

TITLE: Neutralizing workplace bullying: The buffering effects of contextual factors

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#### ABSTRACT

*Purpose.* This paper examines the direct and buffering effects of three workplace contextual factors – constructive leadership, perceived organizational support, and organizational anti-bullying initiatives – on bullying and its relationships with relevant criteria. Further, the paper investigates the effectiveness of organizational initiatives against bullying as perceived by targets and non-targets.

*Method.* Data were collected from 727 employees in nine New Zealand healthcare organizations. Of these, 133 employees were classified as bullied, as they had experienced at least two negative acts per week over the last 6 months.

*Findings.* Correlations revealed negative relationships between the three contextual work factors and bullying. Moderated regression showed that perceived organizational support buffered the relationship of bullying with self-rated job performance, and that organizational initiatives against bullying buffered the relationship of bullying with both wellbeing and organizational

commitment. Targets consistently gave lower ratings than non-targets of the effectiveness of organizational initiatives to address bullying.

*Implications.* These results show that contextual factors are important in workplace bullying.

They were directly associated with lower levels of bullying and buffered the negative impacts of workplace bullying both through anti-bullying initiatives and perceived organizational support.

Further research is needed into effective ways for organizations to counter bullying.

*Originality.* There is scant research on workplace factors that may reduce bullying and buffer its negative effects. Our paper makes an original contribution in providing evidence of the importance of three contextual factors, and of buffering effects for perceived organizational support and organizational initiatives against bullying.

**KEYWORDS:** workplace bullying, perceived organizational support, leadership, anti-bullying.

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### *Introduction*

Workplace bullying is a concern for many employees in their everyday working lives.

Research shows that it is a widespread phenomenon, with rates of 5-28% across Western countries (Lutgen-Sandvik, Tracy, & Alberts, 2007). Workplace bullying results in anxiety, depression, absenteeism, and turnover (Hogh, Mikkelsen, & Hansen, 2011). Pioneering research by Leymann (1996) identified a poor work environment as the key antecedent of bullying. Indeed, work environment factors may influence both the likelihood that bullying occurs and affect how recipients of bullying respond (Salin & Hoel, 2011). From a prevention perspective, then, contextual factors may take on primary and secondary prevention roles in reducing bullying and its impacts (Bentley, Catley, Cooper-Thomas, Gardner, O'Driscoll, Dale, et al., 2012; Law, Dollard, Tuckey, & Dormann, 2011).

While considerable progress has been made in understanding contextual factors as antecedents to bullying, Salin and Hoel (2011) highlight several limitations that future research should address. These include using multivariate analyses to simultaneously investigate the relative strengths of contextual factors, and interactive models that reflect the complexity of contextual factors that may have multiple and dynamic effects. We address these shortcomings in the present study investigating both the direct and buffering roles of three contextual workplace factors as depicted in Figure 1: Constructive leadership, perceived organizational support, and

organizational initiatives against bullying. These three factors are proposed to directly reduce bullying and also reduce the negative ramifications of bullying on relevant individual and organizational criteria. In the sections that follow we define bullying, outline our rationale for choosing these criterion variables, and provide arguments for our hypotheses.

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Insert Figure 1 about here

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### *Defining Workplace Bullying*

Workplace bullying is the persistent exposure to negative and aggressive behaviors, which may be psychological, verbal, or physical, and may be perpetrated by an individual or group (Einarsen, Hoel, Zapf, & Cooper, 2011; O'Moore, Seigne, McGuire, & Smith, 1998). Such negative behaviors are labeled as bullying when they “occur repeatedly and regularly (e.g., weekly) and over a period of time (e.g., about six months)” (Einarsen et al., 2011, p. 22).

Bullying is primarily psychological and persistent, and on this basis is distinguished from workplace violence, which is primarily physical and irregular (Rayner & Cooper, 2006; Zapf, Einarsen, Hoel, & Vartia, 2003). Estimated rates of bullying vary across studies depending on the criterion and measure used, with the two most common measurements being self-identified bullying and inventory-based checklists of negative behaviors (Nielsen, Matthiesen, & Einarsen, 2010).

*Individual and Organizational Consequences of Workplace Bullying*

Bullying can have severe effects on individual targets and on the organization. At the individual level, the results of bullying include lower self-esteem, more negative emotion, anxiety, stress, fatigue, burnout and depression (Agervold & Mikkelsen, 2004; Cassitto, Fattorini, Gilloli, Rengo, & Gonik, 2004; Djurkovic, McCormack, & Casimir, 2006; Hauge, Skogstad, & Einarsen, 2010; Hoel, Faragher, & Cooper, 2004; Lovell & Lee, 2011; Lutgen-Sandvik, 2008). In the current study we examined strain and wellbeing to capture two opposing dimensions of individual health (see also Law et al., 2011). Although strain and wellbeing are related, strain is the outcome of experiencing stressors and is focused on environmental factors whereas wellbeing captures individual traits, social cues, and cognitive processes (Warr, 2006).

Bullying also negatively affects organizations: Targets take more days off, report unclear expectations of task performance, have reduced job satisfaction, commitment to the organization, and work motivation, and are more likely to leave the organization than non-targets (Agervold & Mikkelsen, 2004; Djurkovic, McCormack, & Casimir, 2008; Harvey, Stoner, Hochwarter & Kacmar, 2007; Keashly & Neuman, 2004). Based on these findings, our remaining two criterion variables were performance and organizational commitment. Performance represents a key outcome for the organization, while organizational commitment is an important attitude in itself and also has implications for task performance, contextual performance, and turnover (Sinclair,

Tucker, Cullen, & Wright, 2005). To date there has been little research investigating the relationship of bullying with these variables.

#### *Contextual Factors as Antecedents of Workplace Bullying*

Contextual factors have the most potential for broad impacts in reducing bullying and its effects since they can be implemented across work units and organizations (Bond, Tuckey, & Dollard, 2010; Giorgi, 2010; Salin & Hoel, 2011). Three recent studies have considered broader factors and investigated both their direct and interactive effects, in line with Salin and Hoel's (2011) call for such research designs. In a survey of frontline police officers, Tuckey, Dollard, Hosking, and Winefield (2009) observed that perceived cognitive, emotional and behavioral support from colleagues negatively predicted experiences of bullying and observed bullying toward others. Moreover, the positive relationship between observed bullying and work demands was reduced by a combination of support from colleagues and high work control. Investigating perceived organizational support (POS) among schoolteachers, Djurkovic et al. (2008) found that POS was both negatively related to bullying and moderated the relationship between workplace bullying and targets' intention to leave. More recently Law et al. (2011), using a random Australian working sample, found both a direct and moderating effect for psychological safety climate (PSC), which is the perception of management's commitment to protecting workers' psychological health and safety. PSC had direct negative relationships with bullying at the

individual and organization level. Further, PSC at the organizational level buffered the positive relationships of bullying with psychological distress and emotional exhaustion, and buffered the negative relationship of bullying with engagement. In the present study we investigated three potential antecedents to ascertain direct and moderator relationships with bullying: Constructive leadership, POS, and organizational anti-bullying initiatives.

*Constructive leadership.* Hauge and colleagues (2007) note the paradox that although supervisors are the most frequent perpetrators of bullying, relatively few studies have investigated the relationship of leadership behavior and bullying. Those studies that have been conducted tend to examine the negative consequences of destructive forms of leadership behavior (see, for instance, Aasland, Skogstad, Notelaers, Neilsen, & Einarsen, 2010; Kelloway & Barling, 2010). Less attention has been focused on how constructive leadership behavior may reduce the likelihood of bullying occurring and attenuate the negative outcomes of bullying. Constructive leadership is defined as behaviors which encourage and recognize individuals for their contributions, support their needs, foster growth and development within the organization and illustrate a leader's flexibility to innovate and adapt to environmental contingencies (Ekvall & Arvonen, 1991). Poor leadership can lead to or exacerbate bullying in workplaces in various ways. Leaders may behave in bullying ways themselves, model bullying behaviors which others copy, fail to intervene in bullying behavior or even reward it (Mathisen, Einarsen, & Mykletun,

2011). In contrast, constructive leadership may directly reduce the likelihood of bullying by modeling constructive behaviors, intervening when bullying occurs and ensuring consistent punishment for bullying. The few studies that investigated supportive or constructive leadership and bullying have found a negative relationship, showing that employees who experience such positive leadership experience less bullying (Brotheridge & Lee, 2006; Hauge, Skogstad, & Einarsen, 2007; Skogstad et al., 2011). Thus we predict a direct negative relationship of constructive leadership with bullying.

*Hypothesis 1:* Constructive leadership negatively predicts bullying.

Constructive leadership may also reduce the negative effects of bullying by managing conflict, clarifying work roles and goals, acting as a role model for appropriate behavior, and reducing targets' perceptions of loss of control (Gardner & Johnson, 2001; Hoel & Giga, 2006; Strandmark & Hallberg, 2007). Previous research has found that negative leadership behaviors such as laissez-faire leadership facilitate negative work factors such as role conflict in predicting bullying (Hauge et al., 2007). Here we focus on positive leadership behaviors to suggest positive buffering effects. Leaders who intervene in conflict, trust employees, and provide autonomy may reduce the degree to which targets of bullying experience strain and wellbeing. Clarifying work roles and goals may help to keep employees' work on track, reducing the negative effects of bullying on performance. Also through having clear goals, targets of bullying may be better able



to integrate these with their own goals hence sustaining organizational commitment even in the face of bullying. We predict that:

*Hypothesis 2:* Constructive leadership will reduce the relationship of bullying with (a) strain, (b) wellbeing, (c) performance, and (d) organizational commitment.

*Perceived organizational support (POS).* POS is defined as the employee's perception that the organization will help employees to carry out their work and support their socioemotional wellbeing (Rhoades & Eisenberger, 2002). A supportive workplace which acknowledges individuals' goals and values, supports wellbeing as well as performance, and values employee ideas and contributions, may be an effective counter to bullying (Djurkovic, et al., 2008; Keashly, 2001). Based on the norm of reciprocity, in which good treatment from one person obliges the other to respond in kind (Gouldner, 1960), employees repay POS with attitudes and behaviors that benefit the organization (Eisenberger, et al., 1990; Rhoades & Eisenberger, 2002). Higher levels of POS are therefore likely to be associated with lower levels of bullying. While there is evidence that a poor work environment is associated with higher levels of bullying (Skogstad et al., 2011), only recently have supportive workplace climates been recognized as potential antecedents of lower levels of bullying (Parzefall & Salin, 2010; Tucket et al., 2009). Hence we propose:

*Hypothesis 3:* Perceived organizational support negatively predicts bullying.

There is emerging evidence that POS may act also as a buffer to reduce the impact of bullying by sustaining reciprocal positive attitudes and behaviors. Djurkovic et al. (2008) found that POS buffered the relationship of bullying with intentions to leave. More recently, Parzefall and Salin (2010) have suggested that POS may act as a buffer for victims of bullying, helping them to cope. In line with this evidence, we propose that POS may buffer the relationships of bullying on targets' strain and wellbeing. Past research has found that POS moderates the effects of psychological aggression on emotional well-being, somatic health, and job-related affect (Schat & Kelloway, 2003), and that it buffers the effects of psychological contract breach on negative affective reactions (Dulac, Coyle-Shapiro, Henderson, & Wayne, 2008). Hence, when an employee feels supported they may be better able to see bullying as separate from their broader experiences of work, which reduces its prominence and impact (Parzefall & Salin, 2010). Past research has shown that POS positively predicts organizational commitment (Eisenberger et al., 1990, 2001) and both task and contextual performance (Eisenberger et al., 1986, 1990; Wayne et al., 1997), so a buffering effect for the relationship of bullying with these criteria is plausible. We note a potential dark side to POS in the context of bullying, in that high levels of POS could lead a target to feel obligated to perform or feel committed in spite of experiencing bullying. However, if a lack of POS allows bullying to reduce a target's

performance this may threaten the target's continued employment which is also a negative outcome. Overall, we predict that:

*Hypothesis 4:* Perceived organizational support will reduce the relationship of bullying on

(a) strain, (b) wellbeing, (c) performance, and (d) organizational commitment.

*Organizational anti-bullying initiatives.* Targets often report that employers respond inadequately to bullying by, for example, failing to support targets, trivializing targets' concerns, accepting and normalizing bullying behavior, blaming targets, and failing to deal with bullies (Duffy, 2009; Hogh, Mikkelsen, & Hansen, 2011). More effective actions are likely to be system-wide approaches which make clear those behaviors that are and are not acceptable and which create good working relationships (Duffy, 2009; Hogh et al., 2011). This may require policies and procedures with credible enforcement, support for targets and those accused of bullying, suitable training, and the modeling of appropriate behavior by management and senior staff (Namie, 2007; Rayner & Cooper, 2006; Rayner & Lewis, 2011). A few studies have investigated the direct effects of organizational actions on bullying, with mixed results (Hoel & Giga, 2006; Mikkelsen, Hogh, & Puggaard, 2011). Hoel and Giga (2006) found little consistent evidence that organisational interventions reduced bullying. It is possible that the interventions raised awareness and increased reporting of bullying and that this did not accurately reflect actual changes in bullying (Cooper-Thomas, Leighton, Xu, & Knight-Turvey, 2010). Using a

process evaluation approach, Mikkelsen et al. (2011) found evidence for the beneficial effects of a range of interventions to prevent workplace bullying. Several other authors argue that organisational initiatives should be multi-faceted for maximum effectiveness (Ferris, 2004; Keashly & Neuman, 2004; Saam, 2010). While the evidence is sparse, we consider that organizational initiatives are more likely to predict lower levels of bullying, and identified a broad range of initiatives from previous research (see Method).

*Hypothesis 5:* Organizational initiatives against bullying negative predict bullying.

Additionally, we examined whether organizational initiatives against bullying can reduce the effects of bullying. Thus, when organizational initiatives are perceived by employees to be effective, we anticipate that even though bullying may still occur, its impact will be lessened – akin to secondary prevention (Bentley et al., 2012). Specifically, when employees who experience bullying have recourse to organizational initiatives designed to prevent or reduce bullying, their psychological health may be less affected and they may experience less strain and better wellbeing. Further, organizational actions against bullying may act as a specific type of reciprocity within social exchange theory (Coyle-Shapiro & Conway, 2004) – if the organization is seen as taking action against bullying, then targets may work harder in turn to offset any negative impacts of bullying hence sustaining their performance and organizational commitment.

We predict:

*Hypothesis 6:* Organizational initiatives against bullying will reduce the relationship of bullying on work-related experiences, attitudes, and behaviors of (a) strain, (b) wellbeing, (c) performance, and (d) organizational commitment.

*Perceived effectiveness of organizational initiatives.* Past research has identified a range of potential activities that organizations could put in place to reduce bullying, but evidence of their effectiveness is sparse (Hoel & Giga, 2006; Keashly & Neumann, 2004; Mikkelsen et al., 2011). Given that organizational responses to bullying are often copied from one workplace to another (Salin, 2008), it is important to identify which organizational actions are seen as most effective in countering bullying (Mikkelsen et al., 2011). Therefore, we explored bullied and non-bullied employees' perceptions of the effectiveness of various anti-bullying initiatives to obtain a rank ordering and also investigate differences in perceived effectiveness.

#### *Workplace Bullying in the Healthcare Industry*

Bullying is identified as more prevalent in certain industries, especially those involving service such as education and healthcare (Browning, Ryan, Thomas, Greenberg, & Rolniak, 2007; Djurkovic, McCormack, & Casimir, 2006; Eriksen & Einarsen, 2004; Hutchinson, Vickers, Jackson, & Wilkes, 2005). For this research we chose the healthcare industry because bullying has been identified as a major problem in this sector both internationally (DiMartino, Hoel, & Cooper, 2003; Nielsen, Matthiesen, & Einarsen, 2008; Strandmark & Hallberg, 2007;

Yildirim & Yildirim, 2007), and in New Zealand (Bentley, Catley, Gardner, O'Driscoll, Trenberth, & Cooper-Thomas, 2009; Foster et al., 2004; Scott, Blanshard, & Child, 2008). Given the prevalence of bullying in healthcare it is likely that contextual factors promote bullying, including a sometimes harsh, high-pressure environment, as well as differences in knowledge that relate to work hierarchies and contribute to power imbalances (Foster et al., 2004; Scott et al., 2008).

*Summary.* The main goal of the present study was to investigate whether constructive leadership, perceived organizational support, and organizational anti-bullying initiatives would (a) directly negatively predict bullying and (b) through a moderating effect, reduce the relationships of bullying with individual and organizational-level criteria of strain, wellbeing, performance, and organizational commitment.

### *Method*

#### *Participants*

Participants were a convenience sample of 727 employees from nine healthcare organizations in New Zealand, comprising different organizations and sites from within two district health boards and two residential care organizations. Eighty-four percent (612) of participants indicated their gender as female and the mean age was 46 years. Respondents had an average of 7 years in their current job and nearly 8 years in the organization. Participants were

primarily New Zealand European (503; 69%), with Maori (64; 9%) and Cook Island Maori (6; 1%) also represented, as well as European (i.e., either not holding New Zealand citizenship or a first generation immigrant: 72; 10%), Asian (42; 6%), Pacific Island (33; 5%) and South African (9; 1%; all percentages have been rounded). Of those who indicated their role, 16 (2.2%) were senior managers, 81 (11.3%) were middle-level managers, 73 (10.2%) were first-line supervisors, and 445 (62.0%) were non-managerial employees.

#### *Procedure*

Participants were informed about the research through a participant information sheet that was sent to them internally (either email or paper). Participants completed a computer-based survey, either online or on a laptop. Laptops were set up in a central location at each organization, with each laptop screened to provide privacy. An online option was provided for participants who preferred to complete the survey at a time and location convenient to them.

#### *Measures*

*Bullying.* This was measured in two ways. One measure was the revised version of the Negative Acts Questionnaire (NAQ-R) (Hauge, Skogstad, & Einarsen, 2007), which lists 22 negative workplace behaviors. Example items are “being ignored or excluded” and “excessive monitoring of your work”, with respondents asked to indicate how often they have experienced each of these behaviors over the previous 6 months. Responses ranged from 0 (never) to 4 (daily)

( $\alpha = .87$ ). Two scores were computed for each respondent. First, the mean response across the 22 items was computed to yield an “average” score for each person. Second, we computed a binary bullying score (0, 1) to categorize participants as either bullied or not bullied. Following Hauge et al. (2007), the criterion was such that participants had to have experienced at least two of the negative behaviors weekly or more frequently over the past six months. To achieve this, participants were assigned a score of 1 on any item to which they responded “weekly” or more, and participants who obtained a sum of 2 or greater across the 22 items were classified as having been bullied. Respondents who scored less than 2 were classified as non-bullied. In addition, a second measure of bullying was included for comparison purposes, which was self-reported bullying. Respondents were provided with a definition of bullying as repeated negative actions, taken from Lutgen-Sandvik et al (2007, p. 847) and asked “Do you consider yourself to have been bullied at your workplace over the past 6 months?”, with response options ranging from “no” (0) to “yes, almost daily” (5).

*Constructive leadership.* Six items were used from Ekvall and Arvonen’s (1991) measure of change-oriented leadership (e.g., “defines and explains work requirements clearly to subordinates”, “sets clear goals for work”). Respondents were asked to rate their immediate manager. Responses to all items were on a 6-point scale ranging from 1 (not at all) to 6 (always) ( $\alpha = .93$ ).



*Perceptions of organizational support.* Seven items were used from Eisenberger, Huntington, Hutchison, and Sowa's (1986) measure of perceived organizational support (POS). Shorter versions of the full POS scale are common and non-contentious because the original scale is unidimensional and has high internal reliability (Djurkovic, McCormack, & Casimir, 2008). Sample items are "Help is available from my organization when I have a problem" and "my organization cares about my opinions". Participants responded on a scale ranging from 1 (strongly agree) to 7 (strongly disagree) ( $\alpha = .93$ ).

*Effectiveness of organizational initiatives against bullying.* Thirteen potential actions were identified from the literature on bullying and negative workplace climates (e.g., Ferris, 2004), as well as the more general literature on organizational stress management interventions which organizations might engage in to address bullying. The item stem was "we now wish you to think about what, if anything, your organization has done to address bullying. How effective do you think your organization has been in each of the following areas?" All items are provided in Table 3. Responses were on a 6 point scale ranging from 1 (very ineffective) to 6 (very effective), with a "don't know" option offered ( $\alpha = .98$ ).

*Wellbeing.* Wellbeing was assessed using Warr's (1990) list of 15 affective adjectives, such as "tense", "calm", "depressed", "cheerful", and "optimistic". Participants were asked to indicate how often they had felt each of these affective experiences in their job over the previous

6 months, ranging from 1 (never) to 6 (all the time). Negatively-worded adjectives (such as “tense” and “depressed”) were recoded so that a high score indicated greater well-being ( $\alpha = .94$ ).

*Psychological strain.* The 12 item version of the General Health Questionnaire (GHQ-12; Goldberg, 1972) was used to measure psychological strain. The items relate to psychosocial symptoms experienced over the past 6 months such as “Felt constantly under strain” and “Been able to face up to your problems”. Participants responded from 0 (not at all), 1 (no more than usual), 2 (rather more than usual), and 3 (much more than usual). The six positively worded items were reverse-scored so that a higher score on the instrument indicated greater strain ( $\alpha = .85$ ).

*Self-reported performance.* Individuals’ perceptions of their job performance were measured with three items asking them to rate their overall job performance compared to others (Kessler et al., 2003). An example item is “How would you rate your own usual job performance over the past 6 months?” Ratings were on a 1-10 scale, where 1 = the worst performance anyone could have at your job and 10 = the performance of a top worker ( $\alpha = .73$ ).

*Affective organizational commitment.* Respondents’ affective organizational commitment was measured with six items from Meyer and Allen (1997). Example items are “I really feel as if this organization’s problems are my own”, and “This organization has a great deal of personal

meaning for me". Responses were on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree) ( $\alpha = .83$ ).

#### *Data analyses*

Factor analyses supported the structure of established scales. For the new measure of perceived effectiveness of organizational anti-bullying initiatives, principal axis factoring indicated a single factor accounting for 70.39% of the variance. Next, data were pooled across organizations and for men and women, given that there were no significant differences (results are available from the first author). Moderated multiple hierarchical linear regressions were undertaken on the responses of the subset of respondents who experienced bullying following the procedure recommended by Cohen, Cohen, West, and Aiken (2003). For this, we identified those who had experienced at least 2 negative acts per week over the last 6 months, with 133 respondents meeting this criterion. Note that, to retain sufficient power and given the difficulty of finding moderator effects in field research McClelland & Judd, 1993; Siemsen, Roth, & Oliviera, 2010), we conducted each moderator analysis separately.

#### *Results*

The means, standard deviations, and zero order correlations of all variables are shown in Table 1. Given our focus on the potential buffering effects of moderator variables for those who experienced bullying, we provide this information separately for non-bullied participants (the

lower left diagonal of the table), and bullied participants (the upper right diagonal of the table).

For non-bullied employees, NAQ-R bullying (the frequency of negative acts experienced) is moderately negatively correlated with the perceived effectiveness of organizational initiatives ( $r = -.30$ ), organizational support ( $r = -.35$ ), and constructive leadership ( $r = -.35$ ). For these employees also, NAQ-R bullying is strongly positively correlated with strain ( $r = .39$ ), strongly negatively correlated with wellbeing ( $r = -.45$ ), and weakly negatively correlated with self-reported performance ( $r = -.23$ ), and organizational commitment ( $r = -.26$ ).

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Insert Table 1 about here

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The results are similar for the bullied employees, although the relationships appear slightly weaker between NAQ-R bullying and perceived effectiveness of organizational initiatives ( $r = -.32$ ), organizational support ( $r = -.20$ ), and constructive leadership ( $r = -.22$ ). The relationships appear weaker also for NAQ-R bullying with strain ( $r = .21$ ) and wellbeing ( $r = -.22$ ), with no significant relationship of bullying with self-reported performance ( $r = .03$ ) or organizational commitment ( $r = -.05$ ).

In Hypotheses 1, 3, and 5, we predicted that constructive leadership, POS, and anti-bullying initiatives would negatively predict bullying. The correlations on the upper right diagonal are negative and significant for these relationships ( $r$ 's of  $-.22$  with constructive leadership,  $-.20$  with POS, and  $-.32$  with anti-bullying initiatives). These results support

Hypotheses 1, 3, and 5. It is also notable that these relationships are significant also for the non-bullied sample ( $r$ 's of  $-.30$ ,  $-.35$ ,  $-.35$ ). A multiple regression analysis was conducted with the data from bullied respondents to investigate relative prediction since these contextual factors are likely to overlap (Salin & Hoel, 2011), and showed that when these three predictors are entered concurrently, only anti-bullying initiatives is significant ( $F(3, 118) = 5.00$ ,  $p < .01$ ,  $R^2 = .11$ ; anti-bullying initiatives  $\beta = -.27$ ,  $p < .01$ , constructive leadership  $\beta = -.07$ ,  $ns$ , POS  $\beta = -.06$ ,  $ns$ ).

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Insert Table 2 about here

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In Hypotheses 2, 4, and 6, we predicted that constructive leadership, POS, and anti-bullying initiatives would moderate the relationships between bullying and the criterion variables of strain, wellbeing, performance, and organizational commitment, such that the impact of bullying would be lessened when these organizational initiatives were present

Three of the predicted 12 interactions were significant. The interaction of bullying with organizational support predicted performance ( $\Delta R^2 = .03$ ,  $p < .05$ ), while the interaction of bullying and organizational initiatives was significant in predicting wellbeing ( $\Delta R^2 = .05$ ,  $p < .01$ ) and organizational commitment ( $\Delta R^2 = .05$ ,  $p < .01$ ). Following Cohen et al. (2003), to interpret the interactions we plotted their simple slopes at one standard deviation above the mean and one standard deviation below the mean of both the independent variable (NAQ bullying) and the moderator (Sibley 2008). The significant results ( $p < .05$ ) are displayed in Figures 2a to 2c.

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Insert Figure 2a, 2b, 2c about here

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Figure 2a shows the interaction of POS and bullying with performance. At high levels of POS, respondents who experienced higher levels of bullying also reported higher performance. Conversely, at low levels of POS those who experienced high levels of bullying reported lower performance. Neither simple slope was significant (high POS: Simple slope = .61,  $t = 1.65$ ,  $p > .05$ ; low POS: Simple slope = -.46,  $t = -1.51$ ,  $p > .05$ ), but the significant interaction showed that the simple slopes were significantly different from each other. In support of Hypothesis 4c, our results show that POS buffered the effects of bullying.

Figure 2b shows that bullied respondents who rated organizational anti-bullying initiatives as more effective showed no interaction between bullying and wellbeing (simple slope = -.21,  $t = -1.26$ ,  $p > .05$ ), whereas those rating organizational anti-bullying actions as less effective showed an interaction (simple slope = -.72,  $t = -5.25$ ,  $p < .001$ ). Thus, for participants who reported organizational initiatives against bullying as more effective, the level of bullying experienced had no impact on wellbeing. In contrast, participants who reported lower effectiveness for organizational initiatives against bullying experienced lower wellbeing in tandem with greater bullying. This supports Hypothesis 6b.

Figure 2c shows that participants rating organizational anti-bullying initiatives as more effective showed no interaction between bullying and organizational commitment (simple slope

= .31,  $t = 0.98$ ,  $p > .05$ ). However, for participants rating organizational anti-bullying initiatives as less effective, when bullying was high, they had lower organizational commitment (simple slope =  $-.68$ ,  $t = -3.02$ ,  $p < .01$ ). Thus, more effective organizational anti-bullying actions buffered against bullying however mild or severe it was, in terms of its effects on organizational commitment. When such initiatives were less effective, participants were at risk and at high levels of bullying they showed lower organizational commitment. This supports Hypothesis 6d. The direct and moderator relationships are summarized in Figure 3.

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Insert Figure 3 about here

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Insert Table 3 about here

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Finally, we explored which organizational actions healthcare employees rated as the most and least effective in countering bullying. The initiatives are shown in rank order in Table 3, with separate columns for bullied and non-bullied respondents. The results show that respondents perceived the most effective strategy to be developing a workplace bullying policy, with other important initiatives including efforts to support and encourage a respectful work environment, and having clear procedures for dealing with bullying. The overall ranking of organizational anti-bullying activities was similar across bullied and non-bullied participants, although bullied participants consistently rated the initiatives as less effective, as shown by the significant  $t$ -tests. Further, even respondents who were not bullied on average rated only approximately half of the initiatives (7 of 13) as somewhat effective or higher.

*Discussion*

The main purpose of this study was to investigate whether constructive leadership, perceived organizational support (POS), and the perceived effectiveness of organizational anti-bullying initiatives would both directly predict lower bullying and buffer the negative relationship of bullying with strain, wellbeing, performance, and organizational commitment. The results provided some support for these propositions. Direct negative relationships were found for these contextual factors with bullying. Further, effective organizational anti-bullying actions buffered the relationship of bullying with wellbeing and organizational commitment, and POS buffered the relationship of bullying with performance. Thus, actions by the organization – both specific actions and less tangible perceptions of support – have a role in reducing the impact of bullying, and are associated with lower levels of bullying.

These results show the value of having effective organizational initiatives against bullying. At high levels of bullying, participants who rated organizational initiatives as less effective also experienced lower wellbeing and lower performance while those reporting more effective organizational initiatives had similar levels of wellbeing and performance regardless of level of bullying. To date, much of the evidence on organizational initiatives to counter bullying has arisen from practitioner anecdotes (Duffy, 2009; Namie, 2007) or has been primarily descriptive (Hogh, Mikkelsen, & Hansen, 2011; Rayner & Cooper, 2006; Resch & Schubinski,



1996). The current study provides empirical data to substantiate the importance of organizational initiatives, which is important in persuading organizations to invest in anti-bullying activities.

Perceived organizational support (POS) is a less formal way in which organizations may be able to counter the impact of bullying at work (Djurkovic et al., 2008). Where POS was lower, bullying appeared to be detrimental to performance but the reverse trend is also of concern, showing that employees experiencing high levels of bullying and high POS showed higher performance. The combination of bullying and POS may put additional pressure on targets to perform at a high level. This may have short-term productivity benefits but is likely to be detrimental to individual health and performance if it continues and may give rise to health-related absenteeism, employment disputes, and turnover. POS had a direct negative relationship with bullying also, showing that overall POS is associated with fewer negative behaviors.

We found direct but no buffering effects for constructive leadership. Previous research has suggested that consistent and strong leadership is important for reducing bullying (Einarsen, Raknes, & Matthiesen, 1994; Hauge et al., 2007; Resch & Schubinski, 1996), and our research supports this. It is surprising that we found no buffering effects. It is possible that leadership has only direct relationships with the other variables we investigated, or that constructive leadership only has moderating effects at higher levels, with few respondents in this study rating their leaders as highly constructive. Finally, it may be that work context factors, for example

shiftwork which is typical in healthcare, diluted the potential impact of leadership in buffering the effects of bullying. Specifically, employees may have had a range of people within a leadership team across shifts; we did not measure shiftwork and hence were unable to investigate its potential impact retrospectively.

The final aim of our inquiry was to identify which organizational initiatives against bullying-were rated as most and least effective. Initiatives viewed as slightly more valuable included encouraging open and respectful communication and developing an anti-bullying policy. The rank ordering of initiatives in terms of their perceived effectiveness was similar for bullied and non-bullied respondents, although bullied respondents provided consistently lower ratings of the effectiveness of initiatives than non-bullied respondents. This suggests a relative consensus among employees as to the effectiveness of different actions that organizations can take to deal with bullying, yet implies that such initiatives would benefit from further work to improve their effectiveness when implemented.

#### *Practical Implications*

The direct negative relationships of bullying with constructive leadership, POS, and anti-bullying initiatives support the notion that contextual factors are important in providing an environment that discourages negative behaviors. Turning to the interactions, high levels of POS and bullying provide a worrying combination that, while associated with high levels of

performance which may be the desired outcome (Bentley et al., 2009), in the long term could lead to severe negative health outcomes (Bond et al., 2010). Organizational initiatives reduce the negative relationships of bullying with wellbeing and organizational commitment, supporting the benefits of such activities.

Overall, the evidence shows that contextual factors have an important role in reducing workplace bullying and its relationships with other variables, yet organizations appear to be taking minimal action to address bullying (Bentley et al., 2009; Heames & Harvey, 2006; Salin, 2008). We suggest that organizations should try to better implement the anti-bullying initiatives they have to make them more effective, search for alternatives, and work toward improving the work environment through providing support and constructive leadership. For anti-bullying initiatives, the items assembled for this research (Table 3) may be useful. In particular, having a policy to deal with bullying and developing a clear procedure on how to handle complaints about bullying rank high on this list, and would be relatively non-contentious starting points (see also Vartia & Leka, 2011).

#### *Potential Limitations*

In keeping with most studies in workplace bullying (Nielsen et al., 2008) our research is cross-sectional and therefore we cannot infer causality. Future longitudinal research would be useful in providing evidence on the relationships between variables over time. A second

limitation is the use of self-report data that can lead to common method variance concerns.

Offsetting this concern is the number of weak and non-significant correlations between variables (see Table 1) suggesting that common method variance is not consistently inflating relationships (Lindell & Whitney, 2001; see also Lance, Dawson, Birkelbach, & Hoffman, 2010). Common method variance is more likely to deflate interaction terms (Siemsen et al., 2010), and therefore we can place confidence in those interactions that are found. A final limitation is the lack of power to detect interaction effects, which occur particularly in field settings (Aguinis & Stone-Romero, 1997; McClelland & Judd, 1993). To check on this, we also looked at the coefficients for the interaction terms in the moderated multiple regression analyses to a significance level of  $p < .10$ , but no additional interaction effects were found. Finally, we note that different results might be found in industries other than healthcare.

#### *Future Research*

Contextual workplace factors need further examination as antecedents to and moderators of bullying (Djurkovic et al., 2008; Tuckey et al., 2009), having the potential to improve the workplace for all employees. Indeed, our own research shows negative relationships of bullying with strain, wellbeing, performance, and organizational commitment at mostly higher levels for non-targets than targets (see Table 1). This suggests a negative influence of witnessing bullying (Cooper-Thomas, Catley, Bentley, Gardner, O'Driscoll, & Trenberth, 2011; Hoel, Sheehan,

Cooper, & Einarsen, 2011), and further supports the importance of research investigating factors that reduce bullying and its impacts for the benefit of all employees.

*Conclusion*

Contextual workplace factors directly predict levels of bullying and, in some instances, buffer the negative effects of bullying. There is growing evidence that organizations should take an active rather than laissez-faire approach to the issue of bullying. These results contribute to the small corpus of research focusing on contextual factors that reduce the impact of bullying, and show that this is a fruitful avenue for further investigation.

*References*

- Aasland, M. S., Skogstad, A., Notelaers, G., Nielsen, M. B., & Einarsen, S. (2010). The prevalence of destructive leadership behaviour. *British Journal of Management*, *21*(2), 438-452.
- Agervold, M., & Mikkelsen, E. (2004). Relationships between bullying, psychosocial work environment and individual stress reactions. *Work & Stress*, *18*(4), 336-351.
- Aguinis, H., & Stone-Romero, E. F. (1997). Methodological artifacts in moderated multiple regression and their effects on statistical power. *Journal of Applied Psychology*, *82*(1), 192-206.
- Bentley, T., Catley, B., Gardner, D., O'Driscoll, M., Trenberth, L., & Cooper-Thomas, H. (2009). Perspectives on bullying in the New Zealand health and hospitality sectors. *Journal of Occupational Health and Safety – Australia and New Zealand*, *25*(5): 363-373.
- Bentley, T., Catley, B., Cooper-Thomas, H., Gardner, D., O'Driscoll, M., Dale, A., & Trenberth, L. (2012). Perceptions of workplace bullying in the New Zealand travel industry: Prevalence and management strategies. *Tourism Management*, *33*, 351-360.

Brotheridge, C. M., & Lee, R. T. (2006). Examining the relationship between the perceived work environment and workplace bullying. *Canadian Journal of Community Mental Health*, 25(2), 31-44.

Blewett, V., Shaw, A., La Montagne, A. D., & Dollard, M. (2006). *Job stress: Causes, impact and interventions in the health and community services sector*. Adelaide, SA: Workcover New South Wales/ University of South Australia.

Bond, S. A., Tuckey, M. R., & Dollard, M. F. (2010). Psychosocial safety climate, workplace bullying, and symptoms of posttraumatic stress. *Organization Development Journal*, 28(1), 37-56.

Branch, S., Ramsay, S., & Barker, M. (2007). Managers in the firing line: Contributing factors to workplace bullying by staff – an interview study. *Journal of Management and Organization*, 13, 264-281.

Brotheridge, C. M., & Lee, R. T. (2010). Restless and confused: Emotional responses to workplace bullying in men and women. *Career Development International*, 15(7), 687-707.

Brousse, G., Fontana, L., Ouchchane, L., Boisson, C., Gerbaud, L., Bourguet, D., et al. (2008). Psychopathological features of a patient population of targets of workplace bullying. *Occupational Medicine*, 58, 122-128.

Browning, L., Ryan, C. S., Thomas, S., Greenberg, M., & Rolniak, S. (2007). Nursing specialty and burnout. *Psychology, Health & Medicine, 12*(2), 248 – 254.

Burnes, B., & Pope, R. (2007). Negative behaviors in the workplace: A study of two Primary Care Trusts in the NHS. *International Journal of Public Sector Management, 20*(4), 285-303.

Cassitto, M. G., Fattorini, E., Gilloli, R., Rengo, C., & Gonik, V. (2004). Raising awareness of psychological harassment at work. *Protecting Workers' Health*. Geneva, Switzerland: World Health Organization.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Cooper-Thomas, H. D., Catley, B. E., Bentley, T. A., Gardner, D. H., O'Driscoll, M. P., & Trenberth, L. (2011, June). *Is there a double whammy from being an observer and a target of workplace bullying?* In C. Caponecchia (Chair), Symposium conducted at the 9<sup>th</sup> Industrial and Organisational Psychology Conference, Brisbane, Australia

Cooper-Thomas, H. D., Leighton, N., Xu, J., & Knight-Turvey, N. (2010). Measuring change: Does engagement flourish, fade, or stay true. In S. Albrecht (Ed.), *Handbook of employee engagement* (pp. 87-97). Cheltenham, UK: Edwin Elgar.



- Coyle-Shapiro, J. A.-M., & Conway, N. (2004). The employment relationship through the lens of social exchange. In J. Coyle-Shapiro, L. M. Shore, M. S. Taylor, & L. E. Tetrick (Eds.), *The employment relationship: Examining psychological and contextual perspectives* (pp. 5-28). Oxford, UK: Oxford University Press.
- Cowie, H., Naylor, P., Rivers, I., Smith, P. K., & Pereira, B. (2002). Measuring workplace bullying. *Aggression and Violent Behavior, 7*(1), 33-51.
- Di Martino, V., Hoel, H., Cooper, C. L., (2003). *Preventing violence and harassment in workplace*. European Foundation for the Improvement of Living and Working Conditions. Office for Official Publications of the European Communities.
- Djurkovic, N., McCormack, D., & Casimir, G. (2006). Neuroticism and the psychosomatic model of workplace bullying. *Journal of Managerial Psychology, 21*(1), 73-88.
- Djurkovic, N., McCormack, D., & Casimir, G. (2008). Workplace bullying and intention to leave: the moderating effect of perceived organizational support. *Human Resource Management Journal, 18*(4), 405-422.
- Duffy, M. (2009). Preventing workplace mobbing and bullying with effective organizational consultation, policies and legislation. *Consulting Psychology Journal: Practice and Research, 61*(3), 242-262.

- Dulac, T., Coyle-Shapiro, J. A.-M., Henderson, D. J., & Wayne, S. J. (2008). Not all responses to breach are the same: The interconnection of social exchange and psychological contract processes in organizations. *Academy of Management Journal*, 51(6), 1079–1098.
- Einarsen, S. (1999). The nature and causes of bullying at work. *International Journal of Manpower*, 20(1/2), 16.
- Einarsen, S. (2000). Harassment and bullying at work: A review of the Scandinavian approach. *Aggression and Violent Behavior*, 5(4), 379-401.
- Einarsen, S., & Hoel, H. (2008). Bullying and mistreatment at work: How managers may prevent and manage such problems. In A. Kinder, R. Hughes, & C. L. Cooper (Eds.), *Employee well-being and support: A workplace resource* (pp. 161-173). Chichester, UK: Wiley.
- Einarsen, S., Hoel, H., & Notelaers, G. (2009). Measuring exposure to bullying and harassment at work: Validity, factor structure and psychometric properties of the Negative Acts Questionnaire-Revised. *Work & Stress*, 23(1), 24-44.
- Einarsen, S., Hoel, H., Zapf, D., & Cooper, C. I. (2003). The concept of bullying at work: The European tradition. In S. Einarsen, H. Hoel, D. Zapf & C. Cooper (Eds.), *Bullying and emotional abuse in the workplace: International perspectives in research and practice* (pp. 3-30). London: Taylor & Francis.

- Einarsen, S., Hoel, H., Zapf, D., & Cooper, C. L. (Eds.). (2011). *Bullying and harassment in the workplace : Developments in theory, research, and practice* (2nd Ed.). Boca Raton, FL: Taylor & Francis.
- Einarsen, S., Matthiesen, S., & Skogstad, A. (1998). Bullying, burnout and well-being among assistant nurses. *Journal of Occupational Health and Safety - Australia and New Zealand, 14*(6), 563-569.
- Einarsen, S., Raknes, B., & Matthiesen, S. (1994). Bullying and harassment at work and their relationships to work environment quality: An exploratory study. *European Work & Organizational Psychologist, 4*(4), 381.
- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment and innovation. *Journal of Applied Psychology, 75*, 51-59.
- Eisenberger, R., Huntingdon, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*, 500-507.
- Ekvall, G. & Arvonen, J. (1991). Change-centered leadership: An extension of the two-dimensional model. *Scandinavian Journal of Management, 7*(1), 17-26.

- Eriksen, W., & Einarsen, S. (2004). Gender minority as a risk factor of exposure to bullying at work: The case of male assistant nurses. *European Journal of Work & Organizational Psychology, 13*(4), 473-492.
- Ekvall, G., & Arvonen, J. (1991). Change-centered leadership: An extension of the two-dimensional model. *Scandinavian Journal of Management, 7*(1), 17-26.
- Ferris, P. (2004). A preliminary typology of organisational response to allegations of workplace bullying: see no evil, hear no evil, speak no evil. *British Journal of Guidance & Counselling, 32*(3), 389-395.
- Foster, B., Mackie, B., & Barnett, N. (2004). Bullying in the health sector: A study of bullying of nursing students. *New Zealand Journal of Employment Relations, 29*(2), 67-83.
- Gardner, S., & Johnson, P. R. (2001). The leaner, meaner workplace: Strategies for handling bullies at work. *Employment Relations Today, 28*(2), 23-36.
- Giorgi, G. (2010). Workplace bullying partially mediates the climate-health relationship. *Journal of Managerial Psychology, 25*(7), 727-740.
- Goldberg, D. P. (1972). *The detection of psychiatric illness by questionnaire*. Oxford: Oxford University Press.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review, 25*, 161-178.

Harvey, P., Stoner, J., Hochwarter, W., & Kacmar, C. (2007). Coping with abusive supervision:

The neutralizing effects of ingratiation and positive affect on negative employee outcomes. *Leadership Quarterly*, *18*(3), 264-280.

Hauge, L. J., Skogstad, A., & Einarsen, S. (2007). Relationships between stressful work

environments and bullying: Results of a large representative study. *Work & Stress*, *21*(3), 220 - 242.

Hauge, L. J., Skogstad, A., & Einarsen, S. (2010). The relative impact of workplace bullying as a

social stressor at work. *Scandinavian Journal of Psychology*, *51*, 426–433.

Heames, J., & Harvey, M. (2006). Workplace bullying: A cross-level assessment. *Management*

*Decision*, *44*(9), 1214-1230.

Hoel, H. & Einarsen, S. (2010). Shortcomings of antibullying regulations: The case of Sweden.

*European Journal of Work and Organizational Psychology*, *19*(1), 30–50.

Hoel, H., Faragher, B., & Cooper, C. L. (2004). Bullying is detrimental to health, but all bullying

behaviors are not necessarily equally damaging. *British Journal of Guidance & Counselling*, *32*(3), 367-387.

Hoel, H., & Giga, S. I. (2006). *Destructive interpersonal conflict in the workplace: The*

*effectiveness of management interventions*. British Occupational Health Research

Foundation (BOHRF) and Manchester Business School, The University of Manchester.

- Hoel, H., Giga, S. I., & Davidson, M. J. (2007). Expectations and realities of student nurses' experiences of negative behavior and bullying in clinical placement and the influences of socialization processes. *Health Services Management Research*, 20(4), 270-278.
- Hoel, H., Glasø, L., Hetland, J., Cooper, C. L., & Einarsen, S. (2010). Leadership styles as predictors of self-reported and observed workplace bullying. *British Journal of Management*, 21, 453-468
- Hoel, H., Sheehan, M. J., Cooper, C. L., & Einarsen, S. (2011). Organisational effects of workplace bullying. In S. Einarsen, H. Hoel, D. Zapf & C. L. Cooper (Eds.), *Bullying and harassment in the workplace: Developments in theory, research, and practice* (2nd ed., pp. 129-148). London: Taylor & Francis.
- Hogh, A., Mikkelsen, E. G., & Hansen, A. M. (2011). Individual consequences of workplace bullying / mobbing. In S. Einarsen, H. Hoel, D. Zapf & C. L. Cooper (Eds.), *Workplace bullying: Developments in theory, research and practice* (2nd ed., pp. 107-128). London: Taylor Francis.
- Huntington, A., Bidewell, J., Gilmour, J., Chang, E., Daly, M. J., Wilson, H., et al. (2008). The relationship between workplace stress, coping strategies and health status in New Zealand nurses. *Journal of Occupational Health and Safety - Australia and New Zealand*, 24(2), 131-141.

- Hutchinson, M., Vickers, M. H., Jackson, D., & Wilkes, L. (2005). "I'm Gonna Do What I Wanna Do." Organizational change as a legitimized vehicle for bullies. *Health Care Management Review, 30*(4), 331-336.
- Karasek, R. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly, 24*(2), 285-308.
- Keashly, L. (2001). Interpersonal and systemic aspects of emotional abuse at work: the target's perspective. *Violence and Victims, 16*(3), 233-268.
- Keashly, L., & Neuman, J. H. (2004). Bullying in the workplace: Its impact and management. *Employee Rights and Employment Policy Journal, 8*(2), 335-373.
- Kelloway, E. K., & Barling, J. (2010). Leadership development as an intervention in occupational health psychology. *Work & Stress, 24*(3), 260-279.
- Kessler, R.C., Barber, C., Beck, A.L., Berglund, P.A., Cleary, P.D., McKenas, D., Pronk, N.P., Simon, G.E., Stang, P.E., Ustun, T.B., Wang, P.S. (2003). The World Health Organization Health and Work Performance Questionnaire (HPQ). *Journal of Occupational and Environmental Medicine, 45*(2), 156-174.
- Lance, C. E., Dawson, B., Birkelbach, D., & Hoffman, B. J. (2010). Method effects, measurement error, and substantive conclusions. *Organizational Research Methods, 13*(3), 435-455.

- Law, R., Dollard, M. F., Tuckey, M. R., & Dormann, C. (2011). Psychosocial safety climate as a lead indicator of workplace bullying and harassment, job resources, psychological health and employee engagement. *Accident Analysis and Prevention*, *43*, 1782–1793
- Leymann, H. (1996). The content and development of mobbing at work. *European Journal of Work & Organizational Psychology*, *5*(2), 165-185.
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, *86*, 114–121.
- Lovell, B. L., & Lee, R. T. (2011). Impact of workplace bullying on emotional and physical well-being: A longitudinal collective case study. *Journal of Aggression, Maltreatment & Trauma*, *20*(3), 344-357.
- Lutgen-Sandvik, P. (2008). Intensive remedial identity work: Responses to workplace bullying trauma and stigmatization. *Organization*, *15*(1), 97-119.
- Lutgen-Sandvik, P., Tracy, S. J., & Alberts, J. K. (2007). Burned by bullying in the American workplace: Prevalence, perception, degree and impact. *Journal of Management Studies*, *44*(6), 837-862.
- McClelland, G. H., & Judd, C. M. (1993). Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin*, *114*(2), 376-390.



- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research and application*. Thousand Oaks, CA: Sage Publications.
- Mikkelsen, E. G., & Einarsen, S. (2001). Bullying in Danish work-life: Prevalence and health correlates. *European Journal of Work & Organizational Psychology, 10*(4), 393-413.
- Mikkelsen, E. G., & Einarsen, S. (2002). Basic assumptions and symptoms of post-traumatic stress among victims of bullying at work. *European Journal of Work & Organizational Psychology, 11*(1), 87-111.
- Mikkelsen, E. G., Høgh, A., & Puggaard, L. B. (2011). Prevention of bullying and conflicts at work: Process factors influencing the implementation and effects of interventions. *International Journal of Workplace Health Management, 4*(1), 84-100.
- Namie, G. (2007). The challenge of workplace bullying. *Employment Relations Today, 34*(2), 43-51.
- Nielsen, M. B., Matthiesen, S., & Einarsen, S. (2008). Sense of coherence as a protective mechanism among targets of workplace bullying. *Journal of Occupational Health Psychology, 13*(2), 128-136.
- Nielsen, M. B., Matthiesen, S. B., & Einarsen, S. (2010). The impact of methodological moderators on prevalence rates of workplace bullying: A meta-analysis. *Journal of Occupational and Organizational Psychology, 83*(4), 955-979.

- O'Driscoll, M. (2011, July). *Issues in the definition and measurement of workplace bullying*. Australasian Workplace Bullying Research Network Workshop, Brisbane, Australia.
- O'Moore, M., Seigne, E., McGuire, L., & Smith, M. (1998). Victims of workplace bullying in Ireland. *Irish Journal of Psychology, 19*(2-3), 345-357.
- Ortega, A., Christensen, K. B., Hogh, A., Rugulies, R., & Borg, V. (2011). One-year prospective study on the effect of workplace bullying on long-term sickness absence. *Journal of Nursing Management, 19*, 752-759.
- Parzefall, M.-R., & Salin, D. (2010). Perceptions of and reactions to workplace bullying: A social exchange perspective. *Human Relations, 63*(6), 761-780.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903.
- Rayner, C., & Cooper, C. L. (2006). Workplace bullying. In K. E. Kelloway, J. Barling & J. J. Hurrell Jr (Eds.), *Handbook of workplace violence* (pp. 121-145). Thousand Oaks: Sage.
- Rayner, C., & Lewis, D. (2011). Managing workplace bullying: The role of policies. In S. Einarsen, H. Hoel, D. Zapf, & C. L. Cooper (Eds.). (2011). *Bullying and harassment in the workplace : Developments in theory, research, and practice* (2nd Ed.) (pp. 327-340). Boca Raton, FL: Taylor & Francis.

Resch, M., & Schubinski, M. (1996). Mobbing - prevention and management in organizations.

*European Journal of Work & Organizational Psychology*, 5(2), 295-308.

Rutherford, A., & Rissel, C. (2004). A survey of workplace bullying in a health sector

organisation. *Australian Health Review*, 28(1), 65-72.

Saam, N. J. (2010). Interventions in workplace bullying: A multilevel approach. *European*

*Journal of Work and Organizational Psychology*, 19(1), 51-75.

Salin, D. (2001). Prevalence and forms of bullying among business professionals: A comparison

of two different strategies for measuring bullying. *European Journal of Work &*

*Organizational Psychology*, 10(4), 425-441.

Salin, D., & Hoel, H. (2011). Organisational causes of workplace bullying. . In S. Einarsen, H.

Hoel, D. Zapf & C. L. Cooper (Eds.), *Bullying and harassment in the workplace:*

*Developments in theory, research, and practice* (2nd ed., pp. 227-243). London: Taylor

& Francis.

Schat, A. C. H., & Kelloway, E. K. (2003). Reducing the adverse consequences of workplace

aggression and violence: The buffering effects of organizational support. *Journal of*

*Occupational Health Psychology*, 8(2), 110-122.

Scott, J., Blanshard, C., & Child, S. (2008). Workplace bullying of junior doctors: A cross-

sectional questionnaire survey. *The New Zealand Medical Journal*, 121(1282), 10-15.

Scott, M. J., & Stradling, S. G. (2006). *Counseling for post-traumatic stress disorder* (3rd. Ed.).

(2006), *Counseling for post-traumatic stress disorder* (3rd. Ed.). vi, CA: Sage

Publications Ltd.

Sibley, C. G. (2008). *Utilities for examining interactions in multiple regression* [computer software]. The University of Auckland.

Siemsen, E., Roth, A., & Oliveira, P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods, 13*(3), 456-476.

Skogstad, A., Einarsen, S., Torsheim, T., Aasland, M. S., & Hetland, H. (2007). The destructiveness of laissez-faire leadership. *Journal of Occupational Health Psychology, 12*(1), 80-92.

Skogstad, A., Torsheim, T., & Einarsen, S. (2011). Testing the work environment hypothesis of bullying on a group level of analysis: Psychosocial factors as precursors of observed workplace bullying. *Applied Psychology: An International Review, 60*(3), 475–495.

Strandmark, M., & Hallberg, L. R.-M. (2007). The origin of workplace bullying: experiences from the perspective of bully victims in the public service sector. *Journal of Nursing Management, 15*, 332-341.

- Tehrani, N. (2004). Bullying: A source of chronic post traumatic stress? *British Journal of Guidance & Counselling*, 32(3), 357-366.
- Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal*, 43(2), 178-190.
- Tepper, B. J., Moss, S. E., Lockhart, D. E., & Carr, J. C. (2007). Abusive supervision, upward maintenance communication, and subordinates' psychological distress. *Academy of Management Journal*, 50(5), 1169-1180.
- Tuckey, M. R., Dollard, M., Hosking, P. J., & Winefield, A. H. (2009). Workplace bullying: The role of psychosocial work environment factors. *International Journal of Stress Management*, 16(3), 215-232.
- Vartia, M., & Leka, S. (2011). Interventions for the prevention and management of bullying at work. In S. Einarsen, H. Hoel, D. Zapf, & C. L. Cooper (Eds.), *Bullying and harassment in the workplace: Developments in theory, research, and practice* (2nd ed., pp. 359-379). London: Taylor & Francis.
- Warr, P. B. (1990). The measurement of well-being and other aspects of mental health. *Journal of Occupational Health Psychology*, 62, 193-210.

Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40(1), 82–111.

Zapf, D., Einarsen, S., Hoel, H., & Vartia, M. (2003). Empirical findings on bullying in the workplace. In S. Einarsen, H. Hoel, D. Zapf & C. Cooper (Eds.), *Bullying and emotional abuse in the workplace: International perspectives in research and practice* (pp. 103-126). London: Taylor & Francis.

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Table 1. Means, standard deviations, correlations, and reliability coefficients of study variables with non-bullied data set on lower diagonal and bullied only on upper diagonal.

Variable	Non-Bullied		1	2	3	4	5	6	7	8	9	Bullied	
	M	SD										M	SD
1 Anti-bullying actions	4.07	1.39	.98	.40 <sup>‡</sup>	.43 <sup>‡</sup>	-.32 <sup>‡</sup>	-.27 <sup>‡</sup>	-.25 <sup>‡</sup>	.35 <sup>‡</sup>	.11	.16	2.72	1.21
2 POS	4.58	1.63	.49 <sup>‡</sup>	.95	.52 <sup>‡</sup>	-.20 <sup>*</sup>	.01	-.33 <sup>‡</sup>	.47 <sup>‡</sup>	.10	.51 <sup>‡</sup>	3.02	1.68
3 Constructive Leadership	2.95	1.37	.41 <sup>‡</sup>	.51 <sup>‡</sup>	.93	-.22 <sup>*</sup>	-.14	-.24 <sup>‡</sup>	.39 <sup>‡</sup>	.18 <sup>*</sup>	.18 <sup>*</sup>	1.87	1.23
4 NAQ-R Bullying	1.28	.27	-.30 <sup>‡</sup>	-.35 <sup>‡</sup>	-.35 <sup>‡</sup>	.87	.55 <sup>‡</sup>	.50 <sup>‡</sup>	-.45 <sup>‡</sup>	-.05	-.17 <sup>*</sup>	2.29	.66
5 Self-Report Bullying	.02	.14	-.19 <sup>‡</sup>	-.14 <sup>‡</sup>	-.15 <sup>‡</sup>	.19 <sup>‡</sup>	-	.21 <sup>*</sup>	-.22 <sup>*</sup>	.03	-.05	.18	.38
6 Strain	1.23	.48	-.20 <sup>‡</sup>	-.40 <sup>‡</sup>	-.35 <sup>‡</sup>	.39 <sup>‡</sup>	.05	.85	-.69 <sup>‡</sup>	-.18 <sup>*</sup>	-.18 <sup>*</sup>	1.73	.53
7 Wellbeing	4.11	.83	.29 <sup>‡</sup>	.50 <sup>‡</sup>	.44 <sup>‡</sup>	-.45 <sup>‡</sup>	-.15 <sup>‡</sup>	-.70 <sup>‡</sup>	.94	.10	.29 <sup>‡</sup>	3.14	.87
8 Performance	7.86	1.19	.12 <sup>‡</sup>	.13 <sup>‡</sup>	.16 <sup>‡</sup>	-.23 <sup>‡</sup>	.02	-.27 <sup>‡</sup>	.30 <sup>‡</sup>	.73	-.06	7.39	1.40
9 Organizational Commitment	4.44	1.42	.34 <sup>‡</sup>	.60 <sup>‡</sup>	.34 <sup>‡</sup>	-.26 <sup>‡</sup>	-.15 <sup>‡</sup>	-.33 <sup>‡</sup>	.44 <sup>‡</sup>	.12 <sup>‡</sup>	.83	3.53	1.40

Note.  $N = 467-592$  for the non-bullied sample and  $N = 111-133$  with pairwise deletion used. Reliabilities on the diagonal are based on the non-bullied sample. <sup>#</sup>  $p < .001$ , <sup>‡</sup>  $p < .01$ , <sup>\*</sup>  $p < .05$ , <sup>‡</sup> = Levene's test showed unequal variances hence equal variances not assumed. POS = perceived organizational support; NAQ = negative acts questionnaire;  $t$  = t-value;  $R$  = effect size.

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Table 2. Regression analysis results showing direct and moderating relationships in predicting strain, wellbeing, performance, and organizational commitment among bullied employees.

Variables	Strain			Wellbeing			Performance			Organizational Commitment		
	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$
NAQ-R	.48 <sup>#</sup>	.46 <sup>#</sup>	.45 <sup>#</sup>	-.39 <sup>#</sup>	-.37 <sup>#</sup>	-.32 <sup>#</sup>	.03	.05	-.01	-.14	-.05	.09
Constructive Leadership	-.13			.31 <sup>#</sup>			.19*			.15		
POS		-.24 <sup>^</sup>			.40 <sup>#</sup>			.10			.49 <sup>#</sup>	
Anti-bullying actions			-.10			.23 <sup>^</sup>			.10			.10
NAQ-R by Constructive Leadership	.02			.01			.10			.04		
NAQ-R by POS		-.00			.00			.20*			.09	
NAQ-R by Anti-bullying actions			-.03			.22 <sup>^</sup>			.05			.24 <sup>^</sup>
Step 1 $R^2$	.27 <sup>#</sup>	.31 <sup>#</sup>	.25 <sup>#</sup>	.30 <sup>#</sup>	.35 <sup>#</sup>	.26 <sup>#</sup>	.03	.01	.01	.05*	.26 <sup>#</sup>	.05*
Step 2 $R^2$	.27 <sup>#</sup>	.31 <sup>#</sup>	.25 <sup>#</sup>	.30 <sup>#</sup>	.35 <sup>#</sup>	.30 <sup>#</sup>	.04	.04	.01	.05	.27 <sup>#</sup>	.10 <sup>^</sup>
$\Delta R^2$	.00	.00	.00	.00	.00	.05 <sup>^</sup>	.01	.03*	.00	.01	.01	.05 <sup>^</sup>
$F$	49.42 <sup>^</sup>	57.16 <sup>^</sup>	34.93 <sup>^</sup>	81.24 <sup>^</sup>	99.57 <sup>^</sup>	52.78 <sup>^</sup>	11.66 <sup>^</sup>	11.59 <sup>^</sup>	9.53 <sup>^</sup>	31.16 <sup>^</sup>	110.77 <sup>^</sup>	30.64 <sup>^</sup>

Note. \*  $p < .05$ , <sup>^</sup>  $p < .01$ , <sup>#</sup>  $p < .001$ .



Table 3. Ratings of the effectiveness of organization strategies to address bullying.

Strategy	Bullied		Not bullied		<i>t</i>
	Mean	SD	Mean	SD	
Developing a workplace bullying policy	3.09	1.77	4.31	1.58	-6.40 <sup>‡L</sup>
Encouraging open and respectful communication between people	2.92	1.46	4.30	1.44	-9.31 <sup>‡</sup>
Developing a clear procedure for handling complaints about bullying	2.90	1.73	4.27	1.63	-7.72 <sup>‡</sup>
Its efforts to increase awareness among its employees about bullying	2.83	1.52	4.13	1.62	-7.56 <sup>‡</sup>
Encouraging appropriate ways for people to interact with their work colleagues	2.70	1.37	4.14	1.49	-9.28 <sup>‡</sup>
Reviewing its procedures for dealing with bullying	2.60	1.52	4.01	1.64	-7.58 <sup>‡</sup>
Developing a system for reporting incidents of bullying	2.57	1.44	4.02	1.62	-8.35 <sup>‡</sup>
Its efforts to identify and resolve conflict quickly and fairly	2.57	1.44	3.95	1.56	-8.63 <sup>‡</sup>
Its efforts to identify the occurrence of bullying in this workplace	2.45	1.44	3.68	1.58	-7.36 <sup>‡</sup>
Its efforts to identify factors which might encourage bullying to occur	2.44	1.33	3.62	1.57	-6.98 <sup>‡</sup>
Providing training and support in the management of relationships	2.42	1.39	4.00	1.57	-9.66 <sup>‡</sup>
Establishing clear consequences for those who engage in bullying other people	2.27	1.55	3.72	1.79	-8.20 <sup>‡L</sup>
Monitoring and reviewing staff relationships, especially fair treatment of people	2.16	1.38	3.70	1.70	-9.70 <sup>‡L</sup>

Note. <sup>‡</sup>  $p < .001$ ; <sup>L</sup> = Levene's test showed unequal variances hence *t*-test does not assume equal variances. Bullying groups split on NAQ score, bullied as those reporting at least two or more acts weekly in the last 6 months. *n* bullied = 96-118; *n* not-bullied = 377-496. Scale is 1 (very ineffective) to 6 (very effective).

Figure 1. Anticipated direct and moderating relationships for the relationship of bullying with predictors and criteria

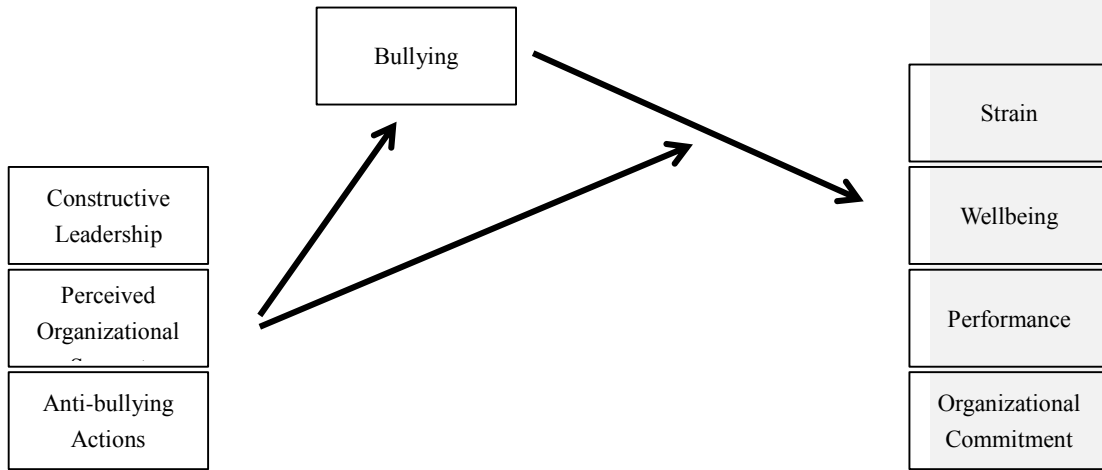


Figure 2a. Interaction between POS and bullying on performance.

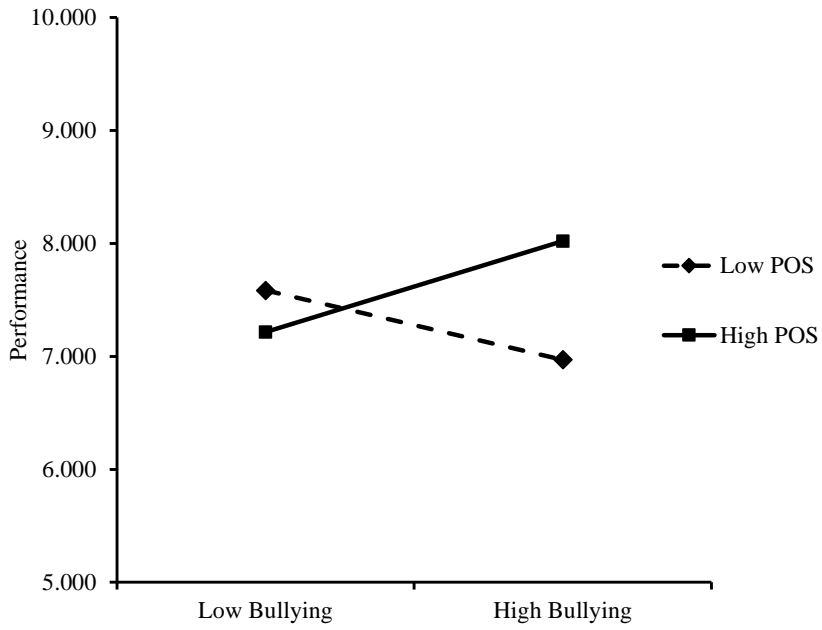


Figure 2b. Interaction between organizational anti-bullying activities and bullying on wellbeing.

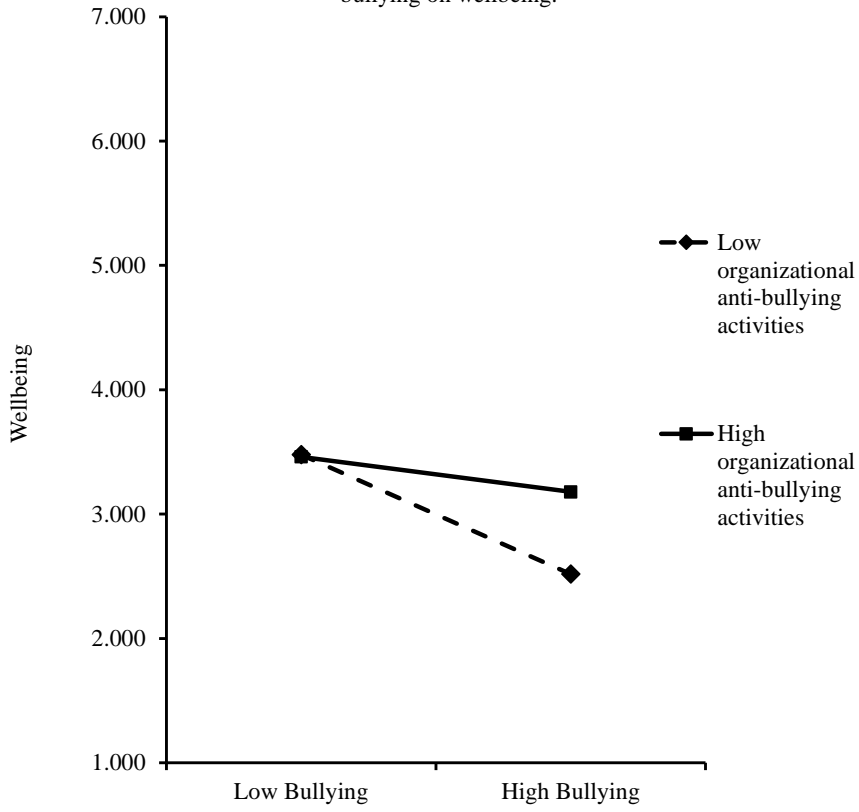


Figure 2c. Interaction between organizational anti-bullying activities and bullying on organizational commitment

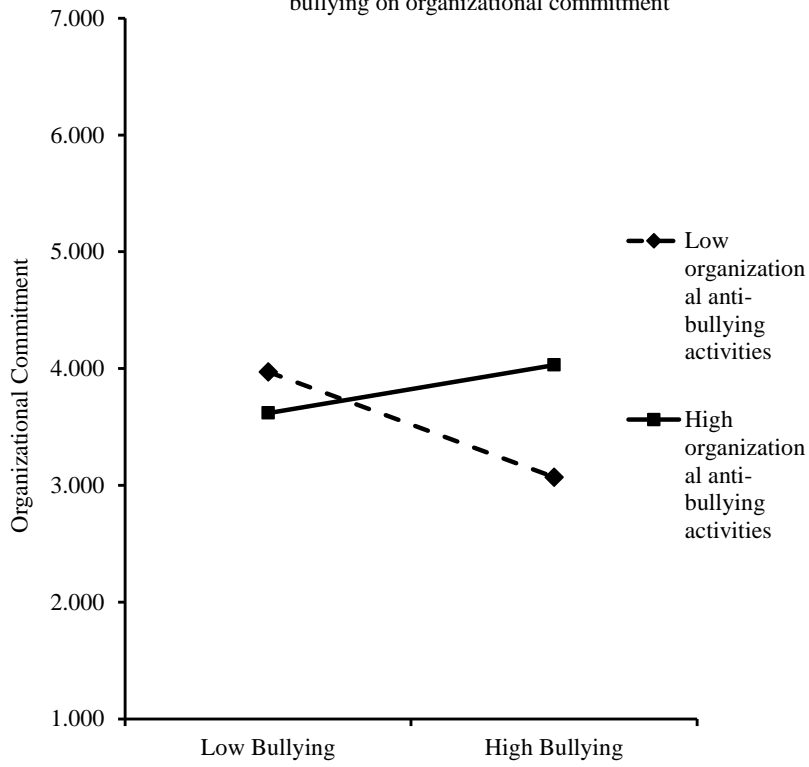


Figure 3. Actual direct and moderating relationships for the relationship of bullying with predictors and criteria.

