadt, 1987). Similarly, a lab study showed that exposure to negative parental expressivity has been found to increase children’s emotional expressivity and externalizing of behavioral problems (Eisenberg et al., 2001). To this end, we expect history of family aggression to be associated with greater hostile affect. That is, observation of interparental aggression increases the likelihood that environmental cues and ambiguous situations trigger hostile affect due to conditioned emotions. The more anger-eliciting situations the child is exposed to, the higher the chances that aggressive concepts in memory contain hostility-related affect. We also expect that supervisors who have observed family aggression are less likely to regulate hostile affect, thereby increasing its occurrence at work. In line with this reasoning, we predict:

Hypothesis 2: History of family aggression is positively related to hostile affect.

Hostile Cognitions, Hostile Affect, and Subordinates’ Perceptions of Abusive Supervision

We further propose that both supervisors’ hostile cognitions and hostile affect will be positively associated with subordinates’ perceptions of abusive supervision. Consistent with social learning theory (Bandura, 1973), we argue that highly accessible encoded hostile cognitions and affect influence one’s behavioral tendencies toward aggression. As an example for such a link involving hostile cognitions, Guerra et al. (2003) found that the relationship between community violence exposure and subsequent aggressive behavior 12 months later was partially mediated by children’s beliefs about the acceptability of aggression. Notably, the level of aggressive behavior remained stable across Grades 1–6 irrespective of whether teacher or parent reports were used. Similarly, Anderson and Bushman (2002) argued that hostile affect in the form of anger provides a justification for aggressive retaliation and potentially interferes with higher level cognitive processes, including those used in moral reasoning. In other words, feeling angry may serve as a cue to react and engage in aggressive behaviors (e.g., yelling, public ridicule).

Supervisors’ Angry Rumination as a First-Stage Moderator

Thus far we have argued that history of family aggression fosters the development of hostile cognitions and affect, which in turn predisposes supervisors to engage in abusive supervision. We further qualify this prediction by arguing that not all supervisors who have observed family aggression will develop hostility-related cognitions and affect. Dispositional characteristics are likely to influence these processes. An important personality factor that explains and predicts the occurrence of anger and aggressive behavior is angry rumination (Denson, Pedersen, Ronquillo, & Nandy, 2009). It refers to the tendency to focus on negative self-evaluations or negative interpretations of one’s life causing the amplification of negative emotion. In the context of our research model, we treat angry rumination as a first-stage moderator because of its capability to increase the accessibility of aggressive thoughts and anger experiences (Pedersen et al., 2011). Consistent with social learning theory, angry rumination represents a form of rehearsal for encoded behavioral scripts (Bandura, 1973). That is, when individuals replay what they have observed in the past (e.g., family aggression), it becomes more readily accessible in memory.
(Huesmann, 1988). Rumination also provides the opportunity to revise and cognitively rehearse aggressive scripts, thus enhancing its appropriateness in various situations (Bandura, 1973). Angry rumination can also amplify the experience of negative emotion because it prolongs the activation of the emotional experience (Clark & Isen, 1981). For instance, a recent neuroimaging study showed that areas of the brain associated with negative affect were active during the time participants engaged in angry rumination, thus corroborating the positive relationship between rumination and increased experience of activated emotions (Denson et al., 2009). Importantly, empirical evidence suggests that those individuals who are predisposed to ruminate about past offenses are not only more susceptible to feeling extremely hostile but also to behaving more aggressively (Bushman & Geen, 1990; Ray et al., 2005). Collectively, we expect that supervisors’ rumination about their past experiences (i.e., history of family aggression) will increase the strength of the indirect effect between history of family aggression and abusive supervision via hostile cognitions and hostile affect:

**Hypothesis 3:** The conditional indirect effect of history of family aggression on abusive supervision via hostile cognitions will be stronger when angry rumination is high compared to when angry rumination is low.

**Hypothesis 4:** The conditional indirect effect of history of family aggression on abusive supervision via hostile affect will be stronger when angry rumination is high compared to when angry rumination is low.

### Overview of Studies

We tested our hypotheses in four studies, each providing evidence of constructive replication (Lykken, 1968). As shown in Table 1, Study 1 tests Hypothesis 1A (explicit hostile cognitions) and Hypothesis 2 (hostile affect), whereas Studies 2–4 assess Hypothesis 1B (implicit hostile cognitions) and Hypotheses 2–4 (hostile affect and angry rumination). In Study 3, we obtained parent ratings of family aggression history to minimize response distortion and memory recall problems associated with retrospective accounts (Hardt & Rutter, 2004). We included a temporal element in Studies 3 and 4 to help reduce concerns associated with common method variance (Podsakoff, MacKenzie, & Podsakoff, 2012). To rule out alternative explanations for our findings, we included previously established antecedents of abusive supervision as control variables in Studies 2–4.

### Study 1

#### Participants and Procedure

As part of an unrelated project, we distributed survey kits to 258 supervisors enrolled in a part-time MBA program in the Philippines. All surveys were in English. Supervisors completed a supervisor questionnaire and generated an anonymous code to allow matching of surveys from his or her corresponding subordinate. Upon completion, supervisors received a sealed envelope containing demographic and behavioral questions (i.e., abusive supervision items) to be given to one of their subordinates. Surveys were returned to the research team in a prepaid envelope via postal mail. Altogether, we were able to match 154 of the 258 supervisor–subordinate surveys. Among supervisors, 55.80% of participants were males, 59.70% were above 30 years old, and average organizational tenure was 2.69 years. Supervisors had supervised their subordinate for an average of 2.79 years. Supervisors worked in various business sectors, such as food and beverage (26%), airline and transportation (25%), government service (22%), and hotels (22%). The subordinate sample consisted of 54.50% males; approximately 81.90% were between 19 and 30 years old, and average organizational tenure was 2.12 years.

### Measures

**History of family aggression (α = .86).** Supervisors’ history of family aggression was assessed with a modified version of the Conflict Tactics Scales (CTS; Straus, 1979). Supervisors were instructed to recall the “worst” year of their childhood (i.e., the time when their parents fought the most) and indicate the frequency (1 = never to 7 = always) with which they witnessed their parents use aggressive tactics toward each other during that year. Example items include “One of my parents yelled at the other” and “One of my parents threw something at the other.”

The validity of the CTS was corroborated by prior work that examined the level of agreement between CTS scores reported by more than one family member (Straus, 1979; Straus, Hamby, Boney-McCoy, & Sugarman, 1996). To provide additional validity evidence for the CTS, we collected data from an independent sample of 267 student and parent dyads in the Philippines. First, we correlated the student-reported observed interparental aggression with the parent-rated measure. Results suggest that the two measures were positively correlated (r = .43, p < .01). Second, we examined the correlation between parent-reported interparental aggression with the student-reported hostile cognitions and hostile affect. Bivariate correlations revealed that parent ratings of history of family aggression were positively related to both hostile cognitions (r = .17, p < .01) and hostile affect (r = .13, p < .05). Overall, these results support the validity of the CTS as a measure of history of family aggression.

**Explicit hostile cognitions (α = .83).** In this study, explicit hostile cognitions were measured with eight items from the General Approval of Aggression subscale of the Normative Beliefs About Aggression Scale (NOBAGS; Huesmann & Guerra, 1997). The subscale reflects the endorsement of aggressive scripts through self-reported beliefs about the acceptability of aggression. Supervisors were asked to rate the extent to which they agreed or disagreed with statements such as “If you’re angry, it is okay to say mean things to people.”

**Hostile affect (α = .98).** Hostile affect was measured using the State Hostility Scale developed by Anderson, Deuser, and DeNeve (1995). It consists of 19 self-relevant statements containing anger- and hostility-related adjectives. Supervisors were requested to rate the extent to which they agreed or disagreed with statements such as “I feel furious” and “I feel angry.”

**Abusive supervision (α = .97).** Using Tepper’s (2000) 15-item scale, subordinates were asked to rate the extent to which their supervisor engaged in abusive behaviors (1 = I cannot

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1 Both supervisors and subordinates (Studies 1–4) and the supervisors’ parent (Study 3) received coffee vouchers as an incentive for participation.
remember him/her using this behavior with me to 7 = S/he always uses this behavior towards me). An example item is “My immediate supervisor puts me down in front of others.”

Results

Descriptive statistics, correlations, and reliability coefficients are presented in Table 2. Supervisors’ history of family aggression was positively associated with explicit hostile cognitions \((r = .57, p < .001)\) and hostile affect \((r = .56, p < .001)\), thus supporting Hypotheses 1A and 2. In turn, explicit hostile cognitions and hostile affect were positively correlated with subordinates’ perceptions of abusive supervision \((r = .60)\) and \(r = .54, p < .001\). Although we found support for the hypothesized relationships, the current study only examined explicit hostile cognitions. Having proposed that history of family aggression is also associated with highly automatic (unconscious) aggressive concepts in memory (Anderson & Bushman, 2002), we account for implicit hostile cognitions in the subsequent studies, while also testing for the moderating role of angry rumination. In addition, we aimed at providing a more stringent test of the proposed relationships by controlling for previously established antecedents of abusive supervision.

Study 2

Participants and Procedure

Data were gathered in 10 call centers in the Philippines. Surveys were administered to supervisors during their designated, preallocated breaks. A member of the research team was present during questionnaire completion and made sure the word completion task (WCT) was completed within 3 min. As in Study 1, supervisors were asked to generate an anonymous code for matching both supervisor and subordinate questionnaires. Supervisors were given a sealed envelope containing the subordinate questionnaire and asked to give it to a subordinate with whom they interacted on a regular basis. Surveys were returned to the research team via postal mail in a prepaid envelope. Out of 530 supervisors, we were able to match 199 supervisor–subordinate dyads. The supervisor sample was 57% male. Supervisors were on average 33.26 years old,
and 84% had been working in their company for 10 years or less and had supervised their subordinate for an average of 3.18 years. The subordinate sample comprised 54% females; 80% were between 19 and 30 years of age, and 81% had been working in their respective companies for 5 years or less.

**Measures**

**History of family aggression** ($\alpha = .96$). As in Study 1, supervisors’ history of family aggression was assessed with the CTS (Straus, 1979).

**Implicit hostile cognitions.** Hostile cognitions were measured with a WCT developed by Anderson, Carnagey, and Ebanks (2003). The WCT is an implicit measure assessing the accessibility of aggressive cognitions that appears as a simple WCT. Supervisors were asked to complete as many of 98 word fragments as possible in 3 min by filling in missing letters. Half the items could be completed to form either aggressive or nonaggressive words. For instance, the item “expl__e” may be completed as “explore” or “explode.” An accessibility of aggressive thoughts score was then calculated by dividing the number of aggressive word completions by the total number of word completions.

We conducted two validation studies to examine the construct validity of the WCT. In the first validation study, using a sample of 191 full-time employees in the Philippines, we correlated the WCT scores with other established measures of hostile cognitions such as the NOBAGS (Huesmann & Guerra, 1997) and the Hostile Automatic Thoughts Questionnaire (HAT; Snyder, Crowson, Houston, Kurylo, & Poirier, 1997). Results showed that both the NOBAGS ($r = .16$, $p < .05$) and the HAT ($r = .18$, $p < .05$) correlated positively with WCT scores. It should be noted that obtaining such low but significant correlations was expected because the WCT is an implicit measure of hostile cognitions (Bing et al., 2007; McClelland et al., 1989), whereas the NOBAGS and the HAT are explicit self-report measures of hostile cognitions. Indeed, implicit measures have been noted to measure additional and oftentimes unique information in comparison to explicit self-reports (James & McIntyre, 2000). Next, we assessed the association of WCT scores with constructs that have been found to be theoretically related to hostile cognitions. For instance, one personality trait that has shown significant associations with increased aggression is trait anger (Spielberger, Jacobs, Russell, & Crane, 1983). Thus, we expected WCT scores to be positively associated with trait anger. Using the same sample of 191 employees, we found a significant positive relationship between trait anger and WCT scores ($r = .25$, $p < .01$). Finally, we expected WCT scores to be negatively related to self-control because the latter has been found to override automatic cognitive tendencies to aggress (Stucke & Baumeister, 2006). Correlational analysis suggests that WCT scores were significantly negatively related to self-control ($r = -.23$, $p < .01$).

In the second validation study, we collected data from an independent sample consisting of 126 full-time employees in the Philippines. We correlated the WCT scores with the Conditional Reasoning Test of Aggression (CTRA; James & McIntyre, 2000), an implicit measure of aggression tapping into an individual’s proclivity to use certain implicit biases in reasoning that enhance the rational appeal of aggression. Correlational analysis revealed a significant positive relationship between the CTRA and WCT ($r = .41$, $p < .001$). Overall, these results provide validity evidence for the WCT as a measure of hostile cognitions.

**Hostile affect** ($\alpha = .97$). As with Study 1, hostile affect was assessed with the State Hostility Scale developed by Anderson et al. (1995).

**Angry rumination** ($\alpha = .90$). Angry rumination was measured with the 10-item Angry Rumination Scale developed by Denson, Pedersen, and Miller (2006). Supervisors were asked to think about their experiences with their respective families while growing up and to rate the extent to which they ruminate about these experiences. An example item is “I keep thinking about events that angered me for a long time.”

**Abusive supervision** ($\alpha = .96$). As in Study 1, subordinates’ perceptions of abusive supervision were measured with Tepper’s (2000) 15-item scale.

**Control variables.** We controlled for subordinates’ neuroticism ($\alpha = .88$), which was assessed with a 10-item scale developed by John and Srivastava (1999). Individuals high in neuroticism may perceive greater abusive supervision compared to their low neuroticism counterparts because of their low emotional stability (John & Srivastava, 1999). In line with Aryee, Chen, Sun, and Debrah (2007), we also controlled for previously established antecedents of abusive supervision such as interactional justice ($\alpha = .95$) and procedural justice ($\alpha = .97$), measured with Niehoff and Moorman’s (1993) nine-item and six-item scales, respectively. Psychological contract violation ($\alpha = .90$) was assessed via Robinson and Morrison’s (2000) four-item scale. The theoretical basis for controlling these variables is derived from social exchange theory (Blau, 1964). Supervisors who have been unfairly treated by organizational agents are more likely to engage in abusive supervision because of the need to restore equity and instigate retribution (Tepper, 2007). In addition, we accounted for supervisors’ gender, age, and duration of working relationship with the supervisor in our analyses. Evidence suggests that males engage in more workplace aggression than females (Hershcovic et al., 2007). However, it is also likely that females may engage in higher levels of abusive supervision than males because of its nonphysical and verbal nature (Tepper, 2000). We controlled for age due to its positive relationship to aggression (Tremblay et al., 1999), with older supervisors having been found to engage in greater abusive supervision compared to their younger counterparts (Hooibol & Brass, 2006). Finally, we controlled for duration of working relationship with the supervisor based on research suggesting that surface-level demographic dissimilarities (e.g., sex and ethnic dissimilarity between supervisor and subordinate) diminish over time as individuals learn more about each other (Harrison, Price, & Bell, 1998). Supervisor’s gender was dummy coded as 0 = male and 1 = female. Both supervisor’s age and duration of working relationship with the supervisor were assessed in years.\(^2\)

\(^2\)The same set of control variables were included in the analyses for Studies 3 and 4. Following the recommendation of Becker (2005), analyses for Studies 2–4 were repeated without the controls. The pattern of results was essentially identical (with or without control variables), indicating that the significant relationships among the study variables were not due to the presence of the covariates.
Table 3

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<td>10. Hostile cognitions (implicit; WCT)</td>
<td>0.19</td>
<td>0.08</td>
<td>-.08</td>
<td>-.04</td>
<td>-.07</td>
<td>-.35</td>
<td>.17</td>
<td>-.10</td>
<td>.26</td>
<td>.32</td>
<td>.31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Hostile affect</td>
<td>2.37</td>
<td>1.30</td>
<td>-.09</td>
<td>-.04</td>
<td>-.19</td>
<td>-.31</td>
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<td>-.07</td>
<td>.35</td>
<td>.67</td>
<td>.46</td>
<td>.38</td>
<td>(.97)</td>
<td></td>
</tr>
<tr>
<td>12. Subordinates’ perceptions of abusive supervision</td>
<td>2.09</td>
<td>1.20</td>
<td>-.26</td>
<td>-.02</td>
<td>-.25</td>
<td>.56</td>
<td>.34</td>
<td>-.15</td>
<td>.47</td>
<td>.35</td>
<td>.34</td>
<td>.49</td>
<td>.52</td>
<td>(.96)</td>
</tr>
</tbody>
</table>

Note. N = 199. Cronbach alpha reliabilities are reported along the diagonal. WCT = Word Completion Task. *p < .05. **p < .01. ***p < .001.

Results

Descriptive statistics are reported in Table 3. Consistent with Hypotheses 1B and 2, supervisors’ history of family aggression was positively related to implicit hostile cognitions (r = .32, p < .01) and hostile affect (r = .67, p < .01), respectively. Hypotheses 3 and 4 proposed that the strength of the indirect effect between history of family aggression and abusive supervision via implicit hostile cognitions and hostile affect is conditional on the level of the supervisors’ angry rumination. Following Preacher, Rucker, and Hayes (2007), we modeled angry rumination as a stage-first moderator of the paths leading from history of family aggression to implicit hostile cognitions and hostile affect, respectively. We tested our moderated mediation model using the SPSS macro developed by Preacher et al., which allowed us to implement bootstrapping methods and probe the significance of conditional indirect effects without assuming normality in the sampling distribution. Specifically, we examined the significance of the conditional indirect effects through 5,000 bootstrap samples using the second-order delta method to obtain standard errors and 95% confidence intervals (cf. Preacher et al., 2007).

The cross-product term (History of Family Aggression × Angry Rumination) was not significantly associated with implicit hostile cognitions (β = .00, ns). Furthermore, the conditional indirect effect between supervisors’ history of family aggression and subordinates’ abusive supervision perceptions via implicit hostile cognitions was not significant for both high (indirect effect = .04, SE = .02, z = 1.79, 95% CI [.00, .09]) and low angry rumination (indirect effect = .03, SE = .03, z = 1.29, 95% CI [.00, .09]). Thus, Hypothesis 3 was not supported. In contrast, the cross-product term (History of Family Aggression × Angry Rumination) was significantly related to hostile affect (β = .14, ΔR² = .02, p < .001). Results revealed that the conditional indirect effect between supervisors’ history of family aggression and subordinates’ abusive supervision via hostile affect was significant and stronger for high (indirect effect = .16, SE = .05, z = 2.96, 95% CI [.05, .30]) as opposed to low angry rumination (indirect effect = .05, SE = .03, z = 1.96, 95% CI [.02, .13]; see Table 6). Using the moderated mediation macro, we also calculated several conditional indirect effects at different values of the moderator to determine the region of significance based on the Johnson–Neyman technique (Preacher et al., 2007). As Figure 1 shows, the conditional indirect effect of supervisors’ history of family aggression on abusive supervision (through hostile affect) was significant at .05 alpha level for angry rumination values above 1.16. Thus, Hypothesis 4 was supported.

A major limitation of Studies 1 and 2 is our reliance on retrospective data, specifically on how history of family aggression was measured (i.e., asking supervisors to recall their experiences). Research evidence suggests that memories of past events may be influenced by inaccurate recall and response distortion (Hardt & Rutter, 2004). For this reason, we conducted a third study that utilized parent ratings of history of family aggression. Although parent ratings are also retrospective in nature, we believe that we can obtain a more accurate account of family aggression history, since parents were either the victims or the perpetrators of the aggressive act (Hardt & Rutter, 2004). Thus, they may be more aware of the extent to which their child observed interparental aggression. In addition, a 3-month time lag was introduced to further alleviate problems associated with common method variance.

---

3 We also assessed the indirect effects of hostile cognitions and hostile affect using Preacher and Hayes’s (2008) bootstrapping technique for multiple mediator models for Studies 2–4. The total indirect effect of history of family aggression through both hostile cognitions and hostile affect was significant for all studies (Study 2, point estimate = .20, 95% CI [.12, .31]; Study 3, point estimate = .17, 95% CI [.08, .30]; and Study 4, point estimate = .20, 95% CI [.11, .30]). Examination of the specific indirect effects revealed that hostile cognitions was a significant mediator (Study 2, point estimate = .05, 95% CI [.02, .10]; Study 3, point estimate = .04, 95% CI [.01, .10]; and Study 4, point estimate = .09, 95% CI [.04, .15]), as was hostile affect (Study 2, point estimate = .15, 95% CI [.06, .25]; Study 3, point estimate = .13, 95% CI [.05, .24]; and Study 4, point estimate = .12, 95% CI [.03, .21]). Overall, these results supported both Hypotheses 1A and 1B.
Study 3

Participants and Procedure

Participants were recruited from four customer service organizations, two call centers and two retail service organizations, in the Philippines. In consultation with the human resources division of each participating organization, a list of supervisors with key responsibilities in managing work units and supervising employees was obtained. Two hundred and seventy-seven supervisors were initially invited via e-mail to participate in a leadership survey. At Time 1, supervisors were asked to give a sealed envelope containing the parent questionnaire to facilitate matching of all study questionnaires. The supervisor completed an employee survey. These reports were identified by asking their respective human resources divisions to nominate a subordinate with whom the supervisor frequently interacted in the previous 3 months. In the survey, the subordinates were asked to provide information concerning their perceptions of abusive supervision. Altogether, we were able to match 134 parent–supervisor–subordinate questionnaires. The supervisor sample consisted of 60% males, with a mean age of 31.25 years. Sixty-six percent of the supervisors had been working in their respective companies for 1–5 years and had supervised their respective subordinate for 2.63 years on average. The subordinate sample comprised 54% females; approximately 79% were 21–30 years old, and 83% had been working in their respective companies for 5 years or less. The parent sample consisted of 45% mothers, and the average age was 55.60 years.

Measures and Results

We retained the Study 2 measures for Study 3. In line with previous work (O’Keefe, 1998), history of family aggression was measured by asking parents to recall their child’s worst year in the family, that is, the time when the parent fought with his or her spouse the most (prior to the age of 18). Subordinates’ neuroticism was assessed with Goldberg’s (1992) scale (α = .89).

Descriptive statistics for Study 3 are presented in Table 4. Paralleling the results of Studies 1 and 2, parent ratings of history of family aggression were positively related to implicit hostile cognitions (r = .27, p < .01) and hostile affect (r = .48, p < .01), respectively, thus supporting Hypotheses 1B and 2. The interaction term (Parent Ratings of History of Family Aggression × Angry Rumination) was not significantly associated with implicit hostile cognitions.

Table 4

Means, Standard Deviations, and Intercorrelations Among Variables in Study 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
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<td>2. Supervisor age</td>
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<td>3. Procedural justice</td>
<td>5.10</td>
<td>1.43</td>
<td>.02</td>
<td>.13</td>
<td>(.96)</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<td>—</td>
<td>—</td>
<td>—</td>
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<td>—</td>
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<tr>
<td>4. Interactional justice</td>
<td>5.33</td>
<td>1.49</td>
<td>.07</td>
<td>.02</td>
<td>—</td>
<td>.57**</td>
<td>.98</td>
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</tr>
<tr>
<td>5. Psychological contract violation</td>
<td>2.37</td>
<td>1.32</td>
<td>.22</td>
<td>.01</td>
<td>—</td>
<td>.30**</td>
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<td>—</td>
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<tr>
<td>6. Duration of work relationship with supervisor</td>
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<td>2.26</td>
<td>.05</td>
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<td>.07</td>
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<td>.20*</td>
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<td>7. Subordinate neuroticism</td>
<td>3.21</td>
<td>1.09</td>
<td>—</td>
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<td>—</td>
<td>.24**</td>
<td>.32**</td>
<td>.26**</td>
<td>.06</td>
<td>(.89)</td>
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</tr>
<tr>
<td>8. Parent ratings of history of family aggression</td>
<td>1.56</td>
<td>1.08</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>.04</td>
<td>—</td>
<td>.05</td>
<td>.13</td>
<td>—</td>
<td>.05</td>
<td>.24**</td>
<td>(.93)</td>
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<tr>
<td>9. Supervisors’ angry rumination</td>
<td>3.10</td>
<td>1.51</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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</tr>
<tr>
<td>10. Hostile cognitions (implicit; WCT)</td>
<td>0.19</td>
<td>0.08</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td>11. Hostile affect</td>
<td>2.47</td>
<td>1.26</td>
<td>—</td>
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<tr>
<td>12. Subordinates’ perceptions of abusive supervision</td>
<td>2.27</td>
<td>1.28</td>
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</tr>
</tbody>
</table>

Note. N = 134. Cronbach alpha reliabilities are reported along the diagonal. WCT = Word Completion Task.

*p < .05. **p < .01.
cognitions ($\beta = .00, ns$). As in the previous studies, we then tested the significance of the conditional indirect effect using 5,000 bootstrap samples. The conditional indirect effect between parent ratings of history of family aggression and abusive supervision via implicit hostile cognitions was not significant for both high (indirect effect $= .02, SE = .03, z = 0.73, 95\% CI [−0.2, 0.10]$) and low angry rumination (indirect effect $= .05, SE = .04, z = 1.22, 95\% CI [−0.01, 1.4])$. Hypothesis 3 was thus not supported. Conversely, the interaction term (Parent Ratings of History of Family Aggression × Angry Rumination) was significantly related to hostile affect ($\beta = .14, \Delta R^2 = .02, p < .05$). The conditional indirect effect between parent ratings of history of family aggression and abusive supervision perceptions via hostile affect was statistically significant for high angry rumination (indirect relationship $= .18, SE = .06, z = 3.09, 95\% CI [0.8, 3.1])$ but not for low angry rumination (indirect relationship $= .05, SE = .05, z = 1.05, 95\% CI [−0.3, 1.6];$ see Table 6). As depicted in Figure 2, the conditional indirect effect becomes significant at the .05 alpha level for angry rumination values above 2.31. Overall, Hypothesis 4 was supported.

A limitation of Study 3 is that the main study variables were all measured at the same time. This might pose a problem because respondents’ answers may be influenced by how the items in the surveys are presented and how they perceive the items are related to one another (Podsakoff et al., 2012). Studies have shown that correlations between variables can change depending on item order (Schwarz, Strack, & Mai, 1991). In addition, measuring variables of interest at the same time poses the risk that mood state measured at the same time. This might pose a problem because respondents’ answers may be influenced by how the items in the surveys are presented and how they perceive the items are related to one another (Podsakoff et al., 2012). Studies have shown that correlations between variables can change depending on item order (Schwarz, Strack, & Mai, 1991). In addition, measuring variables of interest at the same time poses the risk that mood state.

Study 4

Participants and Procedure

Data were obtained from full-time employees enrolled in various postgraduate programs in business, science, and education at a large university in the Philippines. Lecturers were approached to obtain permission to distribute questionnaires to participants. Research team members visited the classes to explain research goals and to assure participant anonymity and voluntary participation. At Time 1, a survey assessing history of family aggression, angry rumination, and control variables was administered to 331 participants. They returned completed questionnaires in sealed envelopes the following week in class, where research team members collected 274 surveys. Survey forms with a large number of missing responses ($n = 17$) and from participants with no direct reports ($n = 10$) were excluded. Two weeks after the Time 1 data collection, we administered a second survey assessing hostile affect and hostile cognitions during class time. Three hundred and one surveys were returned. A third wave of data (Time 3) was collected approximately 6 months after the second survey. At this point, each participant received a sealed envelope containing the subordinate questionnaire (assessing neuroticism and abusive supervision) to be passed along to one of their subordinates. Completed questionnaires were returned via postal mail in a prepaid envelope. We received 198 subordinate surveys. After removal of surveys with a large number of missing responses or incorrect identity codes, we were able to match 162 supervisor–subordinate dyads across the three measurement periods. The supervisor sample consisted of 46.90% males, with a mean age of 33.47 years. Sixty-three percent had been working in their companies between 1 and 5 years and had supervised their subordinate for an average of 3.44 years. The subordinate sample comprised 52.50% males; approximately 84% were between 21 and 30 years of age, and 82.10% had been working in their respective companies for 5 years or less.

Measures and Results

The same measures and controls used in Study 2 were retained for Study 4, the only exception being the assessment of subordinates’ neuroticism via Goldberg’s (1992) scale. Descriptive statistics are reported in Table 5. Consistent with Hypotheses 1B and 2, there was a significant positive relationship of supervisors’ history of family aggression with implicit hostile cognitions ($r = .43, p < .001$) and hostile affect ($r = .65, p < .001$), respectively. The interaction term (Supervisors’ History of Family Aggression × Angry Rumination) was not significantly associated with implicit hostile cognitions ($\beta = .05, \Delta R^2 = .00, ns$). The conditional indirect effect between supervisors’ family aggression history and abusive supervision via implicit hostile cognitions was also non-significant for both high (indirect effect $= .07, SE = .04, z = 1.87, 95\% CI [.09, .47])$ and low angry rumination (indirect effect $= .05, SE = .04, z = 1.60, 95\% CI [.09, .11])$. Thus, Hypothesis 3 was not supported. In contrast, our results indicated that the interaction term (Supervisors’ History of Family Aggression × Angry Rumination) was significantly related to hostile affect ($\beta = .14, \Delta R^2 = .02, p < .05$) over and above the control variables. Moreover, the conditional indirect effect of supervisors’ history of family aggression on abusive supervision via hostile cognitions was significantly stronger for those supervisors with high (indirect effect $= .14, SE = .05, z = 2.79, 95\% CI [.04, .46])$ as opposed to low angry rumination (indirect effect $= .07, SE = .03, z = 1.99, 95\% CI [.02, .17];$ see Table 6). Figure 3 shows that the conditional indirect effect becomes significant at the .05 alpha level for angry.
rumination values above 1.46. Overall, Hypothesis 4 was supported.

General Discussion

Theoretical Contributions

The main goal of our article was to investigate the relationship between supervisors’ history of family aggression and subordinates’ perceptions of abusive supervision. Our results speak to several gaps in the literature. First, we presented empirical evidence suggesting that history of family aggression is associated with abusive supervision. Our findings respond to Tepper’s (2007) call to focus more empirical attention on understanding the antecedents and psychological factors that may influence the occurrence of abusive supervision. Notably, we were able to demonstrate that history of family aggression increases the likelihood of abusive supervisory behavior over and above the influence of organizational mistreatment (e.g., supervisors’ procedural justice, supervisors’ interactional justice, and supervisors’ psychological contract violation) and other person variables (e.g., supervisors’ demographic characteristics and subordinates’ neuroticism). This contributes to the growing number of findings that assign individual differences (i.e., previous experiences and personality) a more central role in explaining workplace aggression (Douglas & Martin, 2001; Greenberg & Barling, 1999). Like all employees, supervisors bring their predispositions and experiences from nonwork environments to the workplace, which in turn impacts how they interact with their constituents. Our results are also in line with social learning theory (Bandura, 1973), which emphasizes the important role of observational learning in acquiring aggressive social behavior. Modeling the aggressive behaviors of their parents, abusive supervisors may have learned the utility of aggression as a means of settling interpersonal conflicts in the workplace in general and of managing subordinates in particular. To this effect, abusive supervision could be conceived as a form of aggressive behavior that is not only displaced but also socially learned from influential socialization agents.

Second, there has been limited research on psychological factors that influence the abusive supervision phenomenon. In this study,

Table 5

Means, Standard Deviations, and Intercorrelations Among Variables in Study 4

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
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<th>9</th>
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<th>11</th>
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<tbody>
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<td>1. T1 supervisor gender</td>
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<td>.50</td>
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<td>—</td>
<td>—</td>
<td>—</td>
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<td>2. T1 supervisor age</td>
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<td>7.72</td>
<td>.08</td>
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<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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</tr>
<tr>
<td>3. T1 procedural justice</td>
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<td>1.34</td>
<td>−.02</td>
<td>.10</td>
<td>(.95)</td>
<td>—</td>
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<tr>
<td>4. T1 interactional justice</td>
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<td>.05</td>
<td>−.07</td>
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<td>5. T1 psychological contract violation</td>
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<td>−.01</td>
<td>.24**</td>
<td>−.30***</td>
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<td>.07</td>
<td>.37***</td>
<td>−.09</td>
<td>−.15</td>
<td>.16*</td>
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<tr>
<td>7. T1 subordinate neuroticism</td>
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<td>1.04</td>
<td>−.11</td>
<td>.13</td>
<td>−.12</td>
<td>−.42***</td>
<td>.34***</td>
<td>.11 (.96)</td>
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<td>8. T1 supervisors’ history of family aggression</td>
<td>1.46</td>
<td>1.31</td>
<td>−.02</td>
<td>−.11</td>
<td>−.04</td>
<td>−.16</td>
<td>.30***</td>
<td>−.06</td>
<td>.24**</td>
<td>(.96)</td>
<td>—</td>
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<td>9. T1 supervisors’ angry rumination</td>
<td>2.99</td>
<td>1.51</td>
<td>−.04</td>
<td>−.12</td>
<td>−.19*</td>
<td>−.13</td>
<td>.46***</td>
<td>−.01</td>
<td>.38***</td>
<td>.38***</td>
<td>(.95)</td>
<td>—</td>
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<td></td>
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<tr>
<td>10. T2 hostile cognitions (implicit; WCT)</td>
<td>0.18</td>
<td>0.08</td>
<td>−.02</td>
<td>−.08</td>
<td>−.01</td>
<td>−.37***</td>
<td>.23**</td>
<td>−.06</td>
<td>.24***</td>
<td>.43***</td>
<td>.34***</td>
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<td>11. T2 hostile affect</td>
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<td>−.05</td>
<td>−.17*</td>
<td>−.32***</td>
<td>.31***</td>
<td>−.01</td>
<td>.33***</td>
<td>.65***</td>
<td>.44***</td>
<td>.49***</td>
<td>(.98)</td>
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<tr>
<td>12. T3 subordinates’ perceptions of abusive supervision</td>
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<td>1.11</td>
<td>−.15</td>
<td>−.03</td>
<td>−.12</td>
<td>−.53***</td>
<td>.37***</td>
<td>−.03</td>
<td>.42***</td>
<td>.45***</td>
<td>.35***</td>
<td>.55***</td>
<td>.54***</td>
<td>(.95)</td>
</tr>
</tbody>
</table>

Note. N = 162. Cronbach alpha reliabilities are reported along the diagonal. T1 = Time 1; T2 = Time 2; T3 = Time 3; WCT = Word Completion Task. *p < .05. **p < .01. ***p < .001.

Table 6

Summary of Conditional Indirect Effects at Low and High Levels of Angry Rumination in Studies 2–4

<table>
<thead>
<tr>
<th>Level of angry rumination</th>
<th>Indirect relationship via implicit hostile cognitions</th>
<th>Indirect relationship via hostile affect</th>
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Note. CI = confidence interval.
we found support for the proposition that supervisors’ history of family aggression increases the likelihood of hostility-related cognitions and affect to develop, thus corroborating our theoretical arguments based on social learning theory (Bandura, 1973). Accordingly, abusive supervision can be understood as being influenced by accessible hostility-related thoughts and feelings in the form of aggressive scripts and concepts, which had been stored and strengthened in memory through repeated observations of interpersonal aggression. To this end, our proposed model actually provides an explanation of the factors underlying the sustained characteristic of abusive supervision, as abusive supervisors may engage in repeated aggression toward their subordinates because of their highly accessible hostile cognitions and hostile affect. In essence, the frequent experience of hostile thoughts and feelings increases abusive supervisors’ tendencies to react with hostility in social situations and especially toward their subordinates due to the inherent power asymmetry (cf. Keltner, Gruenfeld, & Anderson, 2003).

It is also important to note that the hypothesized positive relationship between history of family aggression and hostile cognitions was significant for both explicit and implicit cognitive measures, with hostile cognitions being measured with the NOBAGS (explicit; Huesmann & Guerra, 1997) in Study 1 and with the WCT (implicit; Anderson et al., 2003) in Studies 2–4. As such, our empirical findings provide preliminary evidence that previous learning experiences in the family environment influence cognitions at both the explicit and implicit levels. Specifically, history of family aggression predisposes individuals to think in an aggressive manner not only through conscious beliefs about its acceptability but also via increasing aggressive concepts in memory. This view is in line with the proposition that hostile cognitions can include both beliefs about the acceptability of aggression (Bandura, 1973) and aggressive scripts (Huesmann & Guerra, 1997). We should note at this point, however, that we did not find any support for Hypothesis 3 positing a conditional indirect effect via hostile cognitions. Recall that supervisors’ history of family aggression and hostile affect were both measured with explicit measures, whereas hostile cognitions were assessed with an implicit measure in Studies 2–4. Given that explicit and implicit measures tap into different aspects of a phenomenon (James & McIntyre, 2000), it is possible that the nonsignificant interactions resulted from the differences in measurement approaches.

Finally, regarding the study’s contributions, we deem three issues especially notable. First, we were able to constructively replicate our results in four studies, thereby providing evidence for their generalizability. Second, to our knowledge, we are the first to use an implicit measure of social cognition in the context of abusive supervision. The study takes into account the implicit aspect of cognitive processing that was at one time consciously controlled but had become automatic (Greenwald & Banaji, 1995). We were able to show that even the more automatic and unconscious aspects of hostile cognitions can increase the likelihood of engaging in abusive behaviors. Indeed, Greenwald and Banaji (1995) noted that the use of implicit or indirect measures of cognition can extend the scope of constructs under investigation because “much of social cognition occurs in an implicit mode” (p. 20). Lastly, we were able to provide preliminary evidence that angry rumination may increase the occurrence of abusive supervision. That is, when supervisors ruminate about their previous experiences such as family aggression, they also relive the accompanying emotions associated with the remembered event. Rumination then increases the frequent activation of hostile emotions, such as anger, which also activates associated emotions and memories in the semantic network. Indeed, rumination has been recognized as a strategy that can be utilized either to manage or exacerbate negative emotions (Gross & Thompson, 2007).

Practical Implications

Our study results have several implications for managerial practice. First, executive coaching through cognitive-behavioral coaching (Ducharme, 2004) may prove useful by exposing abusive supervisors to their aggressive beliefs and helping them dispute their hostile thoughts. To the extent that organizations find themselves ill-equipped to provide such interventions, we suggest referrals to leadership training programs that train supervisors to deal with subordinates in nonaggressive ways with a particular focus on better managing hostile thoughts and emotions. One example for such an intervention would be emotional intelligence (EI) training (Clarke, 2006), which could help managers and employees better deal with their own emotions and those of others (Salovey & Mayer, 1989–1990). The value of EI training in the present context lies with increasing awareness of one’s emotions and emotional triggers as well as the feelings and needs of subordinates (e.g., subordinates needing feedback and support; Palmer, Walls, Burgess, & Stough, 2001). Given that angry rumination may exacerbate the experience of negative emotions, EI training may also be beneficial by offering alternative emotional regulation strategies such as attentional deployment in the form of distraction. Abusive supervisors may be taught how to change their internal focus from their unpleasant experiences in the past to evoking thoughts and memories that are inconsistent with their hostile emotions.

Second, our findings support the notion that implicit social cognitions tend to increase abusive behavior in the workplace. We believe that this finding has particular importance in employee
recruitment and selection. Specifically, organizations may better identify and screen out aggression-prone individuals through the use of implicit measures, such as the CRTA (James & McIntyre, 2000), during the selection process (Bing, Burroughs, Whanger, Green, & James, 2000). Indeed, studies have shown that aggressiveness has an implicit component that can be reliably assessed and measured in the workplace (Bing et al., 2007; James & Mazerolle, 2002).

Limitations

Although the results of this study supported most of the hypothesized relationships, our study is not without limitations. First, arousal was not included in the proposed model due to practical considerations. Increased psychological (e.g., perceptions of excitement or relaxation) and physiological (i.e., heart rate or blood pressure) arousal leads to heightened aggressive behavior, similar to the influence of hostile cognitions and affect (Anderson & Bushman, 2002). Our study focused on the role of cognitions and affect because these variables can be easily measured within an organizational context. In contrast, assessing arousal requires precise and controlled measurements.

Second, it is also important to note the large cross-source effects we found between supervisor reports of hostile affect and subordinate reports of abusive supervision ($r < .50$), which exceed levels typically reported in the literature (Berry, Carpenter, & Barratt, 2012).4 We offer two plausible explanations for this finding. First, supervisors who experienced higher levels of hostile affect may have expressed these in the workplace, which in turn influenced subordinates’ emotions and perceptions of abusive supervision similar to emotional contagion (Wu & Hu, 2009). Second, the large correlations may be due to cultural factors, specifically the concept of familism (i.e., belief system characterized by loyalty, reciprocity, and solidarity; Triandis, 1995). In collectivist countries such as the Philippines, the supervisor may be construed as a symbolic representation of a parent who is expected to provide material and emotional support (Restubog & Bordia, 2006). Thus, it is possible that subordinates in our sample were more sensitive to abusive supervision because it might be interpreted as a form of betrayal in societies high in collectivism and familism. However, it should be noted that we were able to consistently obtain significant correlations of similar magnitude across four independent samples, suggesting that results are not due to Type I error.

Third, our research was cross-sectional in nature (despite introducing time lags in Studies 3 and 4). As such, it precludes us from drawing conclusions about cause-and-effect relationships. In reflecting about our theorizing, we point to the theoretical work by Douglas et al. (2008). In modeling how situational and personality factors result in workplace aggression, these authors outlined three alternative processes involving affect/emotions, attributions, and attitudes. These processing routes vary in terms of the level of deliberate or mindful processing (i.e., automatic versus conscious processing of stimuli), which alludes to the salience of temporal processes. Moreover, with the current research design, we cannot rule out the possible role of genetic influences in the occurrence of abusive supervision. Rowe (1994) proposed that the transmission of aggressive behavior may be inherited rather than learned. Genetic influences may also interact with the environment (i.e., socially learned behavior), resulting in increased aggressive tendencies. Indeed, a number of studies have shown that individuals possessing a low transcription variant of the monoamine oxidase A gene are at risk for aggression only when exposed to an abusive home environment (Caspi et al., 2002; Kim-Cohen et al., 2006). Moreover, in a longitudinal sample of monozygotic and dizygotic twins, Jaffee et al. (2005) found that the positive relationship between child maltreatment and future conduct problems becomes stronger as heritable risk increases (e.g., children whose monozygotic twin has conduct disorder). These limitations emphasize the need to employ experimental and longitudinal research designs that would not only assess the temporal ordering of the relationships presented here but also account for a more complete picture of when exposure to aggression relates to future abusive behavior.

The fourth limitation concerns the measures used to assess history of family aggression and hostile affect. With regard to history of family aggression, a major concern lies in its retrospective nature. For example, individuals may not accurately remember what had happened in the past, or they may reconstruct their previous experiences to suit their current needs or circumstances (Squire, 1989). To minimize these issues, we implemented several procedures (as recommended in family aggression research; Hardt & Rutter, 2004; Straus, 1979), such as (a) specifying a 1-year referent period to aid recall of family aggression, (b) asking participants to rate specific and concrete aggressive acts to reduce subjectivity, and (c) cross-validating results obtained in Studies 1, 2, and 4 by obtaining parent ratings of history of family aggression in Study 3. Despite these steps, social desirability and memory recall problems cannot be entirely ruled out. Thus, future research may benefit from obtaining more objective measures of family aggression (e.g., archival records) if feasible. Another measurement issue arises with how hostile affect was assessed across the four studies. Hostile affect was measured with self-reports of the extent to which the respondents experienced specific emotions such as being “angry” and “aggravated” (Anderson et al., 1995). Although this measure captures affective reactions, it is also self-ascribed and assesses conscious discrete emotions, which may not necessarily tap the automatic aspects of hostile affect. In this regard, it would have been ideal to measure hostile affect using an implicit measure similar to the WCT used for hostile cognitions.

In summary, our research takes a first step toward understanding the role of supervisor-level factors such as history of family aggression and angry rumination in the abusive supervision dynamics. Results from the four studies indicated that supervisors’ history of family aggression was associated with increased hostile affect, explicit and implicit hostile cognitions, which in turn were related to increased perceptions of abusive supervision. Furthermore, angry rumination further strengthened these relationships by amplifying hostile affect. The current study provided evidence that abusive supervision can be conceptualized not only as a reaction to workplace injustice but also as a form of socially learned behavior.

4 We would like to thank an anonymous reviewer for this insightful comment.

References


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