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The relationship between workplace aggression and target deviant behaviour: The moderating roles of power and task interdependence

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We investigate how employees' deviant responses to experiencing workplace aggression are shaped by the social context in which the aggressive acts occur. Drawing on the group value model and theories of belongingness, we investigated three moderators of the relationship between workplace aggression and employee deviant behaviour: (1) perpetrator formal power (relating to their position within the organization), (2) perpetrator referent power (derived from their social position at work), and (3) task interdependence between the perpetrator and victim. Participants ($N = 299$) consisted of North American employees in a variety of industries. Power and task interdependence interacted with workplace aggression to predict the extent and the direction of deviant behaviour. Specifically, we found that when the perpetrator had high power (either formal power or referent power) and low task interdependence with the target, victims were most likely to engage in deviance directed towards the perpetrator in response to aggression. These results are consistent with the idea that perpetrator power motivates victims to retaliate, but they are most likely to do so if they are not highly dependent on the perpetrator to complete their work tasks. This study suggests that spirals of workplace aggression depend on the nature of the perpetrator-victim relationship.

Keywords: bullying; incivility; power; task interdependence; victimization; workplace aggression; workplace deviance

Introduction

A large body of research has shown that workplace deviance, defined as purposeful behaviour that violates organizational norms and is intended to harm the organization, its members, or both (Bennett & Robinson, 2000), is a common response to workplace aggression (see Hershcovis & Barling, 2010 for a meta-analytic review). Further, Hauge, Skogstad, and Einarsen (2009) found that being a victim is the biggest predictor of becoming a perpetrator. However, the power imbalance between perpetrators and victims may limit a victim's ability to retaliate (Einarsen, Hoel, & Notelaers, 2009), as might the victim's working relationship with the perpetrator. Existing research on workplace aggression has paid little attention to how the perpetrator-victim relationship might shape victim responses.

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In the aggression literature, there are several related aggression constructs (e.g., abusive supervision, bullying, incivility, social undermining) that are conceptually distinct, but operationally similar (Aquino & Thau, 2009; Hershcovis, 2011). Therefore, in the present study, we define workplace aggression as a psychological form of mistreatment (Aquino & Thau, 2009) that involves negative acts perpetrated against organizational members that victims are motivated to avoid (Neuman & Baron, 2005). This definition is broad enough that it includes persistent and more severe forms of mistreatment (e.g., bullying; Einarsen & Skogstad, 1996) as well as lower intensity and less persistent forms of mistreatment (e.g., incivility; Andersson & Pearson, 1999).

We draw on theories of belongingness (Baumeister & Leary, 1995) and the group value model (Lind & Tyler, 1988) to address the research question: how does the relationship between the perpetrator and victim of workplace aggression influence victims' deviant responses? Specifically, we examine how power, both formal (derived from the individual's organizational position) and referent (derived from their social position at work), and task interdependence work together to influence when and how experienced aggression translates into perpetrator-targeted deviance. We consider power and interdependence because these relational factors are important potential constraints on deviant behaviour in the workplace.

Our approach extends traditional research on the effects of workplace aggression, which tends to examine aggression without consideration of the context of the *specific relationship* in which it occurs (see Aquino, Tripp, & Bies, 2001 and Cortina & Magley, 2009 for exceptions). Given that aggression occurs within the context of two or more individuals who are often involved in an on-going relationship (e.g., two co-workers or a supervisor and subordinate), we propose that an understanding of that relationship is crucial to predicting how one might react to a negative interaction within the relationship.

Belongingness theory and the group value model

Belongingness theory states that human beings have a fundamental need to belong (Baumeister & Leary, 1995). Specifically, individuals are driven to form, maintain, and resist the dissolution of non-aversive, stable, and enduring interpersonal relationships, and a lack of such relationships will result in negative emotional, cognitive, and health-related outcomes. When belongingness is threatened, the target is likely to respond aggressively (e.g., Kirkpatrick, Waugh, Valencia, & Webster, 2002; Twenge, Baumeister, Tice, & Stucke, 2001). For example, in the organizational literature, Ferris, Spence, Brown, and Heller (in press) found that interpersonal injustice negatively affected belongingness and threatened victim self-esteem, resulting in higher levels of deviance. There are at least two reasons for this finding. First, DeWall, Twenge, Gitter, and Baumeister (2009) argued and found that individuals who feel excluded or socially rejected are more likely to perceive neutral information as hostile, which then escalates their likelihood of responding to belongingness threats with aggression. Second, Gouldner (1960) suggested that in social relationships, people feel obligated to give back the form of behaviour that they receive. Hence, victims of workplace mistreatment may be driven to reciprocate their negative treatment.

Lind and Tyler's (1988) group value model posits that the manner in which employees are treated by superiors sends a signal to targets, and to other members of the group or work environment, about that target's value or belongingness. Integrating belongingness theory and the group value model, we suggest that aggression from someone with high power sends signals, to victims and to other employees, that the victim does not belong. This threat to belongingness from a powerful source may yield deviant responses. In the present research we investigate the extent to which perpetrators who possess formal power and referent power incite victims to retaliate with perpetrator-targeted deviance.

Formal power of the perpetrator

Power is defined as the ability to influence the behaviour of others through reward and punishment (Keltner, Gruenfeld, & Anderson, 2003), and determination of consequences (Kim, Smith, & Brigham, 1998). Individuals high in formal power often have an organizationally sanctioned ability to grant promotions, assign tasks, allocate resources, and terminate employment (Keltner et al., 2003). Individuals with formal power also have the opportunity to abuse their position and mistreat their employees (Tepper, 2000).

As stated earlier, a common response to workplace aggression is deviant behaviour (Hershcovis & Barling, 2010). Examples of deviant behaviour include acting rude to someone, making fun of someone, and playing a mean prank on someone (Bennett & Robinson, 2000). However, victims of aggression from high-powered sources may be likely to suppress deviant responses for fear of retaliation (Aquino et al., 2001). Cortina and Magley (2003) found that those who voice concerns about aggression risk retaliation from the perpetrator. By extension, it is likely that retaliatory deviance enacted towards high-powered perpetrators would yield even stronger counter-retaliation; therefore, employees may suppress deviant reactions. Consistent with these findings, researchers have found that individuals fear retributive actions from individuals in positions of higher relative power and therefore refrain from seeking revenge when wronged (e.g., Aquino et al., 2001; Kim et al., 1998). Therefore, we posit that victims will suppress their desire to retaliate against high-powered perpetrators.

Hypothesis 1a: Formal power will moderate the relationship between aggression and perpetrator-targeted deviance such that deviance will be lower when the formal power of the perpetrator is high.

However, perspectives on belongingness and the group value model suggest that aggression from someone with power will threaten employees' perceived belongingness, potentially resulting in aggressive reactions. This prior research has shown that a threat to belongingness – a strong human need – generates hostile cognitions (DeWall et al., 2009) and therefore aggressive responses (e.g., Twenge et al., 2001). Since those with high formal power have the ability to influence the opinions and behaviours of other employees in the workplace (e.g., the victim's co-workers), the threat posed by someone with high power is particularly strong. In addition, due to a high-powered perpetrator's potential to influence job outcomes, victims are likely to perceive aggression from such sources especially negatively. Indeed, Cortina and

Magley (2009) found that victims appraised aggression from high-powered perpetrators as more harmful than aggression from low-powered perpetrators.

Another reason to expect victims to retaliate against high-powered perpetrators is because, more than low-powered perpetrators, high-powered perpetrators are violating the professional norms expected of their position. While poor behaviour (e.g., jokes, rude remarks, etc.) may be normative from someone of equal status, those with high power are expected to exhibit a higher level of professional decorum. Thus, a violation of these expectations may represent a violation of the victim's psychological contract with the organization (Rousseau, 2005), which may trigger retaliatory responses.

These arguments suggest a plausible alternative hypothesis to H1a. That is, if high-powered perpetrators pose a stronger threat to belongingness than low-powered perpetrators, and victims appraise aggression from high-powered perpetrators more negatively, targets may be more likely to develop heightened revenge cognitions and retaliate. Consistent with these arguments, meta-analytic evidence has shown that the magnitude of the relationship between aggression and perpetrator-targeted deviance is stronger when the aggression comes from supervisors than when the aggression comes from co-workers (Hershcovis & Barling, 2010). We therefore propose a competing hypothesis as follows:

Hypothesis 1b: Formal power will moderate the relationship between aggression and perpetrator-targeted deviance such that deviance will be higher when the formal power of the perpetrator is high.

Referent power of the perpetrator

In addition to the power derived from one's formal organizational position (i.e., formal power), power can also be derived from one's social position. Employees gain referent power through their personal appeal to others at work (French & Raven, 1959). Referent power is the ability to make others feel personal acceptance and approval (Hinkin & Schriesheim, 1989), leading those others to identify with and hold in high esteem such power holders (Raven, Schwarzwald, & Koslowsky, 1998). Feelings of admiration and identification with someone at work enhance one's feelings of belongingness (Tajfel & Turner, 1979). Therefore, to the extent that someone with high referent power perpetrates aggression, such power holders not only disrupt the victim's trust and admiration, but also reduce the victim's feeling of belongingness.

As we argued in our discussion of formal power, threatened belongingness is likely to incite victims to react aggressively towards the perpetrator (e.g., Kirkpatrick et al., 2002; Twenge et al., 2001). Whereas aggression from someone with formal power signals that the victim is not a valued member of the group, aggression from someone with referent power communicates a more personal message – specifically, that someone that the victim previously admired does not value them. Such aggression is likely to result in feelings of betrayal and may also provide cues to others about how the victim should be treated (Lind & Tyler, 1988). Therefore, we expect such aggression to incite retaliation in the form of perpetrator-targeted deviance.

Further, because referent power derives from a person's social standing and not his or her formal standing, the victim should be less constrained in his or her response. Whereas with a high formal power perpetrator victims may fear formal punishment for deviant action, with high referent power, this threat is not present. Therefore, whereas we posited competing hypotheses with respect to formal power, we expect that victims will be more likely to engage in perpetrator-targeted deviance towards high- than low-powered perpetrators.

> *Hypothesis 2:* Referent power will moderate the relationship between aggression and perpetrator-targeted deviance such that deviance will be higher when the referent power of the perpetrator is high.

The moderating role of task interdependence

In the previous section we reviewed mixed research findings about whether victims will target deviance towards perpetrators with high formal power. We propose that a second key moderator, task interdependence, may help reconcile these opposing findings by identifying the conditions under which victims are more or less likely to engage in deviance towards perpetrators having high power. We suggest that high task interdependence will constrain, and low task interdependence will enhance aggressive responses towards high-powered perpetrators.

In contrast to criminal aggression, where victims do not continue the relationship with the aggressor, victims of workplace aggression often see the perpetrator repeatedly (Aquino, Grover, Goldman, & Folger, 2003). Aquino et al. (2003) suggested that when one is victimized, it is natural to want to strike back; however, in situations in which the victim must interact with the source of the aggression, retaliating may be unwise. We propose that interdependence with a powerful perpetrator is likely to suppress the urge to retaliate against perpetrators.

Task interdependence has been associated with a number of positive interpersonal outcomes. For example, groups with high levels of interdependence exhibited higher levels of cooperation (Wageman & Baker, 1997) and within-group helping (Allen, Sargent, & Bradley, 2003) than those with low levels of interdependence. Chen, Tang, and Wang (2009) reasoned and found that the effect of task interdependence on employee helping was due to the positive effect of task interdependence on group cohesion. This is consistent with findings that task interdependence fosters the development of positive interpersonal relationships among group members and increases members' sense of belonging (Campion, Medsker, & Higgs, 1993; Johnson & Johnson, 1989). As Chen et al. (2009) note, individuals who are highly interdependent are motivated to maintain positive relationships to facilitate task completion. Individuals' motivation to resist the dissolution of their positive interpersonal relationships is consistent with the tenets of belongingness theory (Baumeister & Leary, 1995).

By motivating employees to maintain positive relationships, task interdependence may limit victims' perceived range of behavioural responses and therefore reduce their likelihood of engaging in perpetrator-targeted deviance. That is, when one is dependent on another to complete work tasks, it is important to maintain a positive relationship so that performance is not adversely affected. Therefore, if victims are mistreated by someone with whom they are interdependent, they may be more

motivated to find a positive solution, and less likely to want to retaliate than those with low interdependence. Therefore, we posit that:

> *Hypothesis 3:* Task interdependence will moderate the relationship between aggression and perpetrator-targeted deviance such that deviance will be higher when the task interdependence between the perpetrator and target is low.

Integrating the arguments related to power with the arguments related to task interdependence suggests formal perpetrator power may strengthen the victim's desire to retaliate while task-interdependence may either constrain the desire to retaliate (high task interdependence), or enable the opportunity to retaliate (low task interdependence). Therefore, we predict that victims will be most likely to retaliate against a high-powered perpetrator when their interdependence with the perpetrator is low. Support for this proposition would help to resolve the mixed evidence regarding whether individuals retaliate when the aggressor has high formal power. Thus, consistent with findings by Hershcovis et al. (2007), we propose that victims do indeed retaliate when perpetrators have high formal power and interdependence is low. However, consistent with other scholars (e.g., Aquino et al., 2001; Kim et al., 1998), we propose victims may be less likely to retaliate when the perpetrator has high formal power and interdependence is high. Similarly, because task interdependence requires that the victim and perpetrator work together to achieve a work task, we also propose that task interdependence will constrain aggression towards those with high referent power. As such, we predict the following three-way interactions:

> *Hypothesis 4:* Victims will engage in higher perpetrator-targeted deviant behaviour when the perpetrator has high formal power and when the level of interdependence with the perpetrator is low. Under all other conditions, the relationship between aggression and perpetrator-targeted deviance will be weaker.
>
> *Hypothesis 5:* Victims will engage in higher perpetrator-targeted deviant behaviour when the perpetrator has high referent power and when the level of interdependence with the perpetrator is low. Under all other conditions, the relationship between aggression and perpetrator-targeted deviance will be weaker.

Method

Participants

Given that this study aims to investigate the extent to which the perpetrator-victim relationship affects victim responses, we were interested only in participants who had experienced an incident of workplace aggression within a specific encounter. We recruited such participants through Study Response, an on-line recruiting system operated by Syracuse University that has a database of over 100,000 individuals who have previously agreed to be contacted to participate in surveys. A pre-screening survey was distributed to 3000 people to identify only those individuals who (1) were employed, (2) had experienced an incident of workplace aggression in the last six months, and (3) were willing to participate in our survey. A total of 976 people responded to the pre-screening survey, 591 of whom met our criteria. We randomly selected 435 of those who were eligible and received responses from 352 (80% response rate). We eliminated 19 respondents due to suspicious response patterns,

and a further 34 cases because they had not experienced workplace aggression despite their initial affirmative response in the pre-screening survey, resulting in a final sample of 299 people.

The mean age of respondents was 41 years ($SD = 31.4$) and their average job tenure was 7.9 years ($SD = 6.8$). Of the respondents, 51% were female and 76% self-identified as Caucasian. Respondents worked in a wide range of mostly white collar jobs.

Procedure

Respondents completed a questionnaire that asked them to report on their trait negative affect and social desirability bias. Respondents were then given examples of workplace aggression incidents, and asked to recall an incident in the last six months in which were the victim of workplace aggression. They were asked to briefly describe in writing the incident without naming the perpetrator. Following their description, we presented participants with a measure of workplace aggression, and then asked them to answer questions about their relationship relative to the specific perpetrator described in their incident.

Measures

Workplace aggression. Participants were first asked to recall and briefly describe a specific incident of workplace aggression they had experienced in the last six months, a time frame commonly used in workplace aggression research (e.g., Einarsen & Skogstad, 1996; Mikkelsen & Einarsen, 2001).

Participants were then asked to reflect on their experience with that same person and indicate how often they had experienced a range of aggressive behaviours from that individual. Specifically, they responded to the Aggressive Experiences Scale (AES; Glomb & Liao, 2003), which asks respondents to report how often each of 20 behaviours occurred over the last six months. In the present study, we excluded three items because they were either ambiguous (i.e., getting in your face, whistle blowing, or telling others about your negative behaviour) or repetitive with other items (i.e., using hostile body language), and two items due to low variance (i.e., physically assaulted you and damaged your property). The AES uses a five-point response scale ($1 = Never$ to $5 = Once\ a\ week\ or\ more$).

After asking respondents to describe an incident of aggression and to respond to the AES, respondents were then asked the extent to which the person whom they identified as the perpetrator of the aggression incident had formal and referent power, and the extent to which they worked interdependently with the perpetrator.

Formal power of the perpetrator. We used Schriesheim, Hinkin, and Podsakoff's (1991) five-item measure of legitimate power, applied to the perpetrator. A sample item is: "He/she has the authority to make demands of me." We used a six-point response scale ($1 = Strongly\ disagree$ to $6 = Strongly\ agree$).

Referent power of the perpetrator. We used Raven et al.'s (1998) measure of referent power. The original scale identifies the supervisor as the source of referent power; therefore, we adapted the wording such that the source of referent power was the person they identified as the aggressor. An example item is "I saw this person as

someone I could identify with.'' We used a six-point response scale (1 = *Strongly disagree* to 6 = *Strongly agree*).

Task interdependence. We adapted Pearce and Gregersen's (1991) five-item task interdependence measure. Respondents were asked to consider their relationship with the person described in the aggression incident. A sample item is the extent to which a participant agrees that ''I have to work closely with this person to do my job.'' We used a six-point response scale (1 = *Strongly disagree* to 6 = *Strongly agree*).

Target-specific deviance. In addition to measuring workplace aggression we used Bennett and Robinson's (2000) seven-item interpersonal deviance measure, which asks respondents to report the frequency with which they engaged in a range of target-specific deviant behaviours (1 = *Never* to 7 = *More than once a week*). We adapted the instructions by asking participants the extent to which they engaged in each of the behaviours towards the person who they described in their aggression incident.

Controls

Meta-analytic research (Bowling & Beehr, 2006) has shown that trait negative affect is a significant predictor of interpersonal aggression; therefore, we controlled for negative affectivity using items from the negative affectivity scale (Watson, Clark, & Tellegen, 1988). Due to the length of the survey, we used 6 of the 10 items. Respondents were asked the extent to which they generally felt: angry, irritable, hostile, scornful, disgusted, loathing. We used a five-point response scale (1 = *Almost never* to 5 = *Almost always*). Further, given that people may be inclined to give socially desirable responses when asked about the extent to which they engage in negative behaviours (i.e., they may underreport their deviant behaviours), we controlled for social desirability bias using seven items from Crowne and Marlowe's (1960) true and false social desirability scale. A sample item is ''I'm always willing to admit when I make a mistake.''

Results

Prior to running our analyses, we checked the skewness and kurtosis of the standardized study variables. The skewness (kurtosis) statistics for bullying, formal power, task interdependence, and targeted deviance were 0.60 (−0.51), −0.47 (−0.55), 0.18 (−0.74), and 0.17 (−1.34), respectively, and were not significant at $p < .05$. Therefore, our data did not violate assumptions of normality and we proceeded with our analyses.

We conducted a confirmatory factor analysis to assess our constructs. To increase our sample-to-parameter ratio, we created five-item parcels for the 15-item experienced aggression measure. Following the procedures recommended by Hall, Snell, Singer-Foust (1999), we created the parcels by conducting exploratory factor analyses on the experienced aggression measure, and combining items that loaded the highest together on the same factors. A six-factor model, in which the items measuring trait negative affectivity, aggression, formal power, referent power, task interdependence, and perpetrator-targeted deviance loaded onto separate factors,

had a significant chi-squared test $\chi^2(390) = 946.36$, $p < .001$, but otherwise exhibited acceptable fit (CFI $= .93$, RMSEA $= .07$; Hu & Bentler, 1999). We compared this model to a one-factor model in which all items loaded onto a common factor $[\chi^2(405) = 6014.07$, $p < .001$, CFI $= .34$, RMSEA $= .22]$ and a five-factor model, which was the same as the six-factor model except that the experienced aggression and perpetrator-targeted deviance items loaded onto the same factor $[\chi^2(395) = 1953.23$, $p < .001$, CFI $= .82$, RMSEA $= .12]$. The six-factor model fitted the data better than the one-factor model $[\Delta \chi^2(15) = 5067.71$, $p < .001]$, and the five-factor model $[\Delta \chi^2(5) = 1006.87$, $p < .001]$, which suggests that the hypothesized model fitted the data better than the alternative models (Schumacker & Lomax, 1996).

Means, standard deviations, inter-correlations, and scale reliabilities are presented in Table 1. Aggression was significantly associated with targeted deviance $(r = .60$, $p < .001)$; however, there was no significant relationship between formal power or task interdependence and deviance. As shown in Table 1, the means for both aggression $(M = 2.35)$ and deviance $(M = 1.88)$ are somewhat low, though this is likely to be because respondents were constrained to one specific relationship. To test our hypotheses, we conducted a hierarchical regression analysis with perpetrator-targeted deviance as the criterion variable (Table 2). In step 1, we controlled for trait negative affect and social desirability bias; in the second step we included the main effects of experienced aggression, formal power, referent power, and task inter-dependence; in the third step we included all of the interaction terms between the main effects; and in the fourth step we included the three-way interaction terms. We centred all independent variables to reduce multicollinearity (Aiken & West, 1991) and standardized the variables to improve interpretation.

Hypothesis 1a posited that perpetrator-targeted deviance would be lower when perpetrator formal power was higher, whereas H1b posited that perpetrator-targeted deviance would be higher when perpetrator formal power was higher. As reported in step 3 of Table 2, the two-way interaction between formal power and aggression was significant $(\beta = .13$, $p = .008)$. The plot of this interaction appears in Figure 1. The plot shows that when formal power was high, perpetrator-targeted deviance was significantly higher than when formal power was low. These results support H1b and fail to support H1a.

Hypothesis 2 posited that perpetrator-targeted deviance would be higher when perpetrator referent power was high than when perpetrator referent power was low.

Table 1. Descriptive statistics and correlations.

	M	SD	1	2	3	4	5	6	7
1. Trait negative affect	2.05	.70	*.87*						
2. Social desirability bias	1.52	.25	−.25**						
3. Aggression	2.35	1.14	.41**	−.02	*.94*				
4. Task interdependence	4.06	1.15	−.01	−.03	.21**	*.83*			
5. Referent power	2.97	1.07	−.17**	.02	−.16*	.32**	*.91*		
6. Formal power	3.64	1.78	.001	−.01	.19**	.56**	.29**	*.96*	
7. Target deviant behaviour	1.88	1.16	.49**	−.21**	.60**	−.03	.07	.07	*.92*

Note: $N = 299$. Cronbach's alphas are shown in italics along the diagonal.
*$p \leq .05$; ** $p \leq .01$.

Table 2. Results of hierarchical regression analysis for perceived aggression × formal power × task interdependence on perpetrator-targeted deviance[a].

Variable	Step 1: Controls	Step 2: Main effects	Step 3: Two-way interactions	Step 4: Three-way interactions
Controls				
Trait negative affect	.46***	.26***	.21***	.21***
Social desirability bias	−.09	−.15**	−.11**	−.11**
Main effects				
Aggression		.59***	.72***	.77***
Formal power		.02	.03	.05
Referent power		.29***	.20***	.21***
Task interdependence (TI)		−.26***	−.26***	−.26***
Two-way interactions				
Aggression × formal power			.13**	.17**
Aggression × TI			−.35***	−.39***
Formal power × TI			−.05	−.08
Aggression × referent power			.14**	.23***
Referent power × TI			−.05	−.04
Referent power × formal power			.01	.01
Three-way interactions				
Aggression × formal power × TI				−.11**
Aggression × referent power × TI				−.16**
Adj R²	.24	.53	.63	.65
ΔR^2		.29***	.10***	.02***
F	47.94***	46.90***	13.62***	8.31***
df	2 294	4 290	6 284	2 282

[a]Standardized regression coefficients are shown.
*$p < .05$; **$p < .01$; ***$p < .001$.

The two-way interaction between referent power and aggression was significant ($\beta = .14$, $p < .001$). The plot of this interaction follows the same pattern as that shown in Figure 1. That is, when referent power was high, perpetrator-targeted deviance was significantly higher than when referent power was low. These results support H2.

Hypothesis 3 posited that perpetrator-targeted deviance would be higher when task interdependence was low than when task interdependence was high. The two-way interaction between task interdependence and aggression was significant ($\beta = -.35$, $p < .001$). The plot of this interaction appears in Figure 2. The plot shows that when task interdependence was high, perpetrator-targeted deviance was significantly lower than when task interdependence was low. These results support H3.

Hypothesis 4 predicted that employees would be most likely to engage in perpetrator-targeted deviance when the perpetrator had high formal power and when task interdependence with the perpetrator was low. The three-way interaction
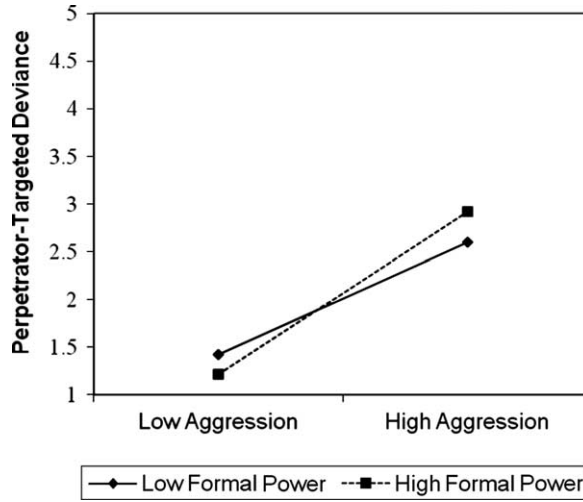
Figure 1. Interaction plot for formal power by aggression.

explained significant variance in targeted deviance ($\beta = -.11$, $p = .04$). Probing the interaction showed that for high formal power and low task interdependence, the relationship between aggression and perpetrator-targeted deviance is strongly positive. Slope difference tests (Dawson & Richter, 2006) showed that slopes at high levels of formal power and low levels of task interdependence differ significantly from any other pair of slopes (see Table 3). Therefore, H4 is supported (see Figure 3).

Hypothesis 5 posited that employees would be most likely to engage in perpetrator-targeted deviance when the perpetrator had high referent power and when task interdependence with the perpetrator was low. The three-way interaction
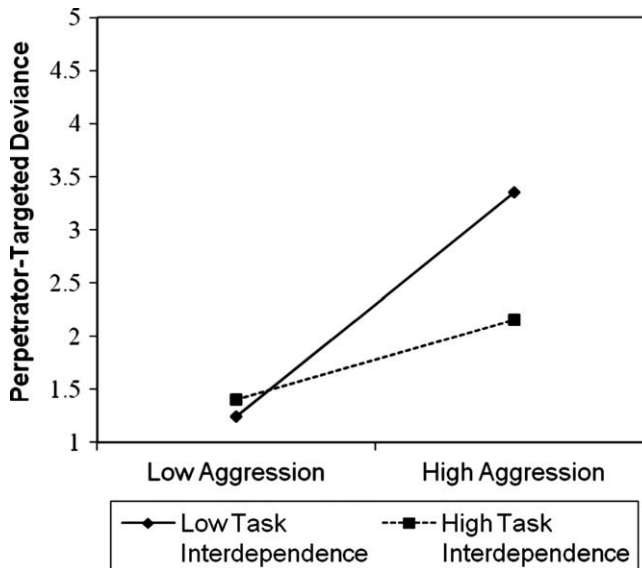

Figure 2. Interaction plot for task interdependence by aggression.

Table 3. Slope differences – workplace aggression and perpetrator-targeted deviance for combinations of high and low power and task interdependence.

	Targeted deviance	
Formal power slope differences	*t*	*df*
Formal power$_{high}$, TI$_{low}$, Formal power$_{high}$, TI$_{high}$	− 7.29***	292
Formal power$_{high}$, TI$_{low}$, Formal power$_{low}$, TI$_{high}$	6.79***	292
Formal power$_{high}$, TI$_{low}$, Formal power$_{low}$, TI$_{low}$	− 2.94***	292
Referent power slope differences		
Referent power$_{high}$, TI$_{low}$, Referent power$_{high}$, TI$_{high}$	− 6.49***	292
Referent power$_{high}$, TI$_{low}$, Referent power$_{low}$, TI$_{high}$	7.87***	292
Referent power$_{high}$, TI$_{low}$, Referent power$_{low}$, TI$_{low}$	3.78***	292

Note: TI = Task interdependence.
***$p < .001$.

explained significant variance in targeted deviance ($\beta = -.16$, $p = .003$). The plot for this interaction follows the same pattern as that shown in Figure 3. That is, for high referent power and low task interdependence, the relationship between experienced aggression and perpetrator-targeted deviance is positive. Slope difference tests showed that slopes at high levels of referent power and low levels of task interdependence differ significantly from any other pair of slopes (see Table 3). Therefore, H5 is supported.

Spector, Zapf, Chen, and Frese (2000) argued that negative affectivity should not be considered a bias, and Becker (2005) argued against controlling for variables that relate to the dependent variable. Therefore, we repeated these analyses excluding the control variables, and found similar results. Specifically, the formal power interaction ($\beta = -.17$, $p = .002$) and the referent power interaction ($\beta = -.14$, $p = .01$) explained significant variance in targeted deviance, and the plots followed the same pattern as those discussed above. These results provide support that the control variables do not drive the findings in this study.

Discussion

Drawing on the group value model (Lind & Tyler, 1988) and theories of belongingness (Baumeister & Leary, 1995), this study investigated victims' reactions to workplace aggression by considering the social context in which aggression occurs. Although several studies have demonstrated that aggression yields retaliatory behaviour from victims, studies have rarely considered whether relationship factors influence a victim's behavioural responses. This study provides evidence that the perpetrator's power and interdependence with the victim combine to influence when victims retaliate. Our research helps in building understanding as to how the perpetrator-victim relationship influences victims' responses to aggression.

Theoretical and practical contributions

Past findings have been somewhat inconsistent with respect to whether a victim of workplace aggression is likely to engage in retaliatory deviance when the perpetrator
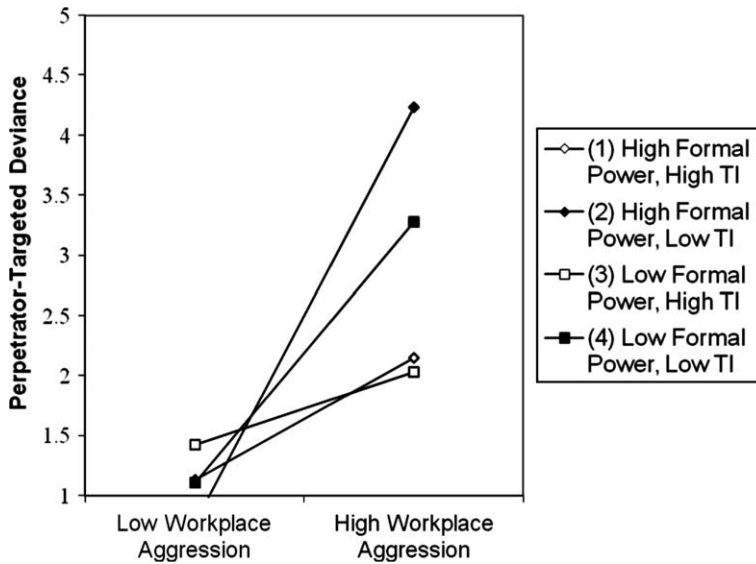
Figure 3. Plot for three-way interaction between formal power, task interdependence, and aggression.

has high power. Some studies have found that victims refrain from perpetrator-targeted deviance when the perpetrator has higher relative status as compared to the victim (e.g., Aquino et al., 2001; Kim et al., 1998); whereas other studies have found that victims target deviant behaviours towards supervisors (e.g., Hershcovis & Barling, 2010; Mitchell & Ambrose, 2007; Thau, Bennett, Mitchell, & Marrs, 2009). As noted in the present study, there are strong arguments on both sides. On the one hand, victims may be afraid of counter-retaliation from high-powered perpetrators (Cortina & Magley, 2003), but on the other, the greater perceived harm (Cortina & Magley, 2009) and threat to belongingness that victims experience when perpetrators have high power as compared to low power the more they are likely to have a strong motivation to retaliate. The present study tested these competing hypotheses and found that for both formal and referent power, victims are significantly more likely to target deviance towards high- than low-powered perpetrators.

The present study further examined the conditions under which a victim might be disinclined to retaliate. In particular, we examined the task interdependence between the victim and perpetrator. As expected, when victims had to work interdependently with perpetrators, they were significantly less likely to retaliate towards perpetrators. Further, when perpetrators had high power and victims were highly task inter-dependent with such perpetrators, victims were least likely to retaliate. These findings concur with past research that has demonstrated that workplace aggression is target-specific (Hershcovis et al., 2007; Jones, 2009), but they also add to the literature by showing when targeted deviance is most and least likely to occur.

Prior research on aggression and deviance has not considered the role of referent power. Our study shows how power from someone's social position can mitigate or exacerbate how individuals respond to aggression. In particular, when a perpetrator is especially respected or admired, victims are more likely to retaliate, possibly in an attempt to undermine the credibility or social standing of their abuser. However,

when the victim's tasks are interdependent with those of the perpetrator, the target may choose to abstain from retaliation because of the high risk of further aggression from the perpetrator (Cortina & Magley, 2003). The finding that both referent power and formal power act in similar ways supports the idea that it is power per se that influences victims' responses, rather than other aspects that might be confounded with formal power (e.g., those higher in formal power also tend to be more experienced).

The pattern of findings shown in Figure 3 is of particular interest. With both types of power, victims are most likely to engage in deviance towards victims with high power and low task interdependence, followed by those with low power and low task interdependence. They are equally – and significantly less – likely to engage in deviance towards those with high task interdependence regardless of power. Therefore, it appears that task interdependence deters deviance, and in its absence, victims are most likely to target those with high levels of power. One possible implication is that victims who work interdependently feel constrained in their retaliatory responses because they depend on the perpetrator to complete their tasks. A more positive potential implication is that victims who work interdependently with their perpetrator may strive to maintain a positive relationship. Future research should aim to tease these possible explanations apart by examining whether victims are more likely to engage in relationship repair or other positive behaviours with perpetrators with whom they are interdependent.

Importantly, our study helps to extend theory about aggression because it highlights how responses to aggression are dependent on features of the relationship in which the aggression occurs. Research in this area has tended to restrict the definition of the perpetrator-target relationship to formal, organizational titles (supervisory role vs. not). This perspective neglects variability in power for individuals who occupy the same role within the organization, and it also disregards both social power and the constraining function of tight interdependence. Our study confirms the value of moving away from investigating aggression "from someone" at work, or from the supervisor or co-worker, to investigating aggression within a particular relationship. We believe that this relational approach to the study of workplace aggression is an important avenue for continued theory development in this area.

Our findings also have implications for managerial practice. First, the finding that task interdependence may inhibit retaliatory aggression could be valuable for managers wishing to reduce the likelihood that aggression will spiral in their organization. Although the onus is on management to attend to any incident of aggression or other deviant behaviour, encouraging task interdependent work arrangements – particularly of employees with different levels of formal and referent power – may impede a single incident of aggression from spiralling.

Second, understanding how aggression begets aggression and spirals through an organization is a serious concern for human resource practitioners. The aggressive interaction is exacerbated when there are power differences between the perpetrator and the victim. In such instances, it is likely that the victim would benefit from organizational assistance; however, due to the power difference (particularly in the case of formal power) it may be difficult, uncomfortable, or unwise for the victim to go through formal channels. Offering victims an alternative avenue to report

high-powered perpetrators may offer victims a less destructive outlet for responding to their mistreatment.

Finally, research suggests that high-powered people do not spend as much time processing information in their relationship with employees as low-powered people because their outcomes are not dependent on the low-powered individual (Galinsky, Magee, Inesi, & Gruenfeld, 2006). This implies that high-powered perpetrators may be unaware of the effect of their negative behaviours, or in fact, that employees perceive their behaviours as aggressive at all. Indeed, behaviours that might be considered innocuous between equal-powered individuals (e.g., failure to notice extra effort) could be perceived as aggressive when perpetrated by someone with high power. Making high-powered individuals aware of how employees perceive their behaviour may help reduce the incidence of aggressive spirals.

Limitations and further research

A potential limitation of the current research is that it uses self-report data. This study used a critical incident technique in which we asked individuals to consider a particular encounter. Given that our research question hinges on a *specific* perpetrator-victim relationship, self-reports of participants' aggression experiences and relationships with the perpetrator were both essential and suitable to our goal. For example, it would not have been appropriate to obtain reports of retaliatory aggression from the perpetrator because reports about the behaviour of a victim from a perpetrator are likely to be unreliable. Nevertheless, in recognition of the possible threat to validity associated with common method bias, we employed several strategies recommended by Podsakoff, Mackenzie, Podsakoff, and Lee (2003). First, to diagnose the presence of common method bias, we conducted a Harman's single factor test. Five factors emerged rendering the single-factor model inconsistent with the data. Second, we assured participants of the anonymity of their responses. Third, we controlled for negative affectivity and social desirability. Fourth, we compared our hypothesized measurement model to a model that included a common method factor, and the latter had significantly worse fit. In addition, given that our study hypothesized and found interaction effects, it is less likely that common method variance is operating (Wall, Jackson, Mullarkey, & Parker, 1996). Taken together, we are confident that common method variance is not a concern in the present study.

A further limitation is that our study was cross-sectional. It is possible that those who engage in deviant behaviours are more likely to become targets of aggression. Though our findings are consistent with our theoretical predictions, future research that examines this question longitudinally would provide stronger evidence in support of the present model. Further, because these aggressive relationships are on-going, it would be interesting to determine whether victims use different tactics to respond to acts of aggression over time.

In addition, the mean level of aggression experienced and deviance enacted is quite low in this study. This is partially because we constrained our participants to consider one relationship only, whereas prior studies have not typically constrained respondents in this way. However, it also implies that the frequency of aggression and retaliation was not particularly high with the focal perpetrator. Future research should attempt to investigate stronger aggression situations to determine whether more frequent acts of aggression lead respondents to react any differently.

The current study examined three relational variables that we believe are of central importance to a victim's relationship with the perpetrator of aggression in the workplace: formal power, referent power, and task interdependence. Continued research in this area will benefit from including additional relational factors. For example, factors such as physical proximity between victims and perpetrators, length of the victim-perpetrator work/personal relationship, and expectation of future interaction may influence victim responses (Hershcovis & Barling, 2007). Further, though we focused exclusively on deviant responses, it would be interesting to investigate whether the relationship between perpetrators and victims influence other outcomes, such as stress and well-being (e.g., Agervold & Mikkelsen, 2004), and reconciliation or forgiveness (Aquino, Tripp, & Bies, 2006). For instance, it might be that individuals are not only *less* likely to retaliate towards their supervisors when there is high interdependence, but they also might be *more* likely to engage in reparative strategies. Once again, however, the approach by the victim might depend on the formal or referent power of the aggressor. The effort required to restore the relationship might only be perceived of as worthwhile if the aggressor has power.

Related to the above, a third direction for future research is to examine the mediating mechanisms to test a more complete moderated-mediated model. Our study proposes belongingness as one potential mediator, but we did not directly test this underlying mechanism. This is an important avenue for future research. Another mediator might be the level of hurt experienced by the victim. It may be that those who experience aggression from high-powered individuals are more hurt than those who experience aggression from low-powered individuals, and that this influences the reaction of the victim. More hurt may produce retaliatory reactions whereas less hurt may lead to forgiveness or ignoring strategies.

A fourth potential direction for research might involve an investigation of the dyadic relationships over time. In this study we captured the perceptions of only the target, however, it is likely that perpetrator perceptions of power and task interdependence might differ from that of targets. Further, both power and task interdependence may be dynamically related to aggression. For instance, perceptions of power and task interdependence might shift through acts of aggression or retaliation. Capturing these dynamics would be difficult because of the ethical difficulties associated with identifying perpetrators (Cowie, Naylor, Rivers, Smith, & Pereira, 2002). One possibility for capturing the complexity of this dynamic relationship may be to use combined diary study and social network methods to study lower intensity forms of aggression, such as incivility. Researchers could recruit participants who experience incivility, and map out victims' structural relationships with various actors in the network, including the perpetrator. In this way, all actors in the social network could report on their perceptions of power and interdependence, ideally over several time points, and one could follow the perceived changes in these dynamics as well as in target responses (e.g., retaliation, reconciliation). Though extremely challenging, with careful design that protects the confidentiality of both perpetrator and target, such research could illuminate when aggression is likely to escalate into a negative spiral, versus when it is likely to be resolved peacefully.

Finally, the present study found a high correlation between interpersonal aggression and deviant behaviour. Given the cross-sectional nature of the sample, there is a possibility that victim deviance precedes aggression from the perpetrator rather than the other way around. Though we asked specifically about aggression by

the victim following their own experience of aggression, this does not preclude the possibility that the victims were the original instigators and that their deviant behaviours contributed to their subsequent victimization. Future research examining the victims' role in contributing to their own victimization would elucidate this possibility.

Conclusion

Evidence is mounting with respect to the importance of the relationship between the victim and the perpetrator (e.g., Hershcovis & Barling, 2010; LeBlanc & Kelloway, 2002). In this study, we extended previous research by examining aggression in the context of a specific relationship. Our findings showed that task interdependence seems to be a key factor that determines whether or not victims will retaliate towards high-powered perpetrators. Our study thus confirms the importance of considering the specific relationship between an aggressor and a victim. We recommend further development of this more nuanced approach to understanding retaliatory responses to aggression.

Acknowledgements

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