Bullying Among Hospital Staff: Use of Psychometric Triage to Identify Intervention Priorities

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Abstract

Survey of workplace bullying in a Norwegian hospital found that 10% of nurses, therapists, and physicians (N=440) had witnessed bullying. Negative Acts Questionnaire (NAQ) scores were low, Minnesota Satisfaction Questionnaire (MSQ) scores were positive, and Organizational Commitment Questionnaire (OCQ) scores were neutral. NAQ scores and having witnessed bullying both predicted low MSQ scores, low over-all job satisfaction, and low OCQ scores. By psychometric triage, some of the NAQ's 22 negative acts can be identified for priority administrative intervention based on a) the degree to which NAQ items predict decreased satisfaction and decreased commitment, b) the prevalence rates of particular negative acts, and c) efficiency of intervention. Psychometric triage recommended intervention first on the problem of "necessary information withheld", which had an 18% prevalence rate and predicted lower MSQ and OCQ scores. The second priority should be on "pressure to give up entitlements", which had prevalence of 2% but also predicted lower MSQ and OCQ scores. The third and fourth priorities should focus on "tasks below level of competence" (reported by 51%) and on "unmanageable workload" (reported by 28%), neither of which predicted MSQ or OCQ scores.

Keywords: Bullying; Hospital; Mobbing; Norway; Psychometric Triage

Introduction

"About 200,000 adults [in Norway] are bullied in their workplaces, half of them daily. Both the National Unions Association and the National Society Against Workplace Bullying have confirmed these estimations. Occupational Safety inspectors report that death by suicide due to bullying is greater than deaths by accidents in Norwegian workplaces. We are speaking about 100 unfortunate events per year. We have to put a stop to this."

Norwegian Prime Minister Bondevik, New Year's Speech, 2003

Bullying has long been known to be a serious, disruptive, and sometimes deadly problem in school systems (Olweus, 1992). Decades of research on the dynamics of bullying in schools and on the effectiveness of intervention methods have led to hope that the prevalence and/or the severity of bullying in school systems can be reduced. However, one unfortunate consequence of the long focus on bullying in schools is that many people, if not most, believe that bullying is predominantly a childhood problem. They also believe that bullies are immature and relatively uneducated, and that victims of bullying are somehow weak and ineffectual. Hence, society in general has been slow to conceive that bullying happens in professional settings among well-educated adults engaged in serious activities.

There is ample evidence of bullying of adults, by adults, in workplace settings. The European Journal of Work and Organizational Psychology published a special issue on workplace bullying in 1996. Einarsen and Skogstad (1996) presented an epidemiological study of almost 8000 Norwegian workers and found the prevalence of bullying to be 8% in the public sector and 11% in the private sector. Hoel and Cooper (2000), in an epidemiological study of more than 5000 workers in the UK, found a prevalence rate of 11%. Østvik and Rudmin (2001) reported a replicated prevalence rate of 12% on a Norwegian military base. Most recently, Nielsen, Skogstad et al. (2009) examined data from over 2500 Norwegian workers and found prevalence of bullying to range from 2% to 14% depending on the method of measurement. There has been little evidence, if any, suggesting that bullying is not a problem in workplace settings.

The consequences of workplace bullying can be profoundly negative for the health and well-being of the victims and for the productivity and success of the institution (Einarsen, Raknes, Matthiesen & Hellesøy, 1996; Leymann, 1999). Bullying has been shown to reduce job commitment (Hoel & Cooper, 2000), and in some cases can coincide with suicide (Rayner, Hoel & Cooper, 2002). Sterud, Hem, Lau & Ekeberg (2008) found work place bullying to be a significant predictor of suicidal ideation among Norwegian ambulance personnel.

Hospitals are large organizational institutions, often employing thousands of personnel, many of whom have self-selected for caring professions of which require high levels educational achievement. Nevertheless, bullying and related negative acts are evident in hospital contexts around the world (McAvoy & Murtagh, 2003). For example, bullying has been reported in studies of physicians (e.g., Cheema, Ahmad, Giri, Kaliaperumal & Naqvi, 2005; Quine, 2003; Paice, Aitken, Houghton & Firth-Cozens, 2004; Scott, Blanshard & Child, 2008), in studies of nurses (e.g., Hutchinson, Wilkes, Jackson & Vickers, 2010; Johnson, 2009; Lewis & Malecha, 2011), and in studies of medical personnel generally (e.g., Alexander, Gray, Klein, Hall & Kettles, 2000; Kivimäki, Elovainio & Vahtera, 2000).

The purpose of this study was to seek information that might have utility in reducing the frequency or the severity of bullying in hospital settings. Thus, this study did not seek information on individuals' personalities, which by definition, are not changeable and thus are not open to administrative interventions. Personality approaches to workplace bullying have not been encouraging. Seigne, Coyne, Randall and Parker (2007) queried 300 adults, found 10 confessing to bullying workmates, and found their personality profiles to be similar to those of leaders, namely, extroverted, independent, aggressive. Glasø, Matthiesen, Nielsen and Einarsen (2007, p. 313) compared the personality profiles of 72 victims of workplace bullying with matched controls and concluded: "There is no such thing as a general victim's personality profile". Stagg and Sheridan (2010) summarized reviews of bullying reduction programs and found that workplace programs were directed to helping victims to prepare for bullying and to cope with its consequences.

In accord with a new model of bullying in hospitals emphasizing organizational antecedents (Hutchinson, Jackson, Wilkes & Vickers, 2008), the present study took the perspective of the organization rather than the victims, and sought to use psychometric methods to identify specific acts of bullying that have measured negative consequences for the organization and that might be amenable to administrative intervention. This study also introduces the concept of psychometric triage by which specific acts of bullying may be prioritized for administrative intervention based a) on their correlations with work satisfaction and organizational commitment, b) on their frequency, and c) on their amenability to intervention.

Method

A five-page questionnaire, in Norwegian, was comprised of: 1) descriptive questions about

respondents and their employment status; 2) the Negative Acts Questionnaire (NAQ); 3) the Minnesota Satisfaction Ouestionnaire (MSO): and 4) the Organizational Commitment Questionnaire (OCQ). The NAQ itemizes 22 negative acts, for example, "Ordered to do tasks below your level of competence," with response options on a five-point scale of 1=never, 2=sometimes, 3=monthly, 4=weekly, 5=daily (Einarsen, Raknes, Matthiesen & Hellesøy, 1994). An additional non-scale question asked, "Have you observed or witnessed bullying at your workplace over the last six months?" with response options of 1=no, 2=very rarely, 3=now and then, 4=several times a week, 5=almost daily. The MSQ itemizes 20 aspects of employment, for example, compensation, co-workers, creativity, etc., with response options on a five-point scale of 1=strongly dissatisfied, 2=dissatisfied, 3=neutral, 4=satisfied, 5=strongly satisfied (Weiss, Dawis, England & Lofquist, 1967). An additional non-scale question asked about global satisfaction: "Over all, how satisfied are you with your job?" The OCQ itemizes 9 aspects of organizational commitment, for example, "I believe that [name of organization] holds the same values as myself," with responses on a five-point Likert scale from 1=completely disagree to 3=neutral to 5=completely agree (Mowday, Steers & Porter, 1979). For each of the scales, if three or more items were unanswered, then the scale score was missing for that respondent. If only one or two items were unanswered, then the scale score was the mean of the answered items.

Participants were sampled from the medical, surgical, psychiatric, and administrative divisions of a Norwegian hospital. Of 1000 questionnaires distributed, 440 were returned, for a response rate of 44%. Of the respondents, 75% were female, 25% male. Mean age was 39.3 years (SD=10.3), ranging from 20 to 66. Mean length of employment at the hospital was 8.9 years (SD=8.1). Nurses comprised 49% of the sample, therapeutic staff 33%, and doctors 18%. Also, 89% of respondents had permanent positions. 90% had full-time employment, 55% did shift work, 77% had leadership roles in their work unit, and 19% were union representatives for their work unit. These last two statistics suggest that a self-selection bias may have caused over-representation of those who have responsibility for the workplace milieu.

Results

Questionnaires were answered anonymously and returned by public post in sealed pre-paid envelops. Most respondents (69%) had complete data, and 26% had one or two unanswered items. Of the total 28,160 response opportunities in this study, only 302 (1%) were unanswered, and six persons accounted for 26% of the total missing data.

The Cronbach alpha coefficients for the NAQ, MSQ, and OCQ, respectively, were α =.85, α =.90, and α =.87. For each scale, the inter-item correlations

were all positive, and the item-total correlations were all strongly positive. For the MSQ, the convergent validity of the 20-item scale with the question of over-all satisfaction was r = +.74(*n*=429, *p*<.001).

The mean NAQ score was 1.3 (*SD*=.27), but eight respondents (2%) had NAQ scores greater than 2.0, including one greater than 3.0. For witnessing bullying, the mean response was 1.4 (*SD*=.72), with 73% reporting "never," 16% reporting "very rarely," and 10% "now and then". However, bullying was witnessed "several times per week" by three respondents and "almost daily" by one. One of these four was the respondent with NAQ over 3.0. Thus, negative acts and bullying are infrequent in this hospital setting but are not absent. Using Olweus's (1993) definition of bullying as at least now-and-then, then the prevalence of witnessing bullying in the present study was 10%.

The mean MSQ score was 3.6 (SD=.52) indicating general work satisfaction for this sample, but 12% of the respondents had MSQ scores lower than 3.0, indicating dissatisfaction, and five had scores lower than 2.0. For these five, NAQ scores ranged between 1.32 and 1.95, putting them in the third of the sample most suffering negative acts; four of the five had witnessed bullying "now and then." For the question about over-all satisfaction, the mean response was 4.0 (SD=.68), but 16 respondents (4%) reported dissatisfaction. One was "strongly dissatisfied" over-all; that person had an above average NAQ score of 1.55 but had witnessed bullying "now and then."

The mean OCQ score was 3.1 (*SD*=.71), indicating indifference to organizational commitment, but 36% of the respondents had scores lower than 3.0, indicating lack of commitment. Scores of 2.0 or lower were evident for 28 respondents (6%), three of whom had scores of 1.0. For these 28, NAQ scores were unremarkable, ranging between 1.00 and 1.95, and only three reported themselves dissatisfied over-all. However, five had witnessed bullying "now and then."

Psychometric Triage

The NAQ score was a significant predictor of low MSQ (r=-.46, n=431, p<.001) and of low over-all satisfaction (r=-.35, n=431, p<.001). Witnessing bullying also was a significant predictor of low MSQ (r=-.31, n=396, p<.001) and of low over-all satisfaction (r=-.27, n=396, p<.001). NAQ was a weak predictor of low OCQ (r=-.11, n=436, p<.05), as was witnessing bullying (r=-.12, n=402, p<.05).

Table 1 rank orders negative acts from the most frequent to the least and shows the percentage of the 440 respondents reporting themselves to experience these acts on a weekly or daily basis. The regression beta values show each act's unique predictive relationship to the MSQ and OCQ scores. Contrary to the expectations of the NAQ, practical jokes by colleagues with whom one does not get along were positive predictors of MSQ (β =+.16, *n*=437, *p*<.05).

The concept of "psychometric triage" being introduced here, exploits the cross-sectional selfreport data by analyzing the specific workplace acts in expectation that they are not equally frequent for the workforce, are not equally consequential for the workforce, and are not equally demanding in the resources for remediation. Thus, administrative interventions might be focused on problems 1) that predict dissatisfaction and lower commitment, 2) that are frequent, and 3) that are open to being changed. The present study has data on the first two of these criteria but must speculate or surmise about the last criterion, until methods are developed to measure amenability to change.

In Table 1, three problems were reported occurring daily or weekly by large percentages of the respondents: 1) assigned "work below level of competence" (reported by 51%), 2) given "unmanageable workload" (reported by 28%), and 3) "necessary information withheld" (reported by 18%). Table 1 also shows that two problems were uniquely predictive of lower job satisfaction and lower organizational commitment: 1) "necessary information withheld" ($\beta = -.12$ predicting MSQ and $\beta = -.12$ predicting OCQ), and 2) "pressured to give up entitlements" ($\beta = -.13$ predicting MSQ and $\beta = -.13$ predicting OCQ).

By the triage criteria of consequence, frequency, and remediability, the data in this study recommend that the 1st administrative priority be assuring that no employee has necessary information withheld. Withholding information necessary for work performance in a hospital context not only impairs productivity but might endanger patients. This kind of complaint might be resolved relatively easily, and maybe immediately, by administrative memo to all people in section leadership roles, and possibly to all employees, on the dangers of withholding necessary information. Further administrative intervention might entail establishing and publicizing avenues by which employees might report situations in which necessary information is withheld.

By triage criteria, the 2nd priority problem might be employees being "pressured to give up entitlement" such as holidays, over-time pay, sick days, etc. This was not a frequent complaint, but it did have negative consequences for job satisfaction and organizational commitment, plus it might be easily and immediately reduced by administrative memo, by monitoring that all employees receive entitlements, and, again, by avenues by which employees can report pressure to give up entitlements.

By triage criteria, the 3rd and 4th priority problems are the two frequent ones, even though they had no demonstrable negative consequences in these data. Being assigned "work below level of competence" and being given an "unmanageable workload" might also be eliminated or reduced by administrative memo, by monitoring, and by avenues by which employees can report these problems. Table 1

Triage of work place problems rank ordered from most frequent to least frequent, along with significant (p < .05) prediction of Minnesota Satisfaction Questionnaire (MSQ) scores and Organizational Commitment Questionnaire (OCQ) scores

Negative acts in the workplace (From <i>Negative Acts Questionnaire</i> © by Ståle Einarsen & Helge Hoel, adapted with their permission.)	Reported daily or weekly	Beta predicting MSQ	Beta predicting OCQ
Work below level of competence	51%		
Unmanageable workload	28%		
Necessary information withheld	18%	12	12
Unreasonable deadlines & targets	16%		
Re-assigned to unpleasant tasks	8%	14	
Opinions and views ignored	8%	23	
Focus of gossip and rumors	6%		
Socially excluded	5%		
Ignored when approach	4%	12	
Threatened or actual physical abuse	4%		
Persistent criticisms of work	3%		
Humiliated or ridiculed	3%		
Pressured to give up entitlements	2%	13	13
Practical jokes by unfriendly people	2%	+.16	
Insults about habits and private life	2%		
Focus of excessive monitoring	2%		
Focus of teasing and sarcasm	2%		
Invasion of personal space	2%		
Focus of shouting or anger	2%		
Repeated reminders of past errors	1%		
Focus of false allegations	0%		
Hints to quit job	0%		

Some negative acts listed in Table 1 have not been given priority in this triage. For example, having one's "opinions and views ignored" was reported by 8% of respondents and had demonstrable negative correlation with job satisfaction ($\beta = -.23$ predicting MSQ). Similarly, the problem of being "ignored when approach" was reported by 4% of respondents and had negative correlation with job satisfaction (β = -.12 predicting MSQ). But such behaviors are unlikely to be changed by administrative directives, and it would be difficult to monitor the degree to which an intervention program is effective, since these problems, though serious, are vague and not easily defined. Unlike the four priority problems in

this triage, administrative memo and administrative monitoring are unlikely to be successful. Hence, resources might better to be used on the four priority problems.

Discussion

Other studies of Nordic hospitals reported less prevalence of workplace bullying and negative acts than did this study. For example, bullying was experienced "now and then" by 3% of three samples of nurses (Einarsen & Skogstad, 1996), by 3% of Norwegian assistant nurses (Einarsen, Matthiesen & Skogstad, 1998), and by 3% of staff in a Danish hospital (Mikkelsen & Einarsen, 2001). Other studies have reported higher prevalence rates in hospitals, for example, 5% in a study of 10 Finnish hospitals (Kivimäki, Elovainio & Vahtera, 2000), 8% in a study of Norwegian nursing home staff (Einarsen & Skogstad, 1996), and 10% in a study of Norwegian psychiatric nurses (Matthiesen, Raknes & Røkkum, 1989). The present study's finding that 10% of hospital respondents witnessed workplace bullying is within range of these other studies, but may be an over-estimate considering a) that witnessing bullying is likely more prevalent than experiencing bullying, and b) that 56% of staff declined to complete the research questionnaire.

Institutions experiencing bullying should consider administrative interventions because negative acts in the workplace do coincide with reduced satisfaction and commitment. Intervention is also recommended because bullying tends to escalate (Leymann, 1990). Einarsen et al., (2003, p. 13-14) argue that "during the early phases of the bullying process, victims are typically subjected to aggressive behavior" often indirect, discrete, and difficult to identify, which leads, however, to "bullying, stigmatization and severe trauma". Similarly, Allport (1954) proposed four phases of bullying, with the two initial phases being prejudicial comment, and negative acts behind the victim's back. In Allport's third phase of bullying, the victim is overtly harassed and excluded or subjected to offensive comments or jokes. The data from the present study found overtly aggressive acts to be rare, but administrative slights and interpersonal harassment to be more common.

Admittedly, this triage of negative acts in this sample has an ad hoc quality. For the criterion of "remediability", there are yet no operational definitions by which to quantify this, nor any theory including costs, time, evaluation of effectiveness, etc. Future research should develop theories, operationalizations, and data on this aspect of reducing work place bullying. Furthermore, and surprisingly, there is little, if any, theory of triage. That is, there is no evident theory by which weights can be assigned to criteria such that priority can be calculated. Triage in medicine seems to currently stand as an heuristic practice. Future research needs to develop conceptual and formal theories of triage and "prioritizing" of problems. Future applied studies might first measure NAQ, MSQ, and OCQ at several successive time points in order to establish reliable base rates of the workplace problems. Specific, and perhaps competing, interventions might then be applied to randomly selected administrative units so that the effectiveness of the interventions can be assessed in comparison to the base rate, in comparison to the non-intervention control units, and in comparison to the alternative competing interventions.

In sum, the present study established 1) that bullying and negative acts in the workplace do coincide with reduced job satisfaction and reduced organizational commitment, 2) that this is evident even among highly educated professional staff in a hospital setting, in a nation in which culture, policies, and laws weigh against abuses of individuals, 3) that specific negative workplace acts can be differentiated by frequency and by quantified relationships to job satisfaction and commitment, and 4) that the concept of triage might be useful in planning and enacting interventions to improve workplace morale.

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Research Profile

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