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What is This?

Harm to Those Who Serve: Effects of Direct and Vicarious Customer-Initiated Workplace Aggression

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Abstract

While there is a large body of research on the effects of being a direct target of workplace aggression, there is far less research on the vicarious experience of aggression at work, despite the fact that more people experience workplace aggression vicariously (i.e., observe it or hear about it) than they do directly. In this study, we develop and test a model of the effects of direct and vicarious exposure to aggression that is directed at employees by customers. Structural equation modeling provided support for the proposed model, in which direct and vicarious workplace aggression influences the perceived risk of future workplace aggression, which in turn affects organizational attachment (affective commitment and turnover intentions) and individual well-being (psychological and physical). Conceptual research and policy implications are discussed.

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Research on workplace aggression has proliferated over the past few decades (Kelloway, Barling, & Hurrell, 2006), with key findings from this work summarized in recent reviews (Aquino & Thau, 2009; Barling, Dupré, & Kelloway, 2009) and meta-analyses (e.g., Berry, Ones, & Sackett, 2007; Bowling & Beehr, 2006; Hershcovis et al., 2007; Lapierre, Spector, & Leck, 2005). We now know there are specific individual and situational characteristics that are associated with the enactment of workplace aggression, and that there are a number of negative outcomes associated with being the target of workplace aggression. Notwithstanding these important advances in our understanding of aggression in the workplace, there remains a need to better understand this workplace phenomenon. Workplace aggression continues to be a pervasive concern in organizations, and from a research perspective, there is more to learn about this issue. Of particular relevance to our research is the fact that workplace aggression tends to be examined from the perspective of the perpetrator and direct target of the aggression, despite the fact that many individuals, although not necessarily direct targets of aggression, may have experienced it indirectly by seeing or hearing about it happen to someone else.

Perpetrators and targets of workplace aggression often work with others, and more importantly interact with others at work, thus raising the potential for the aggression that occurs between two people to be viewed or discussed by others within the workplace. Moreover, some forms of aggression such as social undermining (intentionally damaging a target's reputation or social workplace relationships; see Duffy, Ganster, & Pagon, 2002) are in part harmful because of the effect the behavior has on the target's relationship with other people at work, providing further evidence of the pervasiveness of indirect exposure to workplace aggression. In this study, we examine how attitudes, behaviors, and well-being are affected by seeing or hearing about aggression in the workplace.

Background and Hypotheses

Conceptual and operational definitions of workplace aggression have varied considerably across research (Barling et al., 2009), and include both interpersonal and organizational targets (e.g., Bennett & Robinson, 2000; Neuman & Baron, 2005). We use the workplace aggression definition provided by Schat and Frone (2011): behavior that a target wants to avoid, takes place in a work-related situation, and is potentially physically or psychologically damaging to the target. This definition takes an interpersonal focus (research supports the notion that interpersonal and organizational dimensions of aggression be separately conceptualized; Hershcovis et al., 2007; Robinson & Bennett,

1995) and is consistent with the definition of general aggression (e.g., Baron & Richardson, 1994), as well as with other definitions of workplace aggression (see Neuman & Baron, 2005; Schat & Kelloway, 2005).

Although workplace aggression is a pervasive problem, findings from recent prevalence analyses suggest that a more refined understanding of the data is warranted for several reasons, all of which guide the current research. First, despite the media interest in extreme acts of workplace aggression (e.g., physical attacks, shootings), Schat, Kelloway, and Frone's (2006) analysis of data from a nationally representative U.S. sample shows that the prevalence of psychological workplace aggression (e.g., spreading rumors, yelling) is significantly higher than that of physical workplace aggression (i.e., 41.4% and 6%, respectively). Importantly, their results further show that this effect emerges irrespective of demographic factors (namely gender, race, age, education), job tenure, occupation, and industry sector.

Second, notwithstanding stereotypes that regard all instances of workplace aggression as being initiated by "disgruntled employees" (see Barling et al., 2009), employees remain at greater risk of experiencing workplace aggression at the hands of customers, clients, or patients, in comparison with colleagues (i.e., "insiders" such as supervisors or coworkers). Work by Schat and colleagues (2006) further shows that while 13.5% of employees experienced workplace aggression by supervisors, and 15% by coworkers, 23.4% of their representative sample experienced workplace aggression enacted by customers, clients, and members of the public. Moreover, these differences are intensified if only those occupations in which employees have some contact with the public are examined. Employees working in retail, for instance, are victimized even more than employees working in law enforcement, where such aggression might be expected to be a natural part of the job (Grubb, Roberts, Swanson, Burnfield, & Childress, 2005; Merchant & Lundell, 2001). Additional evidence indicates that certain occupational characteristics increase employees' risk of aggression on the job, including working early morning or late night shifts, working alone or with few other employees, and handling money or something else of value to others (see Canadian Centre for Occupational Health and Safety, 1999; Castillo & Jenkins, 1994; Davis, 1987; Kraus, 1987; LeBlanc, Dupré, & Barling, 2006). As this discussion points out, although aggression occurs across work settings, there is variation in rates depending on workplace characteristics. Similarly, depending on the particular characteristics of the aggression and the context within which it occurs, it can have various outcomes at individual, organizational, and societal levels. For example, LeBlanc and Kelloway (2002) found that outcomes of aggression vary depending on the aggression source; in their study, direct aggression from coworkers predicted emotional well-being, psychosomatic

well-being, and affective commitment, while indirect public aggression predicted fear of aggression.

In light of the issues described above related to findings from recent prevalence analyses, in the current study we focus on a wide range of acts that constitute workplace aggression (i.e., so as to include both physical and psychological acts). Moreover, we examine aggression that is perpetrated specifically by customers (i.e., organizational outsiders) and experienced directly or vicariously.

Vicarious Exposure to Workplace Aggression

In addition to the limitations above, little research has focused to date on the larger social context within which workplace aggression occurs. Employees do not only experience aggression directly. Instead, as they see and hear about others who are the victims of aggression at work (e.g., Glomb, 2002) employees are often indirect victims via their vicarious experiences. Despite this, there has been very little research on witnessing acts of workplace aggression (Glomb & Liao, 2003). Failure to understand the vicarious experience of workplace aggression ignores a reality of the workplace for many. Given that employees who witness or hear about such behavior at work would typically far outnumber those who experience the aggression directly, the implications of findings related to the effect of indirect exposure are far-reaching.

Support for the pervasive effects of vicarious exposure to particular counterproductive events derives from research on family violence, where findings consistently show that exposure to parental and family violence exerts negative contemporaneous and long-term effects on children (e.g., Jouriles, Norwood, McDonald, & Peters, 2001). Moreover, in addition to the large body of research pointing to the diverse negative effects of direct exposure to sexual harassment at work (e.g., Kelloway et al., 2006; Schneider, Swan, & Fitzgerald, 1997), indirect exposure to sexual harassment can have a negative impact on those who are exposed vicariously. Even when employees are not direct targets of sexual harassment, they are often aware of its occurrence, either because they witnessed it or were told about it (Bowes-Sperry & O'Leary-Kelly, 2005; Gutek, 1985), and can experience job-related and psychological outcomes similar to direct victims (e.g., Schneider, 1995). Moreover, the level of ambient sexual harassment in a work group affects individual (Glomb et al., 1997) and team performance (Raver & Gelfand, 2005) vicariously. Overall, research focusing on vicarious exposure to domestic violence, sexual assault and harassment, and community violence shows prolonged negative effects on mental health and interpersonal

relationships (e.g., Eriksson, Van de Kemp, Gorsuch, Hoke, & Foy, 2001; Rosenthal, 2000).

Indirect or vicarious exposure to aggression has long been considered important (Baron & Neuman, 1996; Buss, 1961; Dupré & Barling, 2003), and researchers have begun to study workplace aggression and related forms of interpersonal deviance from the perspective of observers (e.g., Ferguson & Barry, 2011; Glomb & Liao, 2003; Glomb et al., 1997; Leather, Lawrence, Beale, & Cox, 1998; Marrs, 1999; Porath & Erez, 2009; Porath, MacInnis, & Folkes, 2010; Robinson & O'Leary-Kelly, 1998; Rogers & Kelloway, 1997; Schat & Kelloway, 2000, 2003). Researchers have explored the extent to which viewing aggression or interpersonal deviance results in subsequent similar behaviors (e.g., Ferguson & Barry, 2011; Glomb & Liao, 2003; Robinson & O'Leary-Kelly, 1998). Researchers have also suggested that indirect victims suffer adverse outcomes that are similar to those of direct victims (e.g., Glomb et al., 1997; Leather et al., 1998; Marrs, 1999; Rogers & Kelloway, 1997; Schat & Kelloway, 2000, 2003). We extend this work in our examination of the effects of vicarious exposure to workplace aggression. Our goal in this research is to provide a more integrated and refined examination of the effects of exposure to workplace aggression. Accordingly, we include both direct and vicarious experiences in our conceptualization of the experience of workplace aggression, and study their influence separately. Moreover, we consider different types of vicarious aggression (i.e., seeing it, hearing about it), and measure a wide range of aggressive behaviors that were experienced vicariously.

Modeling Outcomes Related to Direct and Vicarious Exposure to Workplace Aggression

Our proposed model is presented in Figure 1. We conceptualize vicarious exposure to aggression at work within the stressor-stress-strain model (Barling, Bluen, & Fein, 1987; Pratt & Barling, 1988). Aggression reflects job stressors (objective events) in this model; they have the potential to lead to stress (subjective experience of the objective event) and, in turn, to strain (i.e., physical and mental health, behavioral, and attitudinal consequences; Barling, Kelloway, & Frone, 2005). Moreover, this research is guided by social learning theory (Bandura, 1973, 1986) which, arguably, remains one of the most powerful accounts of human behavior and forms the basis for understanding the vicarious experiences of those exposed to aggressive acts at work. The central tenets of social learning theory are that individuals learn to enact specific behaviors within interpersonal relationships and social environments, and do so not only from direct or personal experience but also from
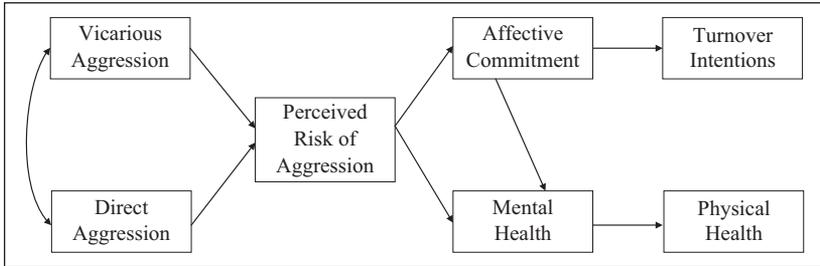
Figure 1. Hypothesized model.

observing the actions and consequences of others' behaviors. Furthermore, social learning theory specifies that the experiential intensity of involvement in the event will moderate the strength of any effects, as a result of which learning would be the strongest when there is direct involvement. Personally witnessing an event, as opposed to directly experiencing it, would be a less-potent source of learning because of the absence of a direct experiential basis. Hearing about—but not seeing—an event would provide the least powerful source for learning (see also Bowes-Sperry & O'Leary-Kelly, 2005, for their discussion of vicarious processes in sexual harassment). Thus, consistent with the tenets of social learning theory (Bandura, 1973), we predict that any effects (i.e., behavioral, attitudinal, and health-related) of personal experiences as the target of workplace aggression will be stronger than vicarious experiences of similar behaviors.

   Our model suggests that the negative experience of being the victim of workplace aggression, both directly and vicariously, will leave employees fearful of future acts of workplace aggression. Although there is little empirical research on the personal effects of aggression directed at employees by customers, a significant body of work has examined this phenomenon on employee-on-employee directed aggression. There are now several studies showing that exposure to aggression at work is associated with perceived risk of future aggression at work, (e.g., Barling, Rogers, & Kelloway, 2001; Budd, Arvey, & Lawless, 1996; Rogers & Kelloway, 1997; Schat & Kelloway, 2000). More importantly from the perspective of this study, one study showed that this phenomenon extends to aggression initiated against employees by members of the public (LeBlanc & Kelloway, 2002), which in turn leads to a number of attitudinal, behavioral, and personal outcomes.

   Some of these earlier studies go further in showing a link between the perceived risk of workplace aggression and a variety of negative personal outcomes. Schat and Kelloway (2000) follow Barling (1996), locating their

model within a work stress framework and describing perceived risk (described as fear in their model) as reflecting "the subjective experience of workplace violence" (p. 387), which would then mediate the effects of workplace aggression on both organizational and personal outcomes (Barling, 1996). In the current study, physical and mental health, affective commitment, and turnover intentions reflect the distal outcomes of direct and vicarious customer-enacted aggression.

At one level, being a victim of aggression has been associated with a variety of negative personal consequences. Indeed, victims of aggression suffer twice the rate of stress-related conditions compared with employees not exposed to such aggression (O'Leary-Kelly, Griffin, & Glew, 1996). Consistent with this notion, Rogers and Kelloway (1997) showed that perceived risk of future aggression was associated with decreased psychological and physical well-being, as manifested by depression, sleep disturbances, and psychosomatic symptoms. Subsequently, Schat and Kelloway (2000) replicated and extended these findings, as their research revealed that exposure to aggression also resulted in depression, anxiety, and gastro-intestinal problems. As a result, the model we develop suggests that the perceived risk of workplace aggression will predict poorer psychological well-being, which in turn would be associated with the presence of psychosomatic symptomatology.

Being a victim of workplace aggression might also influence individuals' regard for their organization. Presumably, individuals who suffer incidents of workplace aggression might question why their employers would tolerate or allow such behaviors, with concomitant negative effects on their attachments to the organization. Research indicates that victims of workplace aggression tend to be lower in terms of affective commitment (Barling et al., 2001; Schat & Kelloway, 2003); in general, when employees are victims of aggression at work, they are less likely to feel emotionally attached to their employing organizations. Thus, we predict that the perceived risk of workplace aggression will be negatively related to affective commitment to the organization. Furthermore, research demonstrates that employees will consider leaving their current organization to obtain a new job as a result of being the victim of workplace aggression (Budd et al., 1996; Rogers & Kelloway, 1997; LeBlanc & Kelloway, 2002). One of the most consistent findings concerning affective commitment is its negative association with withdrawal from the associated organization (Meyer & Allen, 1997). Accordingly, we also predict that affective commitment will be positively associated with turnover intentions.

Our model linking exposure to workplace aggression, perceived risk of workplace aggression, and both affective commitment and well-being goes beyond previous research in specifying a link between affective commitment

to the organization on the one hand and psychological well-being on the other. Specifically, we also suggest that affective attachments to the organization will predict well-being, and there are several reasons for this suggestion. First, the notion that belongingness is critical for achieving psychological health has been central within theories of psychological functioning for decades. For example, Maslow's (1943, 1970) theory of self-actualization presupposed that true psychological health manifested in self-actualization cannot be achieved until belongingness needs had been met; other theorists accorded belongingness a similar role (e.g., Alderfer, 1969). Second, social exclusion is associated with diminished well-being (e.g., Twenge, Baumeister, Tice, & Stucke, 2001). Data from organizational contexts support these assertions, as affective commitment has been shown to be associated with aspects of psychological well-being (Meyer & Allen, 1997), and we predict that affective commitment will be negatively associated with psychological well-being in this study.

Method

Participants and Procedure

Participants in this study were full or part-time employees in the service industry who interacted with customers on a daily basis. After obtaining ethics approval for this research study, participants were recruited through StudyResponse. Recruitment emails were sent to 2,991 individuals registered with StudyResponse as a result of their interest in taking part in social science research. These individuals were informed that they had a chance to win one of four gift certificates for their participation in the online survey. A total of 445 surveys were returned, with 428 surveys usable for subsequent data analysis, based on sufficient responses being provided.

The mean age of respondents was 39 years (SD = 11.4), and the sample was primarily comprised of females (70%). Nearly half (49%) had a high school education, 34% had gained some post-secondary education (e.g., at a community-college or trade school), and 13% had completed a university degree; 4% reported holding less than a high school diploma. Most (73%) worked full-time, had been employed at their current job between 1 and 5 years, and tended to work exclusively during the day; 30% augmented their day shifts with some nighttime shifts. Only 8% worked strictly at night, 10% worked primarily at night with some day shifts, and 9% worked equal amounts of night and day shifts. More than half of the respondents (51%) spent 6 hr or more in direct contact with customers during each shift; 20% between 4 and 6 hr with customers during a shift, while 15% encountered

customers for 1 to 3 hr. Fourteen percent reported dealing with customers, clients, and the public for less than 1 hr per day.

Measures

Workplace aggression. Excluding workplace aggression items not directed exclusively at people (e.g., property damage), 24 items were adapted from Rogers and Kelloway (1997) and Greenberg and Barling (1999) (11 items assessed workplace aggression of a psychological nature, while 13 items assessed aggression of a physical nature; see Table 1 for all items). Participants were asked to indicate the number of times they had experienced any of the 24 acts from a customer during the last 6 months (e.g., yelled or shouted, pushed or shoved). To measure the frequency of these incidents, a 6-point scale was used (0 = *never*, 1 = *once*, 2 = *twice*, 3 = *3-5 times*, 4 = *6-10 times*, and 5 = *more than 20 times*). All items were averaged to form one index reflecting direct exposure to workplace aggression.

Vicarious exposure to customer-initiated aggression. Seeing and hearing about acts of aggression directed by customers at coworkers were assessed using the same items included in the workplace aggression measure described above (see Table 1 for all items). Respondents were asked separately whether they had seen or heard about these types of aggressive behaviors happening to a coworker within the last 6 months. The same 6-point response scale was used ranging from 0 = never to 5 = more than 20 times. Scores from these two variables were averaged to form one index reflecting vicarious exposure to workplace aggression.

Perceived risk of future aggression. Perceived risk of experiencing workplace aggression in the future was assessed using the same items as was used for the direct and vicarious measures of aggression (see Table 1). Participants were asked to indicate if they felt that any of the items would happen to them while at work during the next year. Answers were measured on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Outcomes. Affective commitment was measured using Allen and Meyer's (1990) 8-item scale. Participants responded to the items (e.g., "I would be happy to spend the rest of my career with this company," "This company has a great deal of personal meaning for me") using a 7-point Likert scale (1 = *strongly disagree* and 7 = *strongly agree*). *Turnover intentions* were measured with Rogers and Kelloway (1997) two-item index ("I will probably look for a new job outside my company on the next year," and "I will

Table 1. Items Used to Measure Direct and Vicarious Workplace Aggression.

Items	Direct experience of aggression		Saw aggression		Heard about aggression	
	M	SD	M	SD	M	SD
Workplace aggression						
Transmitted damaging information about you	0.63	1.67	0.94	1.61	5.10	1.46
Said something to spite you	1.02	1.54	1.16	1.81	1.41	1.92
Made rude gestures toward you	0.91	1.59	0.94	1.71	1.13	1.86
Was rude to you	2.32	2.14	1.79	2.17	1.96	2.14
Yelled or shouted at you	1.19	1.73	1.14	1.84	1.37	1.91
Swore or cursed at you	0.94	1.64	0.93	1.70	1.18	1.87
Insulted/name-called you	0.73	1.47	1.01	1.78	1.25	1.92
Glared or gave dirty looks to you	1.74	2.00	1.41	2.02	1.53	2.08
Targeted a false accusation at you	0.74	1.44	0.69	1.44	0.92	1.62
Verbally abused you	0.89	1.60	0.88	1.67	1.15	1.83
Threatened to hit you	0.25	0.88	0.23	0.84	0.35	1.06
Workplace violence						
Hit or tried to hit you	0.16	0.66	0.18	0.78	0.24	0.90
Pushed or shoved you	0.17	0.68	0.23	0.88	0.25	0.91
Deliberately bumped you with unnecessary force	0.20	0.77	0.22	0.85	0.26	0.91
Spit on you	0.08	0.52	0.08	0.53	0.10	0.65
Threatened to throw something at you	0.20	0.80	0.29	0.84	0.26	1.00
Threw something at you	0.18	0.71	0.19	0.78	0.26	0.93
Smashed or kicked something in your presence	0.26	0.85	0.24	0.87	0.21	0.80
Grabbed you	0.19	0.71	0.12	0.63	0.21	0.82
Slapped you	0.06	0.43	0.05	0.31	0.07	0.44
Kicked you	0.06	0.42	0.06	0.37	0.08	0.53
Threatened you with a weapon	0.10	0.55	0.09	0.52	0.14	0.64
Choked you	0.03	0.35	0.05	0.46	0.05	0.52
Threatened to kill you	0.08	0.45	0.11	0.67	0.15	0.81

probably look for a new occupation in the next year"), using a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). *Mental health* was measured using the 12-item General Health Questionnaire (Goldberg et al., 1997) (e.g., "Have you been able to concentrate on whatever you're doing," "Have you felt that you couldn't overcome your difficulties"), in which respondents were asked a series of questions relating to their mental health, using a 7-point Likert scale, ranging from 1 (*not at all*) to 7 (*all of the time*). Finally, participants were asked a series of questions regarding their *physical health* (Schat, Kelloway, & Desmarais, 2005). The 14 items (e.g., "How often have you suffered from indigestion of upset stomach," "How often has your sleep been peaceful and undisturbed") were measured on a 7-point scale, ranging from 1 (*not at all*) to 7 (*all of the time*).

Results

Descriptive statistics, intercorrelations, and reliabilities for the study variables are presented in Table 2. We computed a within-subjects *t* test to contrast the amount of direct and vicarious workplace aggression experienced. Respondents reported experiencing significantly more vicarious ($M = .56$; $SD = .59$) than direct ($M = .25$; $SD = .36$) workplace aggression, $t(419) = 13.21$, $p < .01$.

Testing the Proposed Model

The proposed model outlined in Figure 1 was operationalized as a manifest variable path analysis in which all parameters were estimated with maximum likelihood estimation as implemented in AMOS 18. All analyses were based on the covariance matrix. The goodness of fit of the proposed model was compared against a three-phase model (in which perceived risk of aggression predicted affective commitment, turnover intentions, psychological and physical health directly), and a non-mediated model (in which there was a direct relationship between direct and vicarious aggression and the outcomes of affective commitment, turnover intentions, and psychological and physical health), with the other variables as controls (gender, age, hours worked, night work, and customer contact). The proposed model provided a good fit to the data. Although the χ^2 test was significant, the remaining goodness-of-fit statistics used were above the criteria typically considered necessary to indicate an acceptable fit (root mean square error of approximation [RMSEA] = .067; comparative fit index [CFI] = .976; parsimonious fit index [PFI] = .964). Moreover, the pclose statistic (.120) indicated that RMSEA value did not deviate from .05, and the overall fit of the model was not achieved at the

Table 2. Descriptive Statistics and Correlations Among All Variables (N = 428).

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Gender	1.71	0.46												
2. Age	39	11.41	−11*											
3. Hours worked	2.79	0.71	−18**	−03										
4. Nightwork	1.65*	0.62	05	17*	−03									
5. Public	3.08	1.11	−01	06	16**	16**								
6. Risk of aggression	1.75	0.84	−03	08	18**	14**	19**	(.98)						
7. Affective commitment	4.04	1.37	0.10*	−10*	10	−10*	−07	−21**	(.88)					
8. Turnover intentions	3.10	1.36	−07	20**	−08	12*	12*	22**	−66**	(.94)				
9. Mental health	3.19	1.11	−13*	17**	09	15**	02	40**	−34**	30**	(.91)			
10. Physical health	3.40	1.16	23**	12*	07	11*	02	35**	−14**	12*	67**	(.91)		
11. Vicarious aggression	0.56	0.63	04	10*	09	19**	10*	49**	−13**	10*	19**	21**		
12. Direct aggression	0.25	0.35	−00	09	16**	12*	15**	63**	−20**	20**	33**	31**	57**	

Note. Reliabilities (Cronbach's alpha) are in parentheses along the diagonal. Internal measures of consistency such as Cronbach's alpha are inappropriate for the aggression measures included in this research (Nos. 11 and 12, which include being a victim of direct workplace aggression and vicariously exposed to workplace aggression) and are thus not included (see Bollen & Lennox, 1991; MacCallum & Browne, 1993).
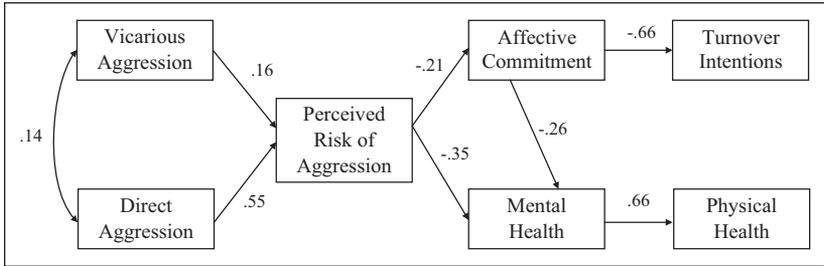*p < .05. **p < .01.

Figure 2. Standardized parameters.

Table 3. Fit Indices for the Predicted Model.

Model	χ^2	df	χ^2 / df	RMSEA	NFI	CFI	PNFI	PCFI
Proposed model	37.72	13	2.90	.067	.964	.976	.448	.453
3 phase	485.5	14	34.68	.281	.539	.540	.269	.270
Non-mediated model	465.9	6	77.65	.424	.557	.551	.119	.118

Note. RMSEA = root mean square error of approximation; NFI = normed fit index; CFI = comparative fit index; PNFI = parsimony adjusted normed fit index; PCFI = parsimony adjusted comparative fit index.

expense of parsimony (parsimony adjusted comparative fit index [PCFI] = .453; parsimony normed comparative fit index [PNFI] = .448). In addition, all the predicted paths yielded significant standardized coefficients (see Figure 2) and the proposed model provided a significantly better fit to the data than the three-phase, $\Delta\chi^2(1) = 447.78$, $p < .01$, and non-mediated models, $\Delta\chi^2(7) = 428.18$, $p < .01$ (see Table 3).

Discussion

The primary aim of this study was to develop and test a model of workplace aggression that includes exposure to both direct and vicarious aggression. There is strong support for the notion that exposure to direct and vicarious aggression is independently associated with perceived risk of future aggression. In addition, consistent with social learning theory predictions (Bandura, 1973), we predicted that direct exposure to workplace aggression would exert stronger effects on the perceived risk of future workplace aggression than vicarious exposure.

Our findings both replicate and extend prior research. First, the findings show that direct and vicarious exposure to customer aggression exert a

similar pattern of findings; both affect perceived risk of future occurrences of workplace aggression, which in turn influence organizational attachment (i.e., lowered affective commitment and turnover intentions) and individual well-being (i.e., reduced physical and mental health). This replicates and extends findings of previous research that have demonstrated relationships between workplace aggression and psychological and physical health, and attachment to the organization (e.g., Barling et al., 2001; Rogers & Kelloway, 1997; Schat & Kelloway, 2000, 2003). Moreover, consistent with the notion that direct exposure would have greater personal meaning than vicarious exposure (Bandura, 1973), the effects resulting from being the direct target of aggression were substantially stronger than those ensuing from being vicariously exposed, despite greater exposure to vicarious aggression.

This information is critical for individuals and the organizations that employ them. Although we have known for some time that employees who endure aggression at work often experience negative outcomes, strong empirical evidence that indirect victims experience these same outcomes has been lacking. The findings from the current study support the notion that witnesses of such aggression—who will usually greatly outnumber the direct victims—are also negatively affected by these behaviors. This finding needs to be seriously considered and extended in thinking about future research and practice.

An important conceptual issue emerges from this research. Like most definitions of aggression in general and workplace aggression more specifically, the definition we adopted (i.e., Schat & Kelloway, 2005) includes the notion that any harm caused was intentional. The extent to which intentionality might be relevant when considering instances of vicarious workplace aggression is questionable: While the current findings show that witnesses are negatively influenced, it is not likely that the acts they saw or heard were enacted intentionally to harm them. Instead, in the vast majority of instances of vicarious aggression, it is far more likely that they were inadvertent witnesses of the aggression. It is possible therefore, that understanding the effects of vicarious workplace aggression might require a modified definition of workplace aggression, because any perceived risk of the aggression or subsequent effects on well-being and organizational attachment likely emerge independent of such intentionality. In addition, it is worth noting that despite the inclusion of intentionality in most definitions of workplace aggression, the measurement of workplace aggression in most studies—including this one—only focuses on aggressive acts, not intentions, further justifying a re-assessment of definitions of workplace aggression.

The extent to which social learning theory helps understand the effects of vicarious aggression, and the results of this study, offer specific practical

implications for organizations. It is evident from the results of the structural equation model that even when any effects of direct aggression are controlled, vicarious exposure to workplace aggression has negative effects for the individual. These findings may be a mixed blessing. While they show that witnessing acts of workplace aggression exert effects on individuals' perceived risk of aggression, and workplace attachments and personal well-being, social learning theory points to how these findings might inform organizational policy and intervention initiatives. Specifically, the earliest findings on modeling and aggression (Bandura, 1965, 1973) showed that merely observing aggression was an insufficient condition for subsequent enactment. Instead, whether the aggressive behavior is subsequently enacted by the observer would depend on whether the modeled behavior was rewarded or punished. When witnesses observe a model being punished for the aggressive behavior, it is much less likely that they will perform the behavior themselves; if they see the behavior rewarded, re-enactment becomes significantly more likely. Thus, articulating clear policies against acts of workplace aggression that are consistently enforced might reduce the level of future aggression (Dekker & Barling, 1998; Dupré & Barling, 2006; Ferguson & Barry, 2011).

The results of the current study also offer avenues for further research. The current study demonstrates that both witnessing and hearing about aggression is detrimental, and an increased focus on both direct and vicarious aggression would be appropriate. In particular, research might focus on the differential outcomes of seeing acts of workplace aggression rewarded, punished, or ignored. Current findings showing that laissez faire leadership exerts negative effects on a range of outcomes (e.g., Skogstad, Einersen, Torsheim, Aasland, & Hetland, 2007) suggests that observing a perpetrator being rewarded or receiving no organizational response for an act of workplace aggression might both exert negative effects on organizational employees. Moreover, it was not possible to separate the vicarious effects of seeing aggression versus hearing about aggression, given the significant correlation between these measures in the current study. From a learning perspective (e.g., Bandura, 1973, 1986), there may be differences in the experience of directly seeing aggression as opposed to being told the same (i.e., second-hand), and it would be interesting to examine the potential differences more closely (see also Pearson & Porath, 2004). Moreover, recent research demonstrates that the experience of workplace aggression leads to a decrease in job performance as a result of a decrease in job attitudes and health (Schat & Frone, 2011). The same may be true for those vicariously exposed; that is, there may be a reduction in performance as a result of being witness to acts of aggression, and future research should examine this possibility.

In addition, it is likely that there are factors that moderate exposure to aggression that should be considered in subsequent research. Stressors do not uniformly result in stress, nor does stress necessarily result in strain (Barling, Dupré, & Hepburn, 1998; Dupré, Barling, & LeBlanc, 2004). For example, previous research suggests that self-efficacy (i.e., the belief that one can influence personal events and outcomes; Bandura, 1986), a lack of identification with the victim (e.g., Barling et al., 1998), and an absence of self-blame attributions (Bradfield & Aquino, 1999) may all be important moderators of the relationship between exposure to aggression and perceived risk of future aggression. At the same time, low tolerance for aggression in the organization, as well as instrumental support from supervisors, might minimize the impact that perceived risk of future aggression has on various outcomes (Dupré & Barling, 2006; Leather et al., 1998).

Future research might also consider the impact that vicarious exposure to other negative workplace behaviors (e.g., sexual harassment, injuries) has on employees in general, or on particular groups of employees. For example, because teenagers have unique motivations for being employed and are more influenced by their work environments than their adult counterparts, findings from research on adults may not generalize to young workers (e.g., Barling & Kelloway, 1999; Krosnick & Alwin, 1989). Thus, the implications of vicarious exposure to behaviors such as workplace aggression or sexual harassment among young employees has potential implications for teenage employees' well-being and subsequent workplace attitudes and behaviors as they progress toward adulthood (see Dupré, Inness, Barling, Connelly, & Hoption, 2006).

Moreover, future research might assess how witnesses react to aggression at work (Bowes-Sperry & O'Leary-Kelly, 2005), given that they often have the ability to change a situation (e.g., Clarkson, 1996), but have been largely overlooked in the study of negative workplace behaviors. Observers may intervene in a number of ways, and it is important to understand what encourages witnesses to take action to reduce the occurrence of these behaviors. Observers' perceptions of and reactions to workplace aggression may vary depending on a number of factors including where the aggression occurs and their degree of power within the organization, as well as their own feelings of helplessness or vulnerability. Moreover, recent research demonstrates that in particular situations, victims of aggression are more likely to retaliate with deviance (Hershcovis, Reich, Parker, & Bozeman, 2012); the same may be true for individuals who witness aggression, and we should try to better understand this possible phenomenon.

The results of this study should be tempered by some potential limitations. First, the data are all cross-sectional in nature, precluding any causal

inferences. Second, the self-report nature of the data make it impossible to exclude the possibility of a mono-method bias, and may suggest socially desirable responding. Both longitudinal data, and data obtained from sources other than direct or vicarious victims would be important in overcoming these limitations. Third, recent research is emphasizing the importance of the source of the aggression (Hershcovis & Barling, 2010), and future research should assess the potential moderating role of the source of workplace aggression (e.g., hospital patients, disgruntled customers), as well as other mediators. It is also important to note that because participants took part in this study through StudyResponse and completed surveys online, the sample may be biased, and thus future research should replicate this research with a different group of participants, and with different data collection methods. Finally, because a small proportion of participants were working night-shifts (where there tends to be a higher propensity for workplace aggression and violence), the prevalence of aggression and violence may be underestimated in this study. Again, future research would benefit by replicating this study in a different context with different types of employees, to determine if the findings are similar.

In conclusion, this study provides evidence of the far-reaching effects of customer-initiated workplace aggression. Given that there are negative outcomes for both direct and indirect victims, it is imperative that organizations strive to minimize this workplace phenomenon and that greater empirical attention is devoted to this topic.

Authors' Note

This article was written while the author was affiliated to Memorial University of Newfoundland, St. John's, Canada.

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References

Alderfer, C. P. (1969). An empirical test of a new theory of human needs. *Organizational Behavior and Human Performance*, *4*, 142-175.

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology*, *63*, 1-18.

Aquino, K., & Thau, S. (2009). Workplace victimization: Aggression from the target's perspective. *Annual Review of Psychology*, *60*, 717-741.

Bandura, A. (1965). Influence of models' reinforcement contingencies on the acquisition of imitative responses. *Journal of Personality and Social Psychology*, *1*, 589-595.

Bandura, A. (1973). *Aggression: A social learning analysis*. Upper Saddle River, NJ: Prentice Hall.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.

Barling, J. (1996). Workplace violence: Its scope and the issues. In G. VandenBos & E. Q. Bulatao (Eds.), *Violence on the job: Identifying risks and developing solutions* (pp. 29-49). Washington, DC: American Psychological Association.

Barling, J., Bluen, S. D., & Fein, R. (1987). Psychological functioning following an acute disaster. *Journal of Applied Psychology*, *72*, 683-690.

Barling, J., Dupré, K. E., & Hepburn, C. G. (1998). Effects of parents' job insecurity on children's work beliefs and attitudes. *Journal of Applied Psychology*, *83*, 112-118.

Barling, J., Dupré, K. E., & Kelloway, E. K. (2009). Predicting workplace aggression and violence. *Annual Review of Psychology*, *60*, 671-692.

Barling, J., & Kelloway, E. K. (Eds.). (1999). *Young workers*. Washington, DC: American Psychological Association.

Barling, J., Kelloway, E. K., & Frone, M. (2005). (Eds.) *Handbook of work stress*. Thousand Oaks, CA: Sage Publications.

Barling, J., Rogers, A. G., & Kelloway, E. K. (2001). Behind closed doors: In-home worker's experience of sexual harassment and workplace violence. *Journal of Occupational Health Psychology*, *6*, 255-269.

Baron, R. A., & Neuman, J. H. (1996). Workplace violence and workplace aggression: Evidence on their relative frequency and potential causes. *Aggressive Behavior*, *23*, 161-173.

Baron, R. A., & Richardson, D. R. (1994). *Human aggression* (2nd ed.). New York, NY: Plenum.

Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, *85*, 349-360.

Berry, C. M., Ones, D. S., & Sackett, P. R. (2007). Interpersonal deviance, organizational deviance, and their common correlates: A review and meta-analysis. *Journal of Applied Psychology*, *92*, 410-424.

Bollen, K., & Lennox, R. (1991). Conventional wisdom on measurement: A structural equation perspective. *Psychological Bulletin*, *110*, 305-314.

Bowes-Sperry, L., & O'Leary-Kelly, A. (2005). To react or not to react: The dilemma faced by sexual harassment observers. *Academy of Management Review*, *30*, 288-306.

Bowling, N. A., & Beehr, T. A. (2006). Workplace harassment from the victim's perspective: A theoretical model and meta-analysis. *Journal of Applied Psychology*, *91*, 998-1012.

Bradfield, M., & Aquino, K. (1999). The effects of blame attributions and offender likableness on forgiveness and revenge in the workplace. *Journal of Management*, *25*, 607-631.

Budd, J. W., Arvey, R. D., & Lawless, P. (1996). Correlates and consequences of workplace violence. *Journal of Occupational Health Psychology*, *1*, 197-210.

Buss, A. H. (1961). *The psychology of aggression*. New York, NY: John Wiley & Sons.

Canadian Centre for Occupational Health and Safety. (1999). *Violence in the workplace*. Retrieved from http://www.ccohs.ca/oshanswers/psychosocial/violence.html

Castillo, D. N., & Jenkins, E. L. (1994). Industries and occupations at high risk for work-related homicide. *Journal of Occupational Medicine*, *36*, 125-132.

Clarkson, P. (1996). *The bystander: An end to innocence in human relationships?* London, England: Whurr.

Davis, H. (1987). Workplace homicides of Texas males. *American Journal of Public Health*, *77*, 1290-1293.

Dekker, I., & Barling, J. (1998). Personal and organizational predictors of workplace sexual harassment of women by men. *Journal of Occupational Health Psychology*, 7-18.

Duffy, M. K., Ganster, D. C., & Pagon, M. (2002). Social undermining in the workplace. *Academy of Management Journal*, *45*, 331-351.

Dupré, K. E., & Barling, J. (2003). Workplace aggression. In A. Sagie, S. Stashevsky, & M. Koslowsky (Eds.), *Misbehavior and dysfunctional attitudes in organizations* (pp. 13-32). New York, NY: Palgrave MacMillan.

Dupré, K. E., & Barling, J. (2006). Predicting and preventing supervisory workplace violence. *Journal of Occupational Health Psychology*, *11*, 13-26.

Dupré, K. E., Barling, J., & LeBlanc, M. M. (2004). The many faces of control at work. In C. L. Cooper (Ed.), *Handbook of stress medicine and health* (pp. 375-398). CRC Press.

Dupré, K. E., Inness, M., Barling, J., Connelly, C., & Hoption, C. (2006). Workplace aggression in teenage part-time employees. *Journal of Applied Psychology*, *91*, 987-997.

Eriksson, C., Van de Kemp, H., Gorsuch, R., Hoke, S., & Foy, D. (2001). Trauma exposure and PTSD symptoms in international relief and development personnel. *Journal of Traumatic Stress*, *13*, 205-211.

Ferguson, M., & Barry, B. (2011). I know what you did: The effects of interpersonal deviance on bystanders. *Journal of Occupational Health Psychology*, *16*, 80-94.

Glomb, T. M. (2002). Workplace anger and aggression: Informing conceptual models with data from specific encounters. *Journal of Occupational Health Psychology*, *7*, 20-36.

Glomb, T. M., & Liao, H. (2003). Interpersonal aggression in work groups: Social influence, reciprocal, and individual effects. *Academy of Management Journal*, 486-496.

Glomb, T. M., Richman, W. L., Hulin, C. L., Drasgow, F., Schneider, K. T., & Fitzgerald, L. F. (1997). Ambient sexual harassment: An integrated model of antecedents and consequences. *Organizational Behavior and Human Decision Processes*, *71*, 309-328.

Goldberg, D. P., Gater, R., Sartorius, N., Ustun, T. B., Piccinelli, M., Gureje, O., & Rutter, C. (1997). The validity of two version of the GHQ in the WHO study of mental illness in general health care. *Psychological Medicine*, *27*, 191-197.

Greenberg, L., & Barling, J. (1999). Predicting employee violence against coworkers, subordinates and supervisors: The roles of person behaviors and perceived workplace factors. *Journal of Organizational Behavior*, *20*, 897-913.

Grubb, P. L., Roberts, R. K., Swanson, N. G., Burnfield, J. L., & Childress, J. H. (2005). Organizational factors and psychological violence: Results from a nationally representative sample of US companies. In V. Bowie, B. Fisher, & C. Cooper (Eds.), *Workplace violence: Issues, trends, strategies* (pp. 37-60). Portland, OR: Willan Publishing.

Gutek, B. (1985). *Sex and the workplace*. San Francisco, CA: Jossey-Bass.

Hershcovis, M. S., & Barling, J. (2010). Towards a multi-foci approach to workplace aggression: A meta-analytic review of outcomes from different perpetrators. *Journal of Organizational Behavior*, *31*, 24-44.

Hershcovis, M. S., Reich, T. C., Parker, S. K., & Bozeman, J. (2012). The relationship between workplace aggression and target deviant behaviour: The moderating roles of power and task interdependence. *Work & Stress*, *26*, 1-20.

Hershcovis, M. S., Turner, N., Barling, J., Arnold, K. A., Dupré, K. E., Inness, M., . . .Sivanathan, N. (2007). Predicting workplace aggression: A meta-analysis. *Journal of Applied Psychology*, *92*, 228-238.

Jouriles, E. N., Norwood, W., McDonald, R., & Peters, B. (2001). Domestic aggression and child adjustment. In J. Grych & F. D. Fincham (Eds.), *Child development and interparental conflict* (pp. 315-336). Cambridge, UK: Cambridge University Press.

Kelloway, E. K., Barling, J., & Hurrell, J. J. (2006). *Handbook of workplace violence*. Thousand Oaks, CA: Sage.

Kraus, J. F. (1987). Homicide while at work: Persons, industries, and occupations at high risk. *American Journal of Public Health*, *77*, 1285-1289.

Krosnick, J. A., & Alwin, D. F. (1989). Aging and susceptibility to attitude change. *Journal of Personality and Social Psychology*, *57*, 416-425.

Lapierre, L. M., Spector, P. E., & Leck, J. D. (2005). Sexual versus nonsexual workplace aggression and victims' overall job satisfaction: A meta-analysis. *Journal of Occupational Health Psychology*, *10*, 155-169.

Leather, P., Lawrence, C., Beale, D., & Cox, T. (1998). Exposure to occupational aggression and the buffering effects of intra-organizational support. *Work & Stress*, *12*, 161-178.

LeBlanc, M. M., Dupré, K. E., & Barling, J. (2006). Predicting and preventing violence directed at employees by members of the public. In E. K. Kelloway, J. Barling, & J. Hurrell (Eds.), *Handbook of workplace violence* (pp. 261-280). Thousand Oaks, CA: Sage.

LeBlanc, M. M., & Kelloway, E. K. (2002). Predictors and outcomes of workplace violence. *Journal of Applied Psychology*, *87*, 444-453.

MacCallum, R. C., & Browne, M. W. (1993). The use of casual indicators on covariance structure models: Some practical issues. *Psychological Bulletin*, *114*, 533-541.

Marrs, M. E. M. (1999). *Antecedents and outcomes of verbal aggression in the workplace* (Unpublished doctoral dissertation). University of Missouri–Columbia.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*, 370-396.

Maslow, A. H. (1970). *Motivation and personality* (2nd ed.). New York, NY: Harper & Row Publishers.

Merchant, J. A., & Lundell, J. A. (2001). *Workplace violence: A report to the nation*. Injury Prevention Research Center, University of Iowa. Retrieved from http://www.public-health.uiowa.edu/iprc/resources/workplace-violence-report.pdf

Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research and application*. Thousand Oaks, CA: Sage.

Neuman, J. H., & Baron, R. A. (2005). Aggression in the workplace: A social-psychological perspective. In S. Fox & P. E. Spector (Eds.), *Counterproductive work behavior: Investigations of actors and targets* (pp. 13-40). Washington, DC: American Psychological Association.

O'Leary-Kelly, A. M., Griffin, R. W., & Glew, D. J. (1996). Organization motivated violence: A research framework. *Academy of Management Review*, *21*, 225-253.

Pearson, C. M., & Porath, C. L. (2004). On incivility, its impact, and directions for future research. In R. W. Griffin & A. M. O'Leary-Kelly (Eds.), *The dark side of organizational behavior* (pp. 403-425). San Francisco, CA: Jossey-Bass.

Porath, C. L., & Erez, A. (2009). Overlooked but not touched: How rudeness reduces onlookers' performance on routine and creative tasks. *Organizational Behavior and Human Decision Processes*, *109*, 29-44.

Porath, C. L., MacInnis, D., & Folkes, V. (2010). Witnessing incivility among employees: Effects on consumer anger and negative inferences about companies. *Journal of Consumer Research*, *37*, 292-303.

Pratt, L., & Barling, J. (1988). Differentiating daily hassles, acute and chronic stressors: A framework and its implications. In J. J. Hurrell, L. R. Murphy, S. L. Sauter, & C. L. Cooper (Eds.), *Occupational stress: Issues and developments in research* (pp. 41-53). London, England: Taylor & Francis.

Raver, J. L., & Gelfand, M. J. (2005). Beyond the individual victim: Linking sexual harassment, team processes, and team performance. *Academy of Management Journal*, *48*, 387-400.

Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multi-dimensional scaling study. *Academy of Management Journal*, *38*, 555-572.

Robinson, S. L., & O'Leary-Kelly, A. M. (1998). Monkey see, monkey do: The influence of work groups on the antisocial behavior or employees. *Academy of Management Journal*, *41*, 658-672.

Rogers, K. A., & Kelloway, E. K. (1997). Violence at work: Personal and organizational outcomes. *The Journal of Occupational Health Psychology*, *1*, 63-71.

Rosenthal, B. S. (2000). Exposure to community violence in adolescence: Trauma symptoms. *Adolescence*, *35*, 271-284.

Schat, A. C., & Frone, M. R. (2011). Exposure to psychological aggression at work and job performance: The mediating role of job attitudes and personal health. *Work & Stress*, *25*, 23-40.

Schat, A. C., Frone, M. R., & Kelloway, E. K. (2006). Prevalence of workplace aggression in the U.S. workforce: Findings from a national study. In J. J. Hurrell, Jr., E. K. Kelloway, & J. Barling (Eds.), *Handbook of workplace violence* (pp. 47-89). Thousand Oaks, CA: Sage.

Schat, A. C., & Kelloway, E. K. (2000). Effects of perceived control on the outcomes of workplace violence and violence. *Journal of Occupational Health Psychology*, 386-402.

Schat, A. C., & Kelloway, E. K. (2005). Workplace aggression. In J. Barling, E. K. Kelloway, & M. Frone (Eds.), *Handbook of Work Stress* (pp. 189-218). Thousand Oaks, CA: Sage.

Schat, A. C., & Kelloway, E. K. (2003). Reducing the adverse consequences of workplace violence and violence: The buffering effects of organizational support. *Journal of Occupational Health Psychology*, *8*, 110-122.

Schat, A. C., Kelloway, E. K., & Desmarais, S. (2005). The Physical Health Questionnaire (PHQ): Construct validation of a self-report scale of somatic symptoms. *Journal of Occupational Health Psychology*, 363-381.

Schneider, K. T. (1995). *Bystander stress: The effect of organizational tolerance of sexual harassment on victims co-workers* (Unpublished doctoral dissertation). University of Illinois, Urbana-Champaign.

Schneider, K. T., Swan, S., & Fitzgerald, L. F. (1997). Job-related and psychological effects of sexual harassment in the workplace: Empirical evidence from two organizations. *Journal of Applied Psychology*, *82*, 401-415.

Skogstad, A., Einersen, S., Torsheim, T., Aasland, M. S., & Hetland, H. (2007). The destructiveness of laissez-faire leadership behavior. *Journal of Occupational Health Psychology*, *12*, 80-92.

Twenge, J. M., Baumeister, R. F., Tice, D. M., & Stucke, T. S. (2001). If you can't join them, beat them: Effects of social exclusion on aggressive behavior. *Journal of Personality and Social Psychology*, *81*, 1058-1069.

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