

## **Burned by Bullying in the American Workplace: Prevalence, Perception, Degree and Impact\***

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**ABSTRACT** This study assesses the prevalence of workplace bullying in a sample of US workers, using a standardized measure of workplace bullying (Negative Acts Questionnaire, NAQ), and compares the current study's prevalence rates with those from other bullying and aggression studies. The article opens by defining bullying as a persistent, enduring form of abuse at work and contrasting it with other negative workplace actions and interactions. Through a review of the current literature, we propose and test hypotheses regarding bullying prevalence and dynamics relative to a sample of US workers. After discussing research methods, we report on the rates of bullying in a US sample, compare these to similar studies, and analyse the negative acts that might lead to perceptions of being bullied. Based upon past conceptualizations, as well as research that suggests bullying is a phenomenon that occurs in gradations, we introduce and provide statistical evidence for the construct and impact of bullying degree. Finally, the study explores the impact of bullying on persons who witnessed but did not directly experience bullying in their jobs.

### **INTRODUCTION**

Right now, there's two open positions under [the bully], and whoever gets them is doomed. That's all we know . . . whoever gets those positions are doomed. (Witness to co-workers' bullying in a large US restaurant chain)

Targets of bullying at work anticipate the workday with dread and a sense of impending doom. They steal through the workplace on a state of high alert, in anticipation of the next attack. Privately, they are profoundly ashamed of being victimized and are confused at their apparent inability to fight back and protect themselves (Randall, 2001). Workplace bullying is a type of interpersonal aggression at work (Neuman and Baron, 2005) that goes beyond simple incivility (Andersson and Pearson, 1999) and is marked by the characteristic features of frequency, intensity, duration, and power disparity (Einarsen et al., 2003; Rayner and Keashly, 2005; Rayner et al., 2002). Due to the hammering

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away described in these situations, targets often find themselves isolated, demoralized, and unable to escape or prevent the bullies' terrorizing tactics (Einarsen et al., 2003). Specifically, bullying at work means

*repeated and persistent negative actions towards one or more individual(s), which involve a perceived power imbalance and create a hostile work environment. Bullying is thus a form of interpersonal aggression or hostile, anti-social behavior in the workplace. (Salin, 2003, p. 1214; emphasis in original)*

The negative ramifications of bullying are widespread. Targets suffer long-term, sometimes permanent, psychological and occupational impairment (Crawford, 2001; Leymann and Gustafsson, 1996). Considerable evidence suggests that bullying is a 'crippling and devastating problem' (Adams and Crawford, 1992, p. 13) with the potential to damage targets' self-esteem, physical health, cognitive functioning, and emotional health (Brodsky, 1976; Einarsen and Mikkelsen, 2003; Keashly and Harvey, 2005). Abused employees are at increased risk of depression (Namie, 2003), prolonged duress stress disorder (Scott and Stradling, 2001), alcohol abuse (Richman et al., 2001; Rospenda, 2002), post-traumatic stress disorder (Leymann and Gustafsson, 1996), and even suicide (Leymann, 1990). Some are so damaged they cannot reintegrate into the workforce, or can do so only after intensive, specialized rehabilitation therapy (Leymann and Gustafsson, 1996; Scott and Stradling, 2001). Recent medical research indicates that recurrent perceptions of injustice at work – no doubt experienced by targets of bullying – are associated with chronic stress, high blood pressure, and increased risk of coronary heart disease (Kivimäki et al., 2005). An audience of co-workers suffer, live in fear of being the next targets, and report higher stress levels and intentions to leave than non-exposed workers (Vartia, 2001). Bullying also can have disastrous effects on interpersonal relationships and family functioning (Jennifer et al., 2003; Rayner et al., 2002; Tracy et al., 2006).

Although US researchers have studied a wide variety of negative acts at work (Fox and Spector, 2005; O'Leary-Kelly et al., 2000), scholars have given the bullying phenomenon, as conceptualized in international studies, less attention. Exceptions include studies of employee emotional abuse, which is quite similar to bullying (Keashly, 1998, 2001; Keashly and Harvey, 2005), analyses of the communicative nature of bullying (Lutgen-Sandvik, 2003a, 2006; Tracy et al., 2006), assessments of the legal protections against bullying (Yamada, 2000), target self-reports to the Workplace Bullying and Trauma Institute (Namie, 2000, 2003), and the framing of bullying as a form of aggression at work (Keashly and Neuman, 2005; Neuman, 2000; Neuman and Baron, 2005). Generalized workplace harassment/abuse (Richman et al., 2001; Rospenda et al., 2000) and mistreatment (Price Spatlan, 1995) might also be classified as bullying, when the experience is repetitive, frequent, enduring, and involves a perceived power imbalance.

The purposes of the current study are to investigate the defining features of bullying, assess its prevalence and dynamics in a US sample, and compare prevalence in a US sample with Scandinavian studies utilizing the same measure. Based upon past conceptualizations and research that indicates bullying occurs in gradations, we introduce the construct of bullying 'degree' and provide evidence of the impact of degree on work

quality outcomes. Finally, we suggest that employees who see their co-workers bullied experience higher levels of negativity and report reduced work quality outcomes than do non-exposed workers. We begin with a brief history of the bullying research, including its origins.

## **THEORETICAL BACKGROUND**

Research on workplace bullying began in Sweden in the 1980s, following the country's groundbreaking research on schoolyard bullying (reviewed in Olweus, 2003). Heinz Leymann (1990), a German-born physician and psychiatrist, is considered by many to be the pioneer in this work (Rayner et al., 2002). His initial interest in school bullying subsequently expanded to include bullying at work (what he termed 'mobbing'), when he recognized similar dynamics in adult patients. A few years later, researchers from both Norway (Einarsen et al., 1994) and Finland (Björkqvist et al., 1994) conducted studies on mobbing and work harassment. In 1990, a British freelance journalist named Andrea Adams (Adams and Crawford, 1992) brought the issue to public attention through a series of BBC broadcasts; she labelled the phenomenon 'bullying'. As a result of Adams' work, a number of UK scholars have conducted and published bullying research (e.g. Hoel et al., 1999, 2001; Rayner, 1997). Since the initial Scandinavian/UK work, bullying research has emerged in Australia (Sheehan and Jordan, 2003), South Africa (Marais-Steinman and Herman, 1997), Austria (e.g. Niedl, 1996), The Netherlands (Hubert and van Veldhoven, 2001), Germany (Zapf, 1999), Bangladesh (Ahmed and Braithwaite, forthcoming), and numerous other countries (Zapf et al., 2003). There continues to be considerable interest in the topic internationally, particularly in the fields of organizational psychology and business/management.

Carroll Brodsky, a US psychiatrist who interviewed over 1000 persons filing workers' compensation claims in California and Nevada, published *The Harassed Worker* (1976). This book is one of the earliest examinations of workplace harassment, but it stirred little interest at the time of its publication. Brodsky's (1976) research was revived in the early 1990s, however, when interest surged in Britain, and it is now considered a central, germinal piece of scholarship on the subject. In the early 1980s, nursing professor Helen Cox (1991) began studying nurses' experiences of verbal abuse when one of her most gifted students threatened to quit school as a result of continued abuse. At about the same time, Sheehan and colleagues explored medical students' experience of abuse (Sheehan et al., 1990). Since this time, US researchers have explored a wide range of 'hostile workplace behaviors [that] can be found in a variety of literatures . . . and under a variety of names' (Keashly and Jagatic, 2003, p. 31). The US interest in workplace negativity and hostility has grown since the early 1990s, in part due to workplace violence (reviewed in Baron and Neuman, 1996), and is studied under a variety of terms. Due to the differing terminology and definitions, as well as the broad range of disciplines represented, this US body of work is less cohesive than international bullying research.

### **Workplace Bullying in Relation to Other Negative Workplace Phenomena**

To understand where workplace bullying fits within the body of US research that examines harmful communication and behaviour at work, it is helpful to frame these

Table I. Terminology and hierarchy of phenomena

<i>Superordinate phenomena</i>	
Counterproductive workplace behaviour (Fox and Spector, 2005; Fox et al., 2001)	
Organizational injustice (Cropanzano and Randall, 1993; Harlos and Pinder, 1999)	
Organizational misbehaviour (Vardi and Weitz, 2004)	
Workplace aggression (Baron and Neuman, 1998; Neuman and Baron, 2005; Schat et al., 2006)	
Workplace deviance (Bennett and Robinson, 2000)	
Antisocial work behaviours (O'Leary-Kelly et al., 2000)	
Workplace violence (broadly defined) (Kelloway et al., 2006)	
<i>Intermediate phenomena</i>	
<i>General forms of workplace abuse</i>	<i>Specific forms of workplace abuse</i>
Emotional abuse (Keashly, 1998, 2001; Lutgen-Sandvik, 2003b)	Discrimination (multiple authors) [race, age, religion, ethnicity, disability]
Mobbing (Leymann, 1990; Zapf and Einarsen, 2005)	Ethnic harassment (Schneider et al., 2000)
Social undermining (Duffy et al., 2002)	Sexual harassment (Dougherty and Smythe, 2004; Pryor and Fitzgerald, 2003)
Workplace bullying (Adams and Crawford, 1992; Rayner et al., 2002)	Abusive supervision (Tepper, 2000)
Workplace harassment (Richman et al., 2001)	
Workplace mistreatment (Meares et al., 2004)	
<i>Subordinate phenomena</i>	
Incivility (Pearson et al., 2004)	
Petty tyranny (Ashforth, 1994)	
Social ostracism (Williams and Sommer, 1997)	
Verbal abuse (Cox, 1991)	
Verbal aggressiveness (Infante and Rancer, 1996)	
Victimization (Aquino and Bradfield, 2000)	

phenomena hierarchically (see Table I for phenomena and associated author/researchers). The hierarchy of phenomena, and associated terminology, is organized to include superordinate, intermediate, and subordinate types of negative communication and conduct. Superordinate phenomena are overarching, general behaviours that span a wide range of harmful workplace actions and interactions, of which bullying is only one. Key phenomena at this level include workplace aggression, counterproductive workplace behaviours, workplace injustice, antisocial work behaviour, workplace deviance, and, broadly defined, workplace violence.

Intermediate phenomena fall under superordinate constructs and include terms for both general and specific forms of workplace abuse. General forms of workplace abuse include phenomena such as bullying, emotional abuse, generalized harassment, and mistreatment – highly similar phenomena. Specific forms of workplace abuse include

phenomena such as sexual/ethnic harassment and particular types of discrimination (e.g. age, race, disability, etc). In actual workplace experiences, overlap usually occurs with general and specific types of abuse. That is, sexual harassment frequently includes abusive acts that are not explicitly sexual or gendered, and, at times, the aetiology of bullying can be gendered or discriminatory. For example, persons might be targeted for failure to perform within accepted sex roles or targeted because they are different from the rest of the workgroup (Einarsen, 1999; Lee, 2002).

Finally, subordinate phenomena are usually forms and types of intermediate behaviours or are characteristic elements of intermediate behaviours. These include victimization, incivility, and verbal aggressiveness. That is, bullying and sexual harassment usually include acts of incivility and a sense of being victimized. Phenomena in each level of the hierarchy, for the most part, subsume those below it. For example, workplace bullying, categorized as an intermediate phenomenon, is one type of the superordinate construct 'workplace aggression'. Bullying could also be classified as a type of antisocial work behaviour that includes verbal/physical and active/passive dimensions and produces harm or injury (O'Leary-Kelly et al., 2000).

### Features of Bullying

As a unique phenomenon, adult bullying at work has four specific features: intensity, repetition, duration, and power disparity. First, bullying involves a pattern of multiple negative acts (Mikkelsen and Einarsen, 2001), and the majority of targets report being subjected to numerous forms of abuse (Einarsen, 1999; Keashly and Harvey, 2005). We use the term *intensity* to specify the number of different negative acts targets report. Researchers often estimate bullying by counting these acts, which include isolation, humiliation, and intimidation, among others. Initially, Leymann (1990) operationalized mobbing as one negative act, although others believe that a minimum of two negative acts is a more accurate measure (Mikkelsen and Einarsen, 2001; Salin, 2001) – a position with which we concur. Second, to constitute bullying, these negative acts must occur *frequently*, usually weekly or more often. Since bullying is conceptualized as a repetitive 'hammering away' at targets (Tracy et al., 2006), most researchers explicitly disregard one-time incidents as instances of bullying (Einarsen and Hoel, 2001; Leymann, 1990; Rayner et al., 2002; Salin, 2001). Third, not only must two or more negative acts occur weekly, they must occur over a *duration* or period of time. Researchers usually apply a six-month duration criterion to differentiate bullying from lower-level negativity (Hoel et al., 2001; Leymann, 1990; Mikkelsen and Einarsen, 2001; Zapf et al., 1996).

Finally, power disparity between perpetrator and target is 'central to the definition of bullying' (Einarsen et al., 2003, p. 21). Although some of the most recent research suggests that resistance to bullying is common (Lutgen-Sandvik, 2006), the majority of definitions for workplace bullying suggest that the target must, for one reason or another, feel unable to stop or prevent abuse. That is, in bullying situations, a power disparity either exists at the onset of bullying or develops over time (Keashly and Nowell, 2003). Based on this body of research, we operationalize bullying as occurring when an individual experiences *at least two negative acts, weekly or more often, for six or more months in situations where targets find it difficult to defend against and stop abuse*. We believe that two or more

negative acts is an appropriate baseline indicator of bullying, since bullying is nearly always comprised of numerous negative acts (Mikkelsen and Einarsen, 2001; Salin, 2001).

### **Prevalence Comparisons across Studies**

Although international scholars have compared prevalence rates across national samples, these comparisons usually do not include US data and often compare studies that have used different measures for bullying, which makes clear comparisons challenging (Zapf et al., 2003). To date, we have found no US studies that have measured the prevalence of the persistent, enduring phenomenon of bullying using a tool specifically designed to measure bullying. There are, however, several US studies of similar intermediate and superordinate phenomena. These include Keashly and collaborators' Michigan studies (Burnazi and Keashly, 2005; Keashly and Jagatic, 2000), the US Department of Veterans Affairs (VA) research that pilots use of the Workplace Aggression Research Questionnaire (WAR-Q) (Keashly and Neuman, 2002, 2005; Neuman, 2004; Neuman and Keashly, 2004), and a US nationwide study of workplace aggression (Schat et al., 2006).

### **HYPOTHESES**

In order to assess US workers' experiences of bullying in a way that allowed comparisons to international studies using comparable methods, we conducted the present study using the Negative Acts Questionnaire (NAQ). Moreover, a review of the current bullying, emotional abuse, and workplace aggression literature guided our assumptions about bullying in a sample of US workers.

### **Bullying Prevalence**

Studies of bullying typically have used one of two methods to determine prevalence. Researchers have identified bully targets by: (a) counting the occurrence of various negative acts over a specified period of time using a behavioural checklist; and (b) participants' self-identification as a target (for an in-depth discussion of workplace bullying measurement issues, see Cowie et al., 2002). However, these measures have produced decidedly different prevalence rates (Rayner, 1999; Salin, 2001). Prevalence based on the number of negative acts 'is higher . . . than is suggested by the self-reports of bullying' (Mikkelsen and Einarsen, 2001, p. 405). For example, a British study found that only half of respondents who reported experiencing persistent, enduring negative acts also self-identified as bullied (Rayner, 1999). Similarly, a Finnish study comparing the two methods found higher prevalence with negative act counts, but considerable overlap between the two methods. Specifically, 'of those classifying themselves as bullied on a daily or weekly basis, all were identified using the list of different negative acts' (Salin, 2001, p. 433). As is true with self-labelling in sexual harassment (Magley et al., 1999), there are a number of reasons one might eschew identifying as a bullying target. Some targets may not perceive their treatment as bullying, while others may simply avoid

self-labelling as a target/victim because being bullied connotes weakness or childishness (Rayner et al., 2002). As a result, assessing bullying prevalence based on perceptions of being targeted likely results in a level of underreporting. What is more, self-identification may be less important than the prevalence of persistent negativity, since workers reporting persistent workplace hostility experience negative health effects regardless of whether or not they label themselves as bullied (Hoel and Cooper, 2000). Therefore, we hypothesized the following:

*Hypothesis 1:* Bullying prevalence based on the number of negative acts will be higher than bullying prevalence based on self-identification as targets.

Related to the issue of self-identification, it is likely that certain negative acts, or a combination of such acts, discriminate between respondents who do and do not self-identify as targets. Einarsen (1999) points out that the *features* of bullying (e.g. frequency, power disparity) 'cause as much anxiety, misery and suffering' (p. 18) as its forms (negative acts). Thus, as well as exploring the impact of intensity and frequency, we assume that particular types of negativity are likely to create the perception that one is being bullied. Current research tells us which negative acts target experience at higher rates than non-targets (Hoel and Cooper, 2000), and there is evidence that particular negative acts – false allegations, hostile communication, intimidation, threats of violence – are significantly related to a wide range of target self-defence responses, while others – work overload, working below one's competence, excessive work monitoring – show no significant relationships to self-defence responses (Alberts et al., 2005). Thus, we hypothesized:

*Hypothesis 2:* Certain negative acts, particularly threats to identity, economic stability, and physical safety, will discriminate between those who self-identify as targets and those who do not.

Bullying prevalence also varies by national culture and 'appears to be less widespread in Scandinavia than in countries such as the UK' (Mikkelsen and Einarsen, 2001, p. 407). Based on Hofstede's (1980) theory regarding national differences and the impact of those differences on workplace values, research suggests that lower rates of bullying in Scandinavia may be due to the low power distance and feminine/egalitarian cultures (Einarsen, 2000; Mikkelsen and Einarsen, 2001; Salin, 2001). In low power distance cultures, smaller differences in power and status exist between people in different positions (Hofstede, 1980). Since perceived power disparity is a feature of bullying, one might expect to find lower levels of bullying in Scandinavia than in UK or US studies (Mikkelsen and Einarsen, 2001; Zapf et al., 2003). Furthermore, since Scandinavian cultures are more feminine/egalitarian, people in these cultures might generally be more concerned with the quality of interpersonal relations (Newman and Nollen, 1996). As such, 'aggressive behaviour, bullying or other forms of power abuse are likely to be less tolerated' in Scandinavia than in masculine cultures, such as the UK and USA, 'in which there is a greater focus on individual assertiveness and achievement' (Mikkelsen and Einarsen, 2001, p. 408).

Hofstede's (1993) examination of American management theories is informative and suggests that US companies stress market processes, individualism, and the importance of managers over workers. Central to these is that the 'ideal principle of control . . . is competition between individuals' (p. 91). Stressing competition and individual achievement and reward de-emphasizes collaborative efforts. Moreover, the focus on management rather than workers, which is likely 'the result of the combination of extreme individualism with fairly strong masculinity' (p. 91), may also enable powerful organizational members to bully others with relative impunity. Thus, our third hypothesis is as follows:

*Hypothesis 3:* Bullying prevalence in the current US sample will be higher than in Scandinavian samples.

### **Bullying Degree**

Past research suggests that bullying occurs in gradations, what we call *degrees*, depending on frequency, intensity, and duration (Davenport et al., 2002; Lutgen-Sandvik, 2003a). We conceptualize bullying degree as a cumulative score reflecting the intensity, frequency, and duration of negative acts that constitute workplace bullying. The intensity of bullying is most often a cluster of hostile strategies rather than a single negative act. For example, in a Danish study, 'all self-reported victims also reported exposure to a wide range of . . . bullying behaviors' (Mikkelsen and Einarsen, 2001, p. 405). Moreover, frequency and duration appear to be linked; targets 'who are frequently bullied also report a longer duration of their problem' (Einarsen and Skogstad, 1996, p. 192). The sheer number of different negative acts associated with bullying and the impact of frequency and duration on targets' experiences indicate that bullying is not a dichotomous, 'yes or no', experience.

Some scholars have made the case that bullying should be conceptualized as occurring on a continuum of negativity. Davenport and colleagues (2002), for example, argue that bullying could be characterized by degrees of harm, similar to first, second and third degree burns, a model further explicated by Lutgen-Sandvik (2003a). More importantly, intensity, frequency and duration – what we calculate as *degree* – are also linked to targets' negative outcomes. US workers persistently exposed to aggression showed greater signs of harm than those occasionally exposed, and those exposed to five or more persistent negative acts demonstrated greater damage than those exposed to fewer than five (Keashly and Neuman, 2002). This research led to our fourth hypothesis:

*Hypothesis 4a:* Bullying degree will be positively correlated with stress.

*Hypothesis 4b:* Bullying degree will be negatively correlated with job satisfaction and overall job rating.

### **Witnessing Workplace Bullying**

Bullying results in a ripple effect indicating that the phenomenon does not involve just a few 'problem' employees (Coyne et al., 2000), but rather is a dynamic process that



negatively impacts everyone in the workgroup. Barling's (1996) discussion of *primary* and *secondary* victims of workplace violence suggests that secondary victims are 'employees who themselves were not violated but whose perceptions, fears and expectations are changed as a result of being vicariously exposed to violence' (Barling, 1996, p. 35). As such, witnesses of bullying could be considered secondary targets, especially since witnesses report increased levels of 'destabilizing forces at work, excessive workloads, role ambiguity and work relationship conflict' (Jennifer et al., 2003, p. 495). That is, in bullying work environments, witnesses probably also experience more negative acts, more frequently, than non-exposed workers. Thus, we hypothesized the following:

*Hypothesis 5:* Witnesses of bullying will report overall workplace negativity at rates lower than targets but higher than non-exposed workers.

Research also suggests that bullying not only negatively impacts targets' work quality outcomes (e.g. satisfaction, stress), but also adversely affects those outcomes for non-bullied witnesses (Jennifer et al., 2003; Vartia, 2001, 2003). Witnessing co-workers have 'significantly more general stress and mental stress reactions' than non-exposed workers (Vartia, 2001, p. 65). Additionally, co-workers who see their colleagues abused more often 'leave their jobs as a result of their contact with bullying' than do non-exposed workers (Rayner et al., 2002, p. 56). As such, our final hypothesis is as follows:

*Hypothesis 6:* Witnesses of bullying will report work quality outcomes that are better than target outcomes but worse than non-exposed worker outcomes.

## METHOD

### Data Collection and Sample

The current study was conducted via an online survey (administered through Survey Monkey) with the intent of hearing from a variety of US workers spanning age groups, industries, and locales. To avoid drawing a skewed sample of abused workers, *all* communication, including verbiage on the website or conversations regarding the project, referred to the project *The American Workplace Survey* and simply asked respondents to 'Tell us about your job'. We used a number of social network, online, and advertising techniques to draw US workers to the website ( $n = 469$ ). These included extra credit to undergraduates who sent the link to adult, working, non-student acquaintances ( $n = 248$ ); network sampling of researchers' contacts outside higher education ( $n = 118$ ); work-related online chat rooms and a web search engine ad (Google) ( $n = 25$ ); and print ads ( $n = 5$ ). Seven respondents did not provide data regarding how they learned about the study.

*Participants.* Four hundred and sixty-nine people responded to the survey. We used zip codes to ensure that participants were US workers; 18 non-US respondents were deleted from the data. Of those remaining, 403 surveys were sufficiently complete to be usable in analyses. Two hundred and sixty-six respondents were women and 134 were men

(three were missing this information). They worked in 18 industries, lived in 33 states, and ranged in age from 18 to 57 (mean 35.8, SD 9.46). The majority of respondents (76 per cent) worked in the following industries: administration, health and social services, education, service sector, professional and scientific fields, finance and insurance, and public administration. When comparing the current sample to Department of Labor (DOL) statistics, we find that women, persons aged 35–44 years, and white-collar industries are somewhat over-represented, and 6 of the 17 DOL industry categories are somewhat under-represented (accommodation/food, construction, manufacturing, public administration, retail, transportation) (US Department of Labor, 2006). On the other hand, the sample is representative of all other age groups, five industries (agriculture, arts, information, real estate, utilities), and includes workers from more than two-thirds of the 50 states.

*Similarities and differences of samples.* Since we compared findings in this study to international bullying studies, it is important to note how our sample compares to the of other NAQ studies. The current sample was weighted towards white-collar professions, as might be expected in an online format, and is similar to Salin's (2001) sample of Finnish professionals with business degrees and a significant portion of Mikkelsen and Einarsen's Danish sample (2001). Participants represented a wide range of ages, as was the case in the Scandinavian studies to which we compared our findings (Mikkelsen and Einarsen, 2001; Salin, 2001). The broad spectrum of industries represented in the current sample, however, may be less comparable to the Danish study that focused on only four organizations (Mikkelsen and Einarsen, 2001). Finally, women were over-represented in the current sample, but this sex characteristic was also apparent in the Salin (2001) and Mikkelsen and Einarsen (2001) studies. In sum, the current sample is similar in age and sex distribution to the studies to which it is compared. It also reflects a similar industry distribution to the Finnish (Salin, 2001) and Norwegian (Einarsen and Skogstad, 1996) studies.

## Measures

The study's measures included operationally-defined and self-identified bullying prevalence, frequency and intensity of negative acts, bullying degree, an assessment of whether participants had witnessed others being bullied, and work-related outcomes. In addition, the online survey, which comprises an extensive study of bullying at work, included numerous other items not explicitly reported in this article.

*Operationally-defined bullying.* Respondents were asked how often they experienced 22 (behaviourally defined) negative acts over the past six months. Response categories for each negative act were: 0, never; 1, occasionally (less than monthly); 2, monthly; 3, weekly, and 4, daily. The list of negative acts came directly from the NAQ, a standardized tool measuring workplace bullying (Einarsen and Hoel, 2001). None of the NAQ items specifically referred to 'bullying'. The NAQ was selected for its established reliability and comparison potential due to its use in a number of previous bullying studies (Einarsen and Hoel, 2001; Hoel and Cooper, 2000; Hoel et al., 2001; Mikkelsen and

Einarsen, 2001; Salin, 2001). Research using the NAQ has demonstrated high internal consistency, with Cronbach's alpha ranging from 0.81 to 0.92 (Mikkelsen and Einarsen, 2001; Salin, 2001). Cronbach's alpha for NAQ in this study was 0.92. We changed one NAQ item that asked respondents about 'coventry', a common British term associated with the silent treatment. The original wording, 'Being ignored, excluded or being "sent to Coventry"' was altered to read 'Being ignored, excluded or isolated from others'.

*Self-identified bullying.* In addition to the negative act inventory, we measured respondents' perceptions of being bullied at work. Perceived bullying was measured by asking respondents to state whether they had been a target of workplace bullying based upon the following definition (taken verbatim from the NAQ):

We define bullying as a situation where one or several individuals perceive themselves to be on the receiving end of negative actions from one or more persons *persistently* over a period of time, in a situation where the targets have difficulty defending themselves against these actions. We do *not* refer to a one-time incident as bullying.

Response categories were: No; Yes, but only rarely; Yes, now and then; Yes, several times per week; Yes, almost daily.

*Intensity and frequency.* To determine the number of negative acts and the regularity of those acts, we assessed two continuous measures related to bullying: intensity and frequency. Intensity scores were the cumulative number of different negative acts experienced – calculated by adding the total number of reported negative acts, regardless of frequency. Frequency, on the other hand, specifically examined the magnitude of negative acts occurring *weekly or daily*. That is, frequency was the cumulative number of negative acts reported to happen on an extremely frequent basis. We used frequency to categorize operationally-defined targets (e.g. two negative acts at least weekly); both frequency and intensity were also components of our bullying degree construct.

*Bullying degree.* Past research suggests that as frequency, number of negative acts (intensity), and duration of bullying increase, so do harmful results (Einarsen, 1999; Keashly and Neuman, 2002). Therefore, we calculated bullying degree using duration and the interrelated measures of intensity and frequency (positively correlated,  $r = 0.69$ ,  $p < 0.01$ ). Thus, a mid-range bullying degree score could reflect two different possibilities: a high number of negative acts at a relatively low frequency or a limited number of negative acts at a relatively high frequency. For example, for a respondent reporting five negative acts monthly (intensity = 5) and eight negative acts weekly/daily (frequency = 8) over the past six months (duration = 6), we would calculate the bullying degree score as  $5 + 8 + 6 = 19$ . (The NAQ asks about negative acts 'over the past six months', so all respondents in the current study had duration scores of 6. We address this issue in the discussion.)

*Witnessed bullying.* Respondents who did not identify as bullying targets were provided with the definition for bullying and asked if they had witnessed bullying at work during the past six months. Answers choices were 'yes/no'.

*Workplace outcomes.* We measured three outcomes related to respondents' work experience over the past six months: job satisfaction, overall job rating, and perceived stress. Job satisfaction was measured using the single item, 'Overall, how satisfied are you in your job?'. Answer choices were arranged along a Likert-type scale ranging from 1, very dissatisfied to 5, very satisfied. Overall job rating/ranking was measured using the single item, 'Overall, how would you rank your experiences at work?'. Answer choices ranged from 1, very negative to 5, very positive. Job stress was measured using a single item, 'How stressful do you find your work environment?'. Answers choices ranged from 1, very unstressful to 5, very stressful.

We used single item scales to measure job satisfaction, overall ranking of work experiences, and work environment-related stress since considerable research indicates that single-item measures are strongly correlated with multiple-item measures of the same concept (Cunney and Perri, 1991; Loo, 2002; Nagy, 2002; Wanous et al., 1997). This is the case for single-item measures of job satisfaction (Nagy, 2002; Wanous et al., 1997), work-related stress and health (Hasson and Arnetz, 2005), and health-related quality of life (Cunney and Perri, 1991). Moreover, since single-item measures are shorter, more efficient, and may encompass more of the facet under analysis (Nagy, 2002), the single-item approach was well suited to our analysis.

*Other survey measures.* The overall study from which these data are taken explored a wider range of workplace dynamics than frequency of negative acts and perceptions of bullying/witnessing. The NAQ, embedded in the online survey, was one aspect of the overall study. Other measures, not reported herein, included frequency of positive acts, responses to being bullied, and in-depth, open-ended items about self-identified target and witness experiences. The reader should note that, similar to any other study that uses multiple scales (e.g. Keashly et al., 1994), the findings may have been different if the scales had been used on their own and not combined. It is possible that the findings from our embedded NAQ may differ from comparative studies in which the NAQ was used on its own.

## RESULTS

Correlations and descriptive statistics for all continuous measure dependent and independent variables are summarized in Table II. As indicated in Table II, continuous

Table II. Descriptive statistics and correlations

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>
1. Bullying degree	8.99	6.70			
2. Job satisfaction	3.82	1.10	-0.589*		
3. Job rating	3.91	0.96	-0.621*	0.829*	
4. Job stress	3.51	1.01	0.341*	-0.345*	-0.310*

*Notes:* Degree scores ranged from 0 to 41.

Means for satisfaction, ranking, and stress range from 1 to 5, with higher scores indicating greater intensity of the variable.

\*  $p < 0.001$ .

measure variables are significantly related. The research question and individual hypotheses were tested using chi-square, discriminant factor, and one-way ANOVA analyses. Tables III, IV, and V present these results.

The results section begins with prevalence data based on our operationalization of workplace bullying and then makes comparisons between the current study and other studies employing the NAQ. Since NAQ studies operationalize bullying in two different ways (one versus two negative acts), we compare prevalence rates from the current study with multiple prevalence measures. Thus, although we define bullying as two negative acts at least weekly for six or more months, we compare our findings to the reported measures in other studies, which may not adhere to the same operational criteria.

### Prevalence Rates with Two Measures

Hypothesis 1 stated that 'Bullying prevalence based on the number of negative acts will be higher than bullying prevalence based on self-identification as targets'. Our operationalization of bullying was *at least two negative acts, weekly or more often, for at least six months*. Based on this definition, nearly a quarter of the respondents ( $n = 113$ , 28 per cent) were classified 'bullied' and met the operationalized criteria; however, only 38 (9.4 per cent) of these respondents self-identified as bullied – a little over one-third (see Table III). The distribution was statistically different from equality,  $\chi^2(1) = 9.25$ ,  $p < 0.01$ . Although the two methods resulted in highly different prevalence rates, as with Salin's (2001) study, the two methods were consistent in the sense that those who had self-identified as bullied also reported significantly higher exposure rates to all but one of the negative acts in the NAQ. Furthermore, of those who classified themselves as bullied, all but two (95 per cent) were also identified operationally. The two who self-identified but were not operationally identified reported one negative act at least weekly rather than two. Thus, Hypothesis 1 was supported. That is, in this study, bullying prevalence based on persistent negative acts was significantly higher than prevalence based on self-identification.

### Self-Identification as Bullied

Hypothesis 2 stated that 'Certain negative acts, particularly threats to identity, economic stability, and physical safety, will discriminate between those who self-identify as targets and those who do not'. To explore differences in the experiences of self-identified targets and non-targets, we initially compared the frequency of the 22 negative acts respondents reported encountering regularly (monthly/weekly/daily) for the two groups. We contrasted the frequently reported negative acts for self-identified targets (38) and non-targets ( $n = 365$ ). Table IV provides comparisons between the two groups and indicates that self-defined targets reported higher frequencies of all negative acts than did non-targets. A one-way chi-square test resulted in significant distribution differences between the two groups for all negative acts, except for violence or threats of violence – a rare occurrence for members of both groups. This comparison indicated that self-identified targets reported nearly all negative acts at higher rates but did not discriminate among acts.

Table III. Prevalence comparisons: workplace bullying and aggression at work

<i>Population (sample size)</i>	<i>NAQ</i>			
	<i>1 neg/act weekly past 6 months %</i>	<i>2 neg/acts weekly past 6 months %</i>	<i>Self-identified last 6–12 months %</i>	<i>Self-identified work history %</i>
Current study: US (403)	46.8 <sup>a,b</sup>	28 <sup>c</sup>	9.4 <sup>d</sup>	29.8 <sup>c</sup>
1. Danish workers (765)	15.8 <sup>a</sup>	4.8 <sup>c</sup>	3.2	8.8 <sup>c</sup>
2. Finnish workers (377)	24.1 <sup>b</sup>		1.6 <sup>d</sup>	
3. UK workers (5288)			10.6	

  

<i>Population (sample size)</i>	<i>WAQ-R and other measures</i>		
	<i>≥ 1 neg/act weekly past 6–12 months %</i>	<i>≥ 6 neg/acts weekly past 6–12 months %</i>	<i>Self-identified work history %</i>
Current study (NAQ)	46.8	7.7	29.8
4. US Michigan workers (689)	18.4		42
5. US Michigan workers (433)	14		56
6. US VA WAQ-R (4801)	36	6	
7. US workers, National Survey of Workplace Health and Safety (2508)	41.4		

*Notes:* Same subscript (<sup>a,b,c,...</sup>) in the same column indicates distribution significantly different from equality ( $\chi^2$ ,  $p < 0.05$ ).

1. Mikkelsen and Einarsen (2001).
2. Salin (2001).
3. Hoel and Cooper (2000); Hoel et al. (2001).
4. Keashly and Jagatic (2000; cited in Keashly and Jagatic, 2003); Keashly and Neuman (2005).
5. Burnazi and Keashly (2005); Keashly and Neuman (2005).
6. Keashly and Neuman (2002, 2005); Neuman (2004).
7. Schat et al. (2006).

To determine what combination of 22 negative acts significantly discriminated between those who self-identified as targets of bullying and those who did not, we entered the 22 negative acts into a multiple discriminant analysis using stepwise entry, with Wilks' lambda as the significance test. The stepwise discriminant analysis produced one significant discriminant function, which included six negative acts: being humiliated or ridiculed in connection with your work (discriminant weight 0.64); having important information withheld (discriminant weight 0.58); being faced with threatening behaviour (e.g. finger-pointing, invasion of personal space, shoving, blocking/barring the way) (discriminant weight 0.54); being pressured not to claim something to which entitled (e.g. sick leave, vacation pay) (discriminant weight 0.50); being ignored or faced with hostility when approaching others (discriminant weight 0.47); and hints to quit your job (discriminant weight 0.46). The function significantly discriminated between self-identified targets

Table IV. Negative acts compared: self-identified targets and non-targets

<i>Negative acts associated with workplace bullying</i>	<i>Percentage reported monthly, weekly, daily</i>		
	<i>Target</i>	<i>Non-target</i>	$\chi^2$
1. Had information withheld that affected your performance	59.5	18.3	21.8
2. Been exposed to an unmanageable workload	56.8	27.6	10.1
3. Ordered to do work below your level of competence	51.4	27.1	7.5
4. Given tasks with unreasonable/impossible targets/deadlines	48.7	16.7	15.7
5. Had your opinions and views ignored	46.0	11.8	20.2
6. Had your work excessively monitored	40.5	12.8	14.4
7. Reminded repeatedly of your errors or mistakes	40.5	7.9	22.0
8. Humiliated or ridiculed in connection with your work	40.5	3.8	30.4
9. Had gossip and rumours spread about you	37.8	6.6	21.9
10. Had insulting/offensive remarks made about you	35.1	3.6	25.6
11. Been ignored, excluded or isolated from others	32.4	7.9	14.9
12. Received hints or signals from others that you should quit job	29.7	3.0	21.8
13. Been intimidated with threatening behaviour	27.0	2.2	21.1
14. Experienced persistent criticism of your work and effort	27.0	3.6	17.9
15. Been ignored or faced hostile reactions when you approached	27.0	3.8	17.5
16. Had key tasks removed, replaced with trivial, unpleasant tasks	27.0	4.1	16.9
17. Had false allegations made against you	24.3	3.6	15.4
18. Subjected to excessive teasing and sarcasm	24.3	4.9	12.9
19. Been shouted at or targeted with spontaneous anger (or rage)	24.3	4.6	13.4
20. Pressured into not claiming something to which entitled	16.2	3.6	8.0
21. Been subjected to practical jokes	8.1	0.6	6.5
22. Experienced threats of violence or abused/attacked	2.7	0.6	1.3

*Notes:* Self-identified targets and non-targets differed significantly from equal distribution for all negative acts ( $\chi^2$ ,  $p < 0.01$ ), except violence/threats of violence.

and non-targets (Wilks' lambda = 0.461,  $\chi^2$  (6) = 157.84,  $p < 0.001$ ) and classified 92.6 per cent of the cases.

### Current Study Prevalence Compared to Scandinavian Prevalence

Hypothesis 3 stated that 'Bullying prevalence in the current US sample will be higher than in Scandinavian samples'. To compare prevalence at as many points as possible with studies employing the NAQ, we calculated all levels of intensity. In this way, we were able to contrast our findings with Scandinavian research that operationalized bullying as *one* negative act at least weekly, in addition to our operationalization of two negative acts (see Table III). Comparisons were made using one-way chi-square tests. The Danish study (Mikkelsen and Einarsen, 2001) reported prevalence of both one and two negative acts at least weekly; the Finnish study (Salin, 2001) reported prevalence based on the occurrence of one negative act at least weekly. Among these NAQ studies, we found that the US sample had a significantly higher prevalence of bullying for nearly all points of comparison. For example, 46.8 per cent of the US, 15.8 per cent of the

Danish, and 24.1 per cent of the Finnish respondents reported experiencing one negative act at least weekly. Chi-square analysis revealed a significant deviation from an equalized distribution: current study vs. Danish ( $\chi^2(1) = 15.35, p < 0.01$ ); current study vs. Finnish ( $\chi^2(1) = 7.27, p < 0.05$ ).

Comparison with the Danish study (Mikkelsen and Einarsen, 2001) for the occurrence of two negative acts at least weekly – the benchmark used in the current study – also indicated significant differences between the two groups. Specifically, 28 per cent of US and 4.8 per cent of Danish respondents reported experiencing two negative acts at least weekly. This difference deviated significantly from an equal distribution ( $\chi^2(1) = 24.6, p < 0.001$ ). For self-identification as a target over the past six months, 9.4 per cent of US, 3.2 per cent of Danish, and 1.6 per cent of Finnish respondents reported that they had been bullied. This result also revealed a significant deviation from an equalized distribution between the US and Finnish samples ( $\chi^2(1) = 5.53, p < 0.05$ ) but produced a non-significant result comparing the US and Danish samples ( $\chi^2(1) = 3.05, p > 0.05$ ). In a final comparison point with Scandinavian NAQ studies, 29.8 per cent of US and 8.8 per cent of Danish respondents self-identified as bullied sometime during their work history. Chi-square results indicated a significant deviation from an equalized distribution ( $\chi^2(1) = 11.42, p < 0.01$ ). Taken together, we found substantial support for Hypothesis 3.

### **Bullying Degree and Work Quality Outcomes**

Hypotheses 4a and 4b stated that ‘Bullying degree will be positively correlated with stress and negatively correlated with job satisfaction and overall job rating’. To test the idea that increased degree is related to negative job outcomes, we correlated respondents’ degree scores with work quality outcomes (stress, overall job ranking, job satisfaction) using two-tailed Pearson correlations. Bullying degree positively correlated with stress ( $r(398) = 0.341, p < 0.001$ ), and was inversely related to job satisfaction ( $r(401) = -0.589, p < 0.001$ ), and overall job ranking/rating ( $r(400) = -0.621, p < 0.001$ ) (see Table II). These findings are consistent with previous research indicating that as there are increases in the number of bullying events occurring weekly, there are also increases in the degree of negative impact (Keashly and Neuman, 2002). Thus we found support for Hypothesis 4.

### **Witnessing Bullying**

Hypothesis 5 stated that ‘Witnesses to bullying will report overall workplace negativity at rates lower than targets but higher than non-exposed workers’. The indicator of overall workplace negativity used in this study was bullying degree. Since all respondents reported frequency of the NAQ’s negative acts over the past six months, regardless of self-identified categories, we calculated a measure of bullying degree for all respondents. Using bullying degree as an indicator of overall workplace negativity, we compared negativity levels among three self-identified categories: bullied workers ( $n = 38$ ), witnesses to bullying ( $n = 44$ ), and non-exposed workers ( $n = 321$ ) with a one-



Table V. Workplace negativity (degree) and work quality outcomes for three self-identified groups

<i>Worker group</i>	<i>Degree</i>	<i>Stress</i>	<i>Satisfaction</i>	<i>Ranking</i>
Targets (38)	19.6 (8.1) <sup>d</sup>	4.1 (0.92) <sup>a</sup>	2.9 (1.2) <sup>b</sup>	2.9 (0.95) <sup>c</sup>
Witnesses (44)	12.1 (7.2) <sup>d</sup>	3.6 (0.76) <sup>a</sup>	3.1 (1.3) <sup>b</sup>	3.5 (1.1) <sup>c</sup>
Non-exposed (321)	7.6 (5.8) <sup>d</sup>	3.2 (1.0) <sup>a</sup>	4.0 (1.0) <sup>b</sup>	4.1 (0.87) <sup>c</sup>
F statistic	64.89**	5.12*	26.19**	30.77**

*Notes:* Degree scores ranged from 0 to 41.

Means for satisfaction, ranking, and stress range from 1 to 5, with higher scores indicating greater intensity of the variable. Standard deviations are in parentheses.

Means with same subscript (<sup>a,b,c,...</sup>) in the same column differ significantly from each other, per LSD tests.

\*  $p < 0.01$ , \*\*  $p < 0.001$ .

way ANOVA. This produced a significant result, and LSD post-hoc analyses resulted in significant differences for bullying degree among groups. Self-identified targets reported the highest bullying degree scores (mean = 19.6, SD 8.1), followed by witnesses (mean = 12.1, SD 7.2) and then non-exposed workers (mean = 7.6, SD = 5.8) ( $F(2, 403) = 64.89, p < 0.001$ ; see Table V). This suggests that even when workers do not self-identify as targets, if they work in an environment where they see others being abused, they also experience higher levels of negativity than do non-exposed workers. Thus Hypothesis 5 was supported.

We further hypothesized (H6), 'Witnesses to bullying will report work quality outcomes that are better than target outcomes but worse than non-exposed worker outcomes'. Again, using self-identification as the grouping criterion, we analysed levels of job satisfaction, job stress, and rating of overall job experience with a one-way ANOVA. This produced a significant result, and LSD post-hoc analyses indicated significant differences for all three work quality outcomes among all three groups (see Table V). Job satisfaction was highest for non-exposed workers (mean = 4.0, SD 1.0), followed by witnesses (mean = 3.1, SD = 1.3), and then targets (mean = 2.9, SD = 1.2) ( $F(2, 400) = 26.19, p < 0.011$ ). Similarly, non-exposed workers ranked their overall work experiences highest (mean = 4.1, SD = 0.87), followed by those who saw others being bullied (mean = 3.5, SD = 1.1), and then targets (mean = 2.9, SD = 0.95) ( $F(2, 399) = 30.77, p < 0.001$ ). The same pattern was evident in reported stress levels; targets reported the highest stress levels (4.1, SD = 0.92), followed by witnesses (mean = 3.6, SD = 0.76), and then non-exposed workers (mean = 3.2, SD = 1.0) ( $F(2, 397) = 5.71, p < 0.05$ ). Thus, we found support for Hypothesis 6.

## DISCUSSION

The central contributions of this study include (a) assessing the prevalence of bullying in a US sample, (b) exploring US workers' perceptions of being bullied, (c) introducing the bullying degree construct, and (d) examining the impact of witnessing others being bullied. According to our analyses, based on an operational definition of bullying as

being composed of two or more negative acts occurring at least weekly for six months or longer, one quarter of respondents in this study were bullied at work. Of potentially more interest is the fact that only one-third of this group (and only 9.4 per cent of the entire sample) self-identified as targets. This suggests that although US workers in this study reported persistent negativity in the workplace, they did not always equate that negativity with the concept of *bullying*. Although we cannot say definitively why this difference occurred, it could be that respondents have naturalized bullying as a normal part of the job, that 'bullying' terminology has not made its way into popular American language, or that US workers in this study associated the term with weakness or passivity and therefore avoided self-labelling. Indeed, the competitiveness of the US culture may contribute to perceptions that being bullied reflects weakness. It also is possible that respondents successfully defended themselves against negative acts and thus believed their experiences fell outside the global definition that indicated bullying was a 'situation where the targets have difficulty defending themselves'. As noted, international studies show the same pattern of differences between operationally-defined and self-identified bullying prevalence (Rayner, 1999; Salin, 2001).

Comparing bullying prevalence across samples is complicated, because the phenomenon has been measured in varied ways over different periods of time. Despite the use of different measurements and time frames, evidence suggests that prevalence of bullying and aggression in different US studies of aggression (Keashly and Jagatic, 2000; Keashly and Neuman, 2005; Schat et al., 2006) and a UK bullying study employing the NAQ (Hoel and Cooper, 2000; Hoel et al., 2001) are comparable to our findings (see Table III). Given that the USA and UK share many cultural similarities (Hofstede, 1998), this perhaps should not be surprising. Similar rates of bullying to the current study were evident based on self-identification as bullied (Hoel and Cooper, 2000) and number of persistent negative acts (Keashly and Jagatic, 2000; Keashly and Neuman, 2005; Schat et al., 2006). This same similarity was not present between the current study and Scandinavian research, however.

Comparisons indicate that persistent workplace negativity is significantly higher in the US sample than in Scandinavian samples. Given the data available, we can speculate that approximately 35–50 per cent of US workers experience one negative act at least weekly in any 6–12 month period, and nearly 30 per cent experience at least two types of negativity frequently. Thus, reported negativity levels for US employees are 20–50 per cent higher than those reported by Scandinavian workers. This suggests that people in the US sample perceived their workplaces as filled with more negative acts than did Scandinavian employees, which could indicate that their workplaces actually were more negative, that they were more likely to perceive actions as negative, or both.

Workers who perceived they were bullied reported all negative acts, except physical attack, at significantly higher frequencies than non-bullied workers. What is potentially more revealing is that there appears to be a cluster of negative acts associated with perceived bullying and subsequent self-labelling. Unlike work overload and impossible deadlines – ubiquitous realities in the modern workplace – behaviours that discriminate between self-identified targets and non-targets represent serious threats to identity (humiliation and ridicule), economic stability (information withheld and hints to quit), and physical safety (threatening behaviour, faced with hostility). These behaviours are

more egregious ruptures of civil discourse at work, seriously transgress norms of appropriate workplace behaviour, and go further to fundamentally threaten essential life domains (professional/personal identity, ability to provide for oneself, security of physical safety). As such, they are more likely to incite fear, dread, and fight-responses (Alberts et al., 2005).

In addition to negative target impact, this study underscores that even non-bullied witnesses report elevated negativity and stress and, in contrast, indicate decreased work satisfaction and overall rating of their work experiences. This is an important insight that is consistent with past literature exploring the impact of bullying on witnessing co-workers (Jennifer et al., 2003; Vartia, 2001, 2003) and reminds organizational members, managers, and researchers to look beyond the dyadic interaction between bully and target to the broader negative impact of bullying on workgroups and organizations. Thus, bullying is not simply an interpersonal issue but is an organizational dynamic that impacts all who are exposed – whether primarily or secondarily (Barling, 1996).

Finally, by exploring the features of bullying (intensity, frequency, duration), it is possible to construct gradations or degrees of bullying. Findings suggest that bullying is a complex phenomenon most effectively conceptualized on a continuum. Using the metaphor of being burned by degree, the current study provides statistical evidence that as bullying degree increases, so do negative outcomes. Low levels of abuse, something we might term ‘pre-bullying’, can be compared to first-degree burns (e.g. sunburn). Like sunburn, low levels of bullying can cause damage over time, but are common, potentially superficial, and usually quick to heal. More intensive, frequent and persistent levels of bullying are similar to second-degree burns, because this level of abuse is more painful and often requires professional treatment and intervention to heal. Last, extremely escalated cases of bullying are similar to third-degree burns. Such serious burns often result in deep scarring and permanent damage. Likewise, high degree bullying may result in permanent psychological damage, post-traumatic stress disorder, increased risk of heart disease, and even suicide (Kivimäki et al., 2005; Leymann, 1990; Mikkelsen and Einarsen, 2001). Our analyses suggest that bullying degree impacts workers’ experiences in fundamental ways and that being bullied is not unitary, but rather is a varied experience that occurs on an escalating continuum.

This study of a sample of US workers builds on current understanding of abuse and harassment at work. It expands the workplace sexual and racial harassment literature to include more common forms of abuse and mistreatment (Richman et al., 1999; Rospenda et al., 2000) that embrace the experiences of workers outside of statutorily-protected worker groups in the USA (Yamada, 2000). The study is one of the first to examine specifically the prevalence of bullying in a US sample using the internationally-utilized NAQ.

### **Limitations and Future Research**

In this investigation, the self-identification prevalence measurement indicated that 28 per cent of respondents felt they had been bullied sometime during their work history.

However, qualitative responses, at times, alluded to abuse that lasted less than six months. This suggests that although the NAQ stipulates, 'during the past six months, how often have you experienced the following . . .', some respondents may report acts that have occurred for less than six months. Regardless of survey wording, this implies that workers may have different conceptualizations of bullying than do researchers (as argued by Liefoghe and MacKenzie-Davey, 2003).

Only for those who self-identified as 'bullied' do we have a continuous measure for duration beyond the six-month frame measured by the NAQ. Considerable evidence suggests that bullying usually lasts longer than six months. Self-identified targets in the current study reported an average duration 18.6 months, and Namie (2000) report an average duration of 16.5 months. Longer durations increase the level of hostility and related harm associated with bullying (Keashly and Neuman, 2002). Longitudinal research has found that those exposed to chronic abuse, at least two years in duration, show deeper and more far-ranging effects, particularly for more distal outcomes like substance abuse (Richman et al., 2001). In this study too, self-identified targets' qualitative responses suggest that the longer bullying continues, the greater the cumulative harm. Future research might consider asking for each negative act: 'How many months did this continue?'. This would provide a more accurate and continuous duration variable for each negative act and thus avoid measuring bullying with reported negative acts that may have been short-lived.

Inquiring about the source of aggression is also important. In this study, 60 per cent of those self-identifying as bullied reported one or more supervisors as the aggressors, and research suggests that bullying from supervisors is more hurtful than from co-worker aggression (Keashly and Neuman, 2005; Keashly et al., 2004; Schat et al., 2006). Clearly, knowing the identity of the aggressor is important in understanding the experience of workplace bullying.

Furthermore, there is some controversy over the characteristic of power disparity (i.e. an inability to defend oneself against abuse) when operationalizing the bullying construct. If bullying is a form of interpersonal aggression in which those targeted end up in an inferior position, then researchers must determine whether such a disparity feature is present. Measuring perceived power disparity is especially important since by most definitions, acts of aggression would not be considered workplace bullying without this feature. As such, in addition to inquiring about perpetrators, future research could fruitfully ask about respondents' efficacy at defending against and/or stopping each negative act.

Another issue concerns whether the online survey drew more workers who felt abused at work than what is representative in the general US workforce. We took many precautions to avoid this possibility, since one of our central goals was to estimate the *rate* of abuse in a US worker sample. As noted, to avoid drawing a skewed sample, *all* communication regarding the research referred to the project as a general workplace survey seeking general information about respondents' jobs. Additionally, we structured the first half of the survey by embedding the NAQ items into a larger survey that included positive experiences at work to mask further the bullying focus.

Nevertheless, there is the potential that a fraction of the initial respondents may have purposely forwarded the survey to someone who was being abused at work. Certainly,

future researchers would be advised to consider this limitation, and with more resources, try to control for it. We would note, however, that we do not believe this potential limitation greatly affected our findings. Comparisons with other US studies (see Table III) suggest that the percentage of persons experiencing persistent negative acts at work in other studies is comparable. We estimate that the differences would be far higher if the current sample were skewed towards abused workers. Conversely, some industries at elevated risk of aggressive behaviour (e.g. service, government) are under-represented (Schat et al., 2006). Thus, level of abuse in the USA may in fact be more extreme than this sample's results indicate.

Finally, although we conducted comparisons among studies, researchers should keep in mind that numbers do not account for differences in linguistic and cultural meanings respondents may attribute to words or phrases, especially as survey tools are translated from one language to another. Although the NAQ is authored by a British and a Norwegian scholar (an aspect that enhances its usefulness across national samples), even the UK and USA differ in regard to language conventions, meanings, and word use. As noted, we revised the wording of a question about being sent 'co-entry'. Future scholars may consider further refining the measure to better fit American workers. Nevertheless, the NAQ is currently the most widely-used measure of bullying, and therefore seems best poised to assess whether differences in bullying rates exist across international samples. Furthermore, the NAQ demonstrates high reliability across studies.

In conclusion, we believe that this study indicates that workplace bullying, as an under-reported and relatively under-analysed phenomenon, is alive and well in the US workplace. Although documenting its existence is a crucial step for tackling the issue, there is much work to be done if we hope to reduce or prevent workplace bullying. Further research is crucial to examine the negative physical and emotional effects of bullying on US workers and ways to prevent such damage. Certainly, the recent medical research linking high levels of perceived justice to lowered risk of coronary heart disease (Kivimäki et al., 2005) is convincing evidence that being treated fairly at work is crucial to workers' health and well-being. The responses in this study suggest a wide range of damage that targets suffer – damage that is costly to organizations, communities and families. Additionally, we need to explore further the secondary harm to employees who witness others being bullied. Finally, but importantly, researchers should further examine the organizational and cultural structures that enable, trigger, and reward bullying in the USA. Bullying does not arise solely as a function of personality, but flourishes in specific workgroups that normalize competitive, abusive behaviour (Salin, 2003). If scholars wish to reduce the occurrence of bullying at work, they must address the larger, structural issues that allow it to persist (Hoel and Salin, 2003; Neuman and Baron, 2003; Salin, 2003; Zapf, 1999).

## NOTE

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## REFERENCES

- Adams, A. and Crawford, N. (1992). *Bullying at Work: How to Confront and Overcome it*. London: Virago Press.
- Ahmed, E. and Braithwaite, J. (forthcoming). 'Shame, pride, and workplace bullying'. In Karstedt, S., Loader, I. and Strang, H. (Eds), *Emotions, Crime and Justice*. Oxford: Hart Publishing.
- Alberts, J. K., Lutgen-Sandvik, P. and Tracy, S. J. (2005). *Workplace Bullying: A Case of Escalated Incivility*. International Communication Association Annual Convention, New York.
- Andersson, L. M. and Pearson, C. (1999). 'Tit for tat? The spiraling effect of incivility in the workplace'. *Academy of Management Review*, **24**, 454–71.
- Aquino, K. and Bradfield, M. (2000). 'Perceived victimization in the workplace: the role of situational factors and victim characteristics'. *Organization Science*, **11**, 525–37.
- Ashforth, B. E. (1994). 'Petty tyranny in organizations'. *Human Relations*, **47**, 755–78.
- Barling, J. (1996). 'The prediction, experience and consequences of workplace violence'. In VanderBos, G. R. and Bulatao, E. Q. (Eds), *Violence on the Job*. Washington, D.C.: American Psychological Association, 29–50.
- Baron, R. A. and Neuman, J. H. (1996). 'Workplace violence and workplace aggression: evidence on their relative frequency and potential causes'. *Aggressive Behavior*, **22**, 161–73.
- Baron, R. A. and Neuman, J. H. (1998). 'Workplace aggression – the iceberg beneath the tip of workplace violence: evidence on its forms, frequency and targets'. *Public Administration Quarterly*, **21**, 446–64.
- Bennett, R. J. and Robinson, S. L. (2000). 'Development of a measure of workplace deviance'. *Journal of Applied Psychology*, **85**, 349–60.
- Björkqvist, K., Osterman, K. and Hjelt-Back, M. (1994). 'Aggression among university employees'. *Aggressive Behavior*, **20**, 173–84.
- Brodsky, C. (1976). *The Harassed Worker*. Lexington, MA: D.C. Health and Company.
- Burnazi, L. and Keashly, L. (2005). *Aggression Revisited: Prevalence, Outcomes and Antecedents*. Annual Meeting of the Academy of Management, Honolulu.
- Cowie, H., Naylor, P., Rivers, I., Smith, P. K. and Pereira, B. (2002). 'Measuring workplace bullying'. *Aggression and Violent Behavior: A Review Journal*, **7**, 33–51.
- Cox, H. (1991). 'Verbal abuse nationwide. Part II: Impact and modifications'. *Nursing Management*, **22**, 66–7.
- Coyne, I., Seigne, E. and Randall, P. (2000). 'Predicting workplace victim status from personality'. *European Journal of Work and Organizational Psychology*, **9**, 335–49.
- Crawford, N. (2001). 'Organisational responses to workplace bullying'. In Tehrani, N. (Ed.), *Building a Culture of Respect: Managing Bullying at Work*. London: Taylor and Francis, 21–31.
- Cropanzano, R. and Randall, M. L. (1993). 'Injustice and work behavior: a historical review'. In Cropanzano, R. (Ed.), *Justice in the Workplace: Approaching Fairness in Human Resource Management*. Hillsdale, NJ: Lawrence Erlbaum Associates, 3–20.
- Cunney, K. A. and Perri, M. (1991). 'Single-item versus multiple-item measures of health-related quality of life'. *Psychological Reports*, **69**, 1, 127–30.
- Davenport, N., Schwartz, R. D. and Elliott, G. P. (2002). *Mobbing: Emotional Abuse in the American Workplace*, 2nd edition. Ames, IA: Civil Society Publishing.
- Dougherty, D. S. and Smythe, M. J. (2004). 'Sensemaking, organizational culture, and sexual harassment'. *Journal of Applied Communication Research*, **32**, 293–317.
- Duffy, M. K., Ganster, D. C. and Pagon, M. (2002). 'Social undermining in the workplace'. *Academy of Management Journal*, **45**, 331–51.
- Einarsen, S. (1999). 'The nature and causes of bullying at work'. *International Journal of Manpower*, **20**, 16–27.
- Einarsen, S. (2000). 'Harassment and bullying at work: a review of the Scandinavian approach'. *Aggression and Violent Behavior: A Review Journal*, **5**, 371–401.
- Einarsen, S. and Hoel, H. (2001). *The Negative Acts Questionnaire: Development, Validation and Revision of a Measure of Bullying at Work*. 10th European Congress on Work and Organisational Psychology, Prague.
- Einarsen, S. and Mikkelsen, E. G. (2003). 'Individual effects of exposure to bullying at work'. In Einarsen, S., Hoel, H., Zapf, D. and Cooper, C. L. (Eds), *Bullying and Emotional Abuse in the Workplace: International Perspectives in Research and Practice*. London: Taylor and Francis, 127–44.
- Einarsen, S. and Skogstad, A. (1996). 'Bullying at work: epidemiological findings in public and private organisations'. *European Journal of Work and Organizational Psychology*, **5**, 185–202.
- Einarsen, S., Raknes, B. I. and Mattheisen, S. B. (1994). 'Bullying and harassment at work and their relationships to work environment quality: an exploratory study'. *The European Work and Organizational Psychologist*, **4**, 381–401.

- Einarsen, S., Hoel, H., Zapf, D. and Cooper, C. L. (Eds) (2003). 'The concept of bullying at work'. In *Bullying and Emotional Abuse in the Workplace: International Perspectives in Research and Practice*. London: Taylor and Francis, 3–30.
- Fox, S. and Spector, P. (Eds) (2005). *Counterproductive Work Behavior*. Washington, D.C.: American Psychological Association.
- Fox, S., Spector, P. E. and Miles, D. (2001). 'Counterproductive work behaviors (cwb) in response to job stressors and organizational justice: some mediator and moderator tests for autonomy and emotions'. *Journal of Vocational Behavior*, **59**, 291–309.
- Harlos, K. P. and Pinder, C. (1999). 'Patterns of organizational injustice: a taxonomy of what employees regard as unjust'. In Wagner, J. (Ed.), *Advances in Qualitative Organization Research*. Stamford, CT: JAI Press, **II**, 97–125.
- Hasson, D. and Arnetz, B. B. (2005). 'Validation and findings comparing VAS vs. Likert scales for psychosocial measurements'. *The International Electronic Journal of Health Education*, **8**, 178–92.
- Hoel, H. and Cooper, C. L. (2000). *Destructive Conflict and Bullying at Work*. Manchester: University of Manchester Institute of Science and Technology (UMIST).
- Hoel, H. and Salin, D. (2003). 'Organisational antecedents of workplace bullying'. In Einarsen, S., Hoel, H., Zapf, D. and Cooper, C. L. (Eds), *Bullying and Emotional Abuse in the Workplace: International Perspectives in Research and Practice*. London: Taylor and Francis, 203–18.
- Hoel, H., Rayner, C. and Cooper, C. L. (1999). 'Workplace bullying'. In Cooper, C. L. and Robertson, I. T. (Eds), *International Review of Industrial and Organizational Psychology*, **14**, 195–230.
- Hoel, H., Cooper, C. L. and Faragher, B. (2001). 'The experience of bullying in Great Britain: the impact of organizational status'. *European Journal of Work and Organizational Psychology*, **10**, 443–65.
- Hofstede, G. H. (1980). *Culture's Consequences: International Differences in Work-Related Values*. Newbury Park, CA: Sage.
- Hofstede, G. H. (1993). 'The cultural constraints of management theories'. *The Executive*, **7**, 1, 81–94.
- Hofstede, G. H. (1998). *Masculinity and Femininity: The Taboo Dimension of National Cultures*. Thousand Oaks, CA: Sage.
- Hubert, A. B. and van Veldhoven, M. (2001). 'Risk factors for undesired behavior and mobbing'. *European Journal of Work and Organizational Psychology*, **10**, 415–24.
- Infante, D. A. and Rancer, A. S. (1996). 'Argumentativeness and verbal aggressiveness: a review of recent theory and research'. *Communication Yearbook*, **19**, 319–51.
- Jennifer, D., Cowie, H. and Anaiadou, K. (2003). 'Perceptions and experience of workplace bullying in five different working populations'. *Aggressive Behavior*, **29**, 489–96.
- Keashly, L. (1998). 'Emotional abuse in the workplace: conceptual and empirical issues'. *Journal of Emotional Abuse*, **1**, 1, 85–117.
- Keashly, L. (2001). 'Interpersonal and systemic aspects of emotional abuse at work: the target's perspective'. *Violence and Victims*, **16**, 233–68.
- Keashly, L. and Harvey, S. (2005). 'Emotional abuse in the workplace'. In Fox, S. and Spector, P. (Eds), *Counterproductive Work Behaviors*. Washington, D.C.: American Psychological Association, 201–36.
- Keashly, L. and Jagatic, K. (2000). *The Nature, Extent and Impact of Emotional Abuse in the Workplace: Results of a Statewide Survey*. Academy of Management Conference, Toronto.
- Keashly, L. and Jagatic, K. (2003). 'By any other name: American perspectives on workplace bullying'. In Einarsen, S., Hoel, H., Zapf, D. and Cooper, C. L. (Eds), *Bullying and Emotional Abuse in the Workplace: International Perspectives in Research and Practice*. London: Taylor and Francis, 31–91.
- Keashly, L. and Neuman, J. H. (2002). *Exploring Persistent Patterns of Workplace Aggression*. 'Workplace Abuse, Aggression, Bullying, and Incivility: Conceptual and Empirical Insights' symposium, Meeting of the Academy of Management, Denver.
- Keashly, L. and Neuman, J. H. (2005). 'Bullying in the workplace: its impact and management'. *Employee Rights and Employment Policy Journal*, **8**, 335–73.
- Keashly, L. and Nowell, B. L. (2003). 'Conflict, conflict resolution and bullying'. In Einarsen, S., Hoel, H., Zapf, D. and Cooper, C. L. (Eds), *Bullying and Emotional Abuse in the Workplace: International Perspectives in Research and Practice*. London: Taylor and Francis, 339–58.
- Keashly, L., Trott, L. M. and MacLean, L. M. (1994). 'Abusive behavior in the workplace: a preliminary investigation'. *Violence and Victims*, **9**, 125–41.
- Keashly, L., Neuman, J. H. and Burnazi, L. (2004). *Persistent Hostility at Work: What Really Hurts?* 'Bullying in the Workplace: Foundations, Forms, and Future Directions' symposium, Meeting of the Society of Industrial and Organizational Psychology, Chicago.

- Kelloway, E. K., Barling, J. and Hurrell, J. J. J. (2006). *Handbook of Workplace Violence*. Thousand Oaks, CA: Sage.
- Kivimäki, M., Ferrie, J. E., Brunner, E., Head, J., Shipley, M. J., Vahtera, J., et al. (2005). 'Justice at work and reduced risk of coronary heart disease among employees'. *Archives of Internal Medicine*, **165**, 2245–51.
- Lee, D. (2002). 'Gendered workplace bullying in the restructured UK Civil Service'. *Personnel Review*, **31**, 205–22.
- Leymann, H. (1990). 'Mobbing and psychological terror at workplaces'. *Violence and Victims*, **5**, 119–26.
- Leymann, H. and Gustafsson, A. (1996). 'Mobbing at work and the development of post-traumatic stress disorders'. *European Journal of Work and Organizational Psychology*, **5**, 251–75.
- Liefooghe, A. P. D. and MacKenzie-Davey, K. (2003). 'Explaining bullying at work: why should we listen to employee accounts?'. In Einarsen, S., Hoel, H., Zapf, D. and Cooper, C. L. (Eds), *Bullying and Emotional Abuse in the Workplace: International Perspectives in Research and Practice*. London: Taylor and Francis, 219–30.
- Loo, R. (2002). 'A caveat on using single-item versus multiple-item scales'. *Journal of Managerial Psychology*, **17**, 68–75.
- Lutgen-Sandvik, P. (2003a). "But Words Will Never Hurt Me . . .": An Exploratory Study of US Workplace Bullying. National Communication Association Annual Convention, Miami Beach.
- Lutgen-Sandvik, P. (2003b). 'The communicative cycle of employee emotional abuse: generation and regeneration of workplace mistreatment'. *Management Communication Quarterly*, **16**, 471–501.
- Lutgen-Sandvik, P. (2006). "'Take this job and . . ." Quitting and other forms of resistance to workplace bullying'. *Communication Monographs*, **73**, 406–33.
- Magley, V. J., Hulin, C. L., Fitzgerald, L. F. and DeNardo, M. (1999). 'Outcomes of self-labeling on sexual harassment'. *Journal of Applied Psychology*, **84**, 390–402.
- Marais-Steinman, S. and Herman, M. (1997). *Corporate Hyenas at Work: How to Spot and Outwit Them by Being Hyenaverse*. Pretoria: Kagiso Publishers.
- Meares, M. M., Oetzel, J. G., Derkacs, D. and Ginossar, T. (2004). 'Employee mistreatment and muted voices in the culturally diverse workforce'. *Journal of Applied Communication Research*, **32**, 4–27.
- Mikkelsen, E. G. and Einarsen, S. (2001). 'Bullying in Danish work-life: prevalence and health correlates'. *European Journal of Work and Organizational Psychology*, **10**, 393–413.
- Nagy, M. S. (2002). 'Using a single-item approach to measure facet job satisfaction'. *Journal of Occupational and Organizational Psychology*, **75**, 77–86.
- Namie, G. (2000). US hostile workplace survey 2000. <http://www.bullyinginstitute.org> (accessed on 10 July 2001).
- Namie, G. (2003). The WBTI 2003 report on abusive workplaces. <http://www.bullyinginstitute.org> (accessed on 19 October 2003).
- Neuman, J. H. (2000). *Injustice, Stress, and Bullying Can Be Expensive!* Workplace Bullying Conference, Oakland, CA.
- Neuman, J. H. (2004). 'Injustice, stress, and aggression in organizations'. In Griffin, R. W. and O'Leary-Kelly, A. M. (Eds), *The Dark Side of Organizational Behavior*. San Francisco, CA: Jossey-Bass.
- Neuman, J. H. and Baron, R. A. (2003). *Social Antecedents of Bullying: A Social Interactionist Perspective*. London: Francis and Taylor.
- Neuman, J. H. and Baron, R. A. (2005). 'Aggression in the workplace: a social-psychological perspective'. In Fox, S. and Spector, P. (Eds), *Counterproductive Work Behaviors*. Washington, D.C.: American Psychological Association, 13–40.
- Neuman, J. H. and Keashly, L. (2004). *Development of the Workplace Aggression Research Questionnaire (WAR-Q): Preliminary data from the Workplace Stress and Aggression Project*. 'Theoretical Advancements in the Study of Anti-Social Behavior at Work' symposium, meeting of the Society for Industrial and Organizational Psychology, Chicago.
- Newman, K. L. and Nollen, S. D. (1996). 'Culture and congruence: the fit between management practices and national culture'. *Journal of International Business Studies*, **27**, 753–80.
- Niedl, K. (1996). 'Mobbing and wellbeing: economic and personal development implications'. *European Journal of Work and Organizational Psychology*, **5**, 239–49.
- O'Leary-Kelly, A. M., Duffy, M. K. and Griffin, R. W. (2000). 'Construct confusion in the study of antisocial work behavior'. *Research in Personnel and Human Resources Management*, **18**, 275–303.
- Olweus, D. (2003). 'Bully/victim problems in school: basic facts and an effective intervention programme'. In Einarsen, S., Hoel, H., Zapf, D. and Cooper, C. L. (Eds), *Bullying and Emotional Abuse in the Workplace: International Perspectives in Research and Practice*. London: Taylor and Francis, 62–78.



- Pearson, C., Andersson, L. M. and Porath, C. L. (2004). 'Workplace incivility'. In Spector, P. and Fox, S. (Eds), *Counterproductive Workplace Behavior: Investigations of Actors and Targets*. Washington, D.C.: American Psychological Association, 177–200.
- Price Spatlan, L. (1995). 'Interpersonal conflict which includes mistreatment in a university workplace'. *Violence and Victims*, **10**, 285–97.
- Pryor, J. B. and Fitzgerald, L. F. (2003). 'Sexual harassment research in the US'. In Einarsen, H., Hoel, H., Zapf, D. and Cooper, C. L. (Eds), *Bullying and Emotional Abuse in the Workplace*. London: Taylor and Francis, 79–100.
- Randall, P. (2001). *Bullying in Adulthood: Assessing the Bullies and Their Victims*. New York: Brunner-Routledge.
- Rayner, C. (1997). 'The incidence of workplace bullying'. *Journal of Community and Applied Social Psychology*, **7**, 199–208.
- Rayner, C. (1999). 'A comparison of two methods for identifying targets of workplace bullying'. In *Abstracts for the Ninth European Congress on Work and Organizational Psychology*. Helsinki: Finnish Institute of Occupational Health.
- Rayner, C. and Keashly, L. (2005). 'Bullying at work: a perspective from Britain and North America'. In Fox, S. and Spector, P. (Eds), *Counterproductive Work Behaviors*. Washington, D.C.: American Psychological Association, 271–96.
- Rayner, C., Hoel, H. and Cooper, C. L. (2002). *Workplace Bullying: What We Know, Who Is To Blame, and What Can We Do?* London: Taylor and Francis.
- Richman, J. A., Rospenda, K. M., Nawyn, S. J., Flaherty, J. A., Fendich, M., Drum, M., et al. (1999). 'Sexual harassment and generalized workplace abuse among university employees: prevalence and mental health correlates'. *American Journal of Public Health*, **89**, 358–63.
- Richman, J. A., Rospenda, K. M., Flaherty, J. A. and Freels, S. (2001). 'Workplace harassment, active coping, and alcohol-related outcomes'. *Journal of Substance Abuse*, **13**, 347–66.
- Rospenda, K. M. (2002). 'Workplace harassment, service utilization, and drinking outcomes'. *Journal of Occupational Health Psychology*, **2**, 141–55.
- Rospenda, K. M., Richman, J. A., Wislar, J. S. and Flaherty, J. A. (2000). 'Chronicity of sexual harassment and generalized workplace abuse: effects on drinking outcomes'. *Addiction*, **95**, 1805–20.
- Salin, D. (2001). 'Prevalence and forms of bullying among business professionals: a comparison of two different strategies for measuring bullying'. *European Journal of Work and Organizational Psychology*, **10**, 425–41.
- Salin, D. (2003). 'Ways of explaining workplace bullying: a review of enabling, motivating and precipitating structures and processes in the work environment'. *Human Relations*, **56**, 1213–32.
- Schat, A. C. H., Frone, M. R. and Kelloway, E. K. (2006). 'Prevalence of workplace aggression in the US workforce: findings from a national study'. In Kelloway, E. K., Barling, J. and Hurrell, J. J. J. (Eds), *Handbook of Workplace Violence*. Thousand Oaks, CA: Sage.
- Schneider, K. T., Hitlan, R. T. and Radhakrishnan, P. (2000). 'An examination of the nature and correlates of ethnic harassment experiences in multiple contexts'. *Journal of Applied Psychology*, **85**, 3–12.
- Scott, M. J. and Stradling, S. G. (2001). 'Trauma, duress and stress'. In Tehrani, N. (Ed.), *Building a Culture of Respect: Managing Bullying at Work*. London: Taylor and Francis, 33–42.
- Sheehan, M. J. and Jordan, P. J. (2003). 'Bullying, emotions and the learning organisation'. In Einarsen, S., Hoel, H., Zapf, D. and Cooper, C. L. (Eds), *Bullying and Emotional Abuse in the Workplace: International Perspectives in Research and Practice*. London: Taylor and Francis, 359–69.
- Sheehan, K. H., Sheehan, D. V., White, K., Leibowitz, A. and Baldwin, D. C. (1990). 'A pilot study of medical student abuse'. *Journal of the American Medical Association*, **263**, 533–7.
- Tepper, B. J. (2000). 'Consequences of abusive supervision'. *Academy of Management Journal*, **43**, 178–90.
- Tracy, S. J., Lutgen-Sandvik, P. and Alberts, J. K. (2006). 'Nightmares, demons and slaves: exploring the painful metaphors of workplace bullying'. *Management Communication Quarterly*, **20**, 148–85.
- US Department of Labor (2006). Industry at a glance. <http://stats.bls.gov/iag/iaghome.htm> (accessed on 5 April 2006).
- Vardi, Y. and Weitz, E. (2004). *Misbehavior in Organizations*. Mahwah, NJ: Lawrence Erlbaum.
- Vartiainen, M. (2001). 'Consequences of workplace bullying with respect to the well-being of its targets and the observers of bullying'. *Scandinavian Journal of Work Environment and Health*, **27**, 63–9.
- Vartiainen, M. (2003). *Workplace Bullying: A Study on the Work Environment, Well-Being and Health* (No. 56). Finnish Institute of Occupational Health, People and Work Research Reports.
- Wanous, J. P., Reichers, A. E. and Hudy, M. J. (1997). 'Overall job satisfaction: how good are single-item measures?'. *Journal of Applied Psychology*, **82**, 247–52.

- Williams, K. D. and Sommer, K. L. (1997). 'Social ostracism by co-workers: does rejection lead to loafing or compensation?'. *Personality and Social Psychology Bulletin*, **23**, 693–706.
- Yamada, D. (2000). 'The phenomenon of "workplace bullying" and the need for status-blind hostile work environment protection'. *Georgetown Law Journal*, **88**, 475–536.
- Zapf, D. (1999). 'Organisational, work group related and personal causes of mobbing/bullying at work'. *International Journal of Manpower*, **20**, 1/2, 70–85.
- Zapf, D. and Einarsen, S. (2005). 'Mobbing at work: escalated conflicts'. In Fox, S. and Spector, P. (Eds), *Counterproductive Work Behaviors*. Washington, D.C.: American Psychological Association.
- Zapf, D., Knorz, C. and Kulla, M. (1996). 'On the relationship between mobbing and bullying at work'. *International Journal of Manpower*, **5**, 215–37.
- Zapf, D., Einarsen, S., Hoel, H. and Vartia, M. (2003). 'Empirical findings on bullying in the workplace'. In Einarsen, S., Hoel, H., Zapf, D. and Cooper, C. L. (Eds), *Bullying and Emotional Abuse in the Workplace: International Perspectives in Research and Practice*. London: Taylor and Francis, 103–26.

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