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Cyberbullying: The new face of workplace bullying?

Abstract

While the subject of cyberbullying of children and adolescents has begun to be addressed, there has been less attention or research on cyberbullying in the workplace. Whilst male-dominated workplaces such as manufacturing settings have been found to have an increased risk of workplace bullying, the prevalence of cyberbullying in this sector is not known. This exploratory study investigated the prevalence and methods of face-to-face bullying and cyberbullying of males at work. One hundred and three surveys (a modified version of the NAQ-R\textsuperscript{1}), were returned from randomly selected members of the Australian Manufacturing Worker’s Union (AMWU). The results showed that 34\% of the respondents were bullied face-to-face, and 10.7\% were cyberbullied. All victims of cyberbullying also experienced face-to-face bullying. The implications for organisations of their “duty of care” in regards to this new form of bullying are indicated.

Keywords: workplace bullying, cyberbullying, bullying, Negative Acts Questionnaire (NAQ), manufacturing, behaviour
With the Information and Communication Technology (ICT) revolution over the last decade, there has been a rapid growth in the number of people interacting using modern technologies such as the Internet and mobile phones. In 2005 there were over one billion Internet users and two billion mobile phone users worldwide. This widespread access to modern communication devices has provided an alternative medium for bullies to target their victims. Various terms have been used to describe this new phenomenon, including cyberbullying, electronic bullying, e-bullying, SMS bullying, mobile bullying, online bullying, digital bullying, and Internet bullying. As in the case of face-to-face bullying, this relatively new field of study has initially focussed on children and adolescents, with investigations of cyberbullying in the workplace slow to commence.

Definitions

Workplace bullying is repeated behaviour that offends, humiliates, sabotages, intimidates, or negatively affects someone’s work when there is an imbalance of power. Both face-to-face bullying and cyberbullying are about relationships, power, and control. Workplace bullying is considered to occur when one or more individuals perceive themselves to be the target of repeated and systematic negative acts on at least a weekly basis over a period of six months or longer. There is also an imbalance of power between the perpetrator and the target of bullying, in addition to the victim’s attribution of the perpetrator’s intent to cause harm. It is due to this imbalance of power that the victim’s ability to cope with the exposure to systematic negative acts becomes severely impaired as they may not perceive themselves to be in a position to effectively protect themselves or to be able to remove themselves from the negative situation.

Prevalence
Research in Scandinavian countries has reported workplace bullying prevalence rates from 3.5% to 16%. However, studies conducted in the United Kingdom have found higher prevalence rates. Incidence rates have been estimated from international studies to be between 400,000 and 2 million employees.

Large organisations with a higher ratio of male to female employees in the manufacturing sector have also been shown to have an increased risk of exposure to workplace bullying. Furthermore, male workers and supervisors have been found to be exposed to higher frequencies of negative behaviour due to the often hostile and authoritarian culture of male-dominated work environments.

Consequences

The experience of workplace bullying can have negative consequences on the victim’s physical health and emotional well-being. The impact of workplace bullying can also extend into the victim’s social and family relationships. In addition, future career advancements such as job promotion can be threatened or damaged due to victims taking long-term or recurring sick leave as a result of ill-health from being bullied at work.

The psychological well-being of employees who witness bullying in the workplace can also be compromised producing low staff morale, reduced commitment, lowered job satisfaction, and the breakdown of work relationships and teams.

The impact at the organisational level is an increased rate of absenteeism which, in turn, negatively impacts upon efficiency, productivity, and profitability. High staff turnover due to low workplace morale and the resignation of staff is costly and time consuming requiring recruitment and the retraining of new staff. The reputation of the
organisation may also suffer due to a poor public image as a difficult place to work. These consequences could be exacerbated even more by the new form of workplace cyberbullying.

Cyberbullying

Cyberbullying techniques use modern communication technology to send derogatory or threatening messages directly to the victim or indirectly to others, to forward personal and confidential communication or images of the victim for others to see and to publicly post denigrating messages. The two main electronic devices through which bullying from a distance occurs are online computers providing access to electronic mail (email) and websites, in addition to mobile phones including calls and Short Message Service (SMS).

The emerging literature on research with children and adolescents indicates that cyberbullying is a serious and escalating concern at a global level. Cases have also emerged of bullying at work via email. While cyberbullying in school and at work has become a recent topic in the media research into workplace cyberbullying is still in progress.

Research Aims

The primary aim of this exploratory study was to ascertain the prevalence of face-to-face bullying and cyberbullying in the manufacturing workplace. In addition, organisational size (small, medium, large), type of organisation (private or public sector) and hierarchical job status (worker or supervisor) were investigated to ascertain whether there were any differences in types of negative acts used to bully. Furthermore, both a behavioural inventory and a self-report measure of workplace bullying were used.
Methodology

Participants

Participants were male employees belonging to the Australian Manufacturing Workers Union (AMWU) Queensland. A total of 145 questionnaires were returned of which 84 (57.9%) were from the mail-out and 61 (42.1%) were from the online survey, an overall response rate of 7.3%. However, 42 (29%) of these respondents were excluded from the analysis on the basis of missing data. The total sample for analysis consisted of 103 individuals, of whom 63.1% were recruited via mail-out and 36.9% via email.

The average age for the sample was 43.2 (SD=9.81) ranging from 20 to 60 years. All respondents were employed on a full-time basis. Two respondents did not indicate the type of organisation they worked in. Table 1 presents the main characteristics of the respondents included in the sample.

Table 1

Main characteristics of the respondents included in the sample (N = 103).

<table>
<thead>
<tr>
<th>Job Tenure (%)</th>
<th>Organisational Size (Number of Employees)</th>
<th>Sector (%)</th>
<th>Hierarchical Status (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5 yrs 43.69</td>
<td>&lt; 101 Small 56.31</td>
<td>101-500 Medium 75.79</td>
<td>&gt; 500 Large 62.14</td>
</tr>
<tr>
<td>&gt; 5 yrs 56.31</td>
<td>&lt; 101 Private 58.25</td>
<td>101-500 Public 39.81</td>
<td>&gt; 500 Worker 62.14</td>
</tr>
<tr>
<td></td>
<td>101-500 Supervisory 37.86</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 The last two categories were aggregated to form one supervisory role category for the purposes of analysis.

Although there was a significant difference in age between the sample obtained from mail out and the online survey ($t = 2.55, df = 101, p = .012$), with the internet responders being younger, on average, than the mail responders, there were no significant differences in regards...
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to size of organization ($\chi^2 = 1.03, df = 2, p = .599$), employment sector ($\chi^2 = 0.43, df = 1, p = .510$), or hierarchical status at work ($\chi^2 = 0.07, df = 1, p = .797$). It was therefore decided to combine the data of the two groups.

Procedure

Participants were randomly selected by computer from the AMWU Queensland members’ register comprising of approximately 13,000 individuals from within four divisions (Metal & Engineering; Technical, Supervisory and Administrative (TSA); Printing and Vehicle). Initially a paper version of the questionnaire was posted to the home address of 1000 participants. Included with the questionnaire was a letter from the Union endorsing the research, an information sheet informing voluntary participation and confidentiality of responses in addition to a self-addressed stamped envelope to facilitate the return of the questionnaire. Due to a low response rate another 1000 members, selected on the basis of having an email address on the AMWU Queensland member’s register, were emailed. The email contained the hyper-link to an online version of the survey, an electronic version of the Union endorsed letter and the information sheet.

Measure of Workplace Bullying

The Negative Acts Questionnaire-Revised (NAQ-R) $^1$ comprises 22 items referring to particular behaviours in the workplace that may be perceived as bullying as well as a self-report item on victimization. The behaviours or negative acts are descriptive without labelling the actions as bullying. The behaviours include; being shouted at, being humiliated, having opinions ignored, being excluded, repeated reminders of errors, intimidating behaviour, excessive monitoring of work, and persistent criticism of work and effort. The researchers
modified the NAQ-R to also incorporate cyberbullying modalities of email, SMS, and mobile or landline telephone calls in addition to the original face-to-face modality.

Participants were requested to complete a 5-point Likert scale on how often they had been subjected to these behaviours over the last six months, with response categories ranging from never (1), now and then (2), monthly (3), weekly (4) and daily (5). To estimate the frequency of exposure to both face-to-face and cyberbullying, Leymann’s operational definition of workplace bullying of one incident per week over a period of at least 6 months was employed.

In addition to indicating the frequency of any negative act experienced in the workplace either face-to-face, by email, by SMS and / or by phone over the previous six months, respondents were requested to report if they had been bullied, according to the following definition of workplace bullying, modified from the NAQ-R, to include both face-to-face bullying and cyberbullying:

“We define bullying as: a situation where one or several individuals persistently over a period of time perceive themselves to be on the receiving end of negative actions (whether in person, by email, by SMS and / or by phone), from one or several persons, in a situation where the target of bullying has difficulty in defending him or herself against these actions. We will not refer to a one-off incident as bullying.”

Participants indicated, according to the above definition, if they had been subjected to bullying over the past 6 months. The six possible responses include no (a), yes very rarely (b), yes now and then (c), yes several times per month (d), yes several times per week (e), and yes almost daily (f).

In this study the internal consistency of the NAQ-R, as measured by Cronbach’s alpha, was found to be .94 overall.
Results

Perceived Exposure To Negative Behaviours In The Workplace

Of the total 103 respondents, 89.3% (n=92) reported experiencing at least one negative act either face-to-face, by email, SMS or telephone on at least ‘a now and then’ basis over the previous six months. Of these respondents there were 5.8% (n=6) who reported experiencing a single type of negative act while 83.5% (n=86) reported two or more types of negative acts. On average, participants reported exposure to 8.9 (SD 6.6) different types of negative acts on a ‘now and then’ or more frequent basis. The incidence of negative acts on a ‘now and then’ basis via modern technology was 8.7% (n=9) by email as well as 8.7% (n=9) by SMS and 34% (n=35) by telephone.

In accordance with Leymann’s criterion of bullying, 34% (n=35) of all respondents could be classified as victims of bullying behaviour as they reported experiencing at least one negative behaviour on at least a weekly basis in the last six months. Furthermore, 25.2% (n=26) of these respondents reported weekly exposure to multiple negative acts. Of all the respondents who experienced negatives acts via modern technology 10.7% (n=11) seven were from the online survey sample and four from the mail out sample. All respondents who perceived themselves as having been exposed to negative behaviours via modern technology also perceived that they were exposed to face-to-face victimization. This consisted of 8.7% (n=9) by email, 7.8% (n=8) by telephone, and 5.8% (n=6) by both email and telephone. There were no respondents who had experienced at least one negative act on a weekly basis by SMS.

Bullying and Type of Negative Acts
Table 2 presents the prevalence of Perceived Exposure to Negative Acts, Bullying and Victimisation for each negative act as per Leymann’s operational definition.

Table 2

Prevalence of perceived exposure to negative acts, bullying and victimisation for each negative act as per Leymann’s (1996) operational definition.

<table>
<thead>
<tr>
<th>Negative Act</th>
<th>Face-to-Face (N=35)</th>
<th>Modern Technology (N=11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordered to do work below your level of competence.</td>
<td>17 (48.6%)</td>
<td>4 (36.4%)</td>
</tr>
<tr>
<td>Information withheld affecting your performance.</td>
<td>14 (40.0%)</td>
<td>6 (54.5%)</td>
</tr>
<tr>
<td>Opinions and views ignored.</td>
<td>14 (40.0%)</td>
<td>2 (18.2%)</td>
</tr>
<tr>
<td>Being ignored, excluded or being ‘sent to Coventry’.</td>
<td>11 (31.4%)</td>
<td>2 (18.2%)</td>
</tr>
<tr>
<td>Key areas of responsibility removed.</td>
<td>10 (28.6%)</td>
<td>2 (18.2%)</td>
</tr>
<tr>
<td>Excessive monitoring of your work.</td>
<td>10 (28.6%)</td>
<td>2 (18.2%)</td>
</tr>
<tr>
<td>Insulting / offensive remarks.</td>
<td>10 (28.6%)</td>
<td>1 (9.1%)</td>
</tr>
<tr>
<td>Exposed to an unmanageable workload.</td>
<td>9 (25.7%)</td>
<td>3 (27.3%)</td>
</tr>
<tr>
<td>Given tasks with unreasonable targets / deadlines.</td>
<td>9 (25.7%)</td>
<td>1 (9.1%)</td>
</tr>
<tr>
<td>Spreading of gossip and rumours about you.</td>
<td>8 (22.9%)</td>
<td>3 (27.3%)</td>
</tr>
<tr>
<td>Humiliated / ridiculed in connection with your work.</td>
<td>6 (17.1%)</td>
<td>1 (9.1%)</td>
</tr>
<tr>
<td>Being shouted at /the target anger or rage.</td>
<td>6 (17.1%)</td>
<td>1 (9.1%)</td>
</tr>
<tr>
<td>Ignored / facing a hostile reaction when you approach.</td>
<td>6 (17.1%)</td>
<td>0</td>
</tr>
<tr>
<td>Persistent criticism of your work and effort.</td>
<td>6 (17.1%)</td>
<td>0</td>
</tr>
<tr>
<td>Repeated reminders of your errors or mistakes.</td>
<td>5 (14.3%)</td>
<td>1 (9.1%)</td>
</tr>
<tr>
<td>Pressure not to claim your entitlements.</td>
<td>5 (14.3%)</td>
<td>1 (9.1%)</td>
</tr>
<tr>
<td>Intimidating behaviour.</td>
<td>5 (14.3%)</td>
<td>0</td>
</tr>
<tr>
<td>Allegations made against you.</td>
<td>4 (11.4%)</td>
<td>3 (27.3%)</td>
</tr>
</tbody>
</table>
Using Leymann’s operational definition of workplace bullying of one negative behaviour on at least a weekly basis in the last six months, all 22 acts were reported by one or more respondents, who could identify them as victims of face-to-face bullying. However, only 16 of the 22 items presented in the NAQ-R were reported by victims of cyberbullying as per Leymann’s operational definition.

The most frequently reported negative acts via modern technology were ‘Someone withholding information’ by both email 55.6% (n = 5) and / or by telephone 37.5% (n = 3) (this included two respondents reporting both methods). The spreading of gossip by telephone was also reported by 37.5% (n = 3) of respondents cyberbullied. Being subjected to allegations made against them by email and being exposed to an unmanageable workload by email were each reported by an equal number of cyberbullied respondents, 37.5% (n = 3). As mentioned earlier there were no respondents who indicated experiencing cyberbullying by SMS as per Leymann’s (1996) criteria.

Bullying and Organizational Demographics

To analyse whether the size (small, medium or large), type of organisation (public or private), and the hierarchical status of the employee (worker or supervisory role) impacted on bullying (bullied or not bullied) Chi-square tests were applied. There were no significant relationships found between the size or type of organisation and being a victim of workplace bullying ($\chi^2 = .688$, $df = 2$, $p = .709$) and ($\chi^2 = 1.413$, $df = 1$, $p = .234$ respectively). This
suggests that there exists an equal chance of being bullied regardless of whether respondents were employed in small, medium or large sized organisations or within the private or public sectors. Similarly, there were no statistically significant relationships found between the employees’ hierarchical status in the organisation and the reporting of face-to-face bullying ($\chi^2 = 1.946, df = 1, p = .163$). Therefore, those in supervisory roles were as likely to report perceived exposure to face-to-face bullying as general workers.

Due to the small sample size, it was not possible to statistically test whether an association existed for the same variables and cyberbullying.

*Comparison between the reporting of perceived negative acts and self-reporting of bullying*

After indicating the frequency of negative acts experienced in the workplace on the behaviour inventory section of the NAQ-R, respondents were requested to report, according to the given definition, if they considered themselves to have been subjected to face-to-face bullying and / or cyberbullying. The frequency of respondents reporting experiencing victimization in the workplace in the total sample is shown in Table 3.

**Table 3**

*Frequency of respondents self-reporting having experienced bullying in the workplace*

<table>
<thead>
<tr>
<th>No</th>
<th>Yes, very rarely</th>
<th>Yes, now and then</th>
<th>Yes, several times per month</th>
<th>Yes, several times per week</th>
<th>Yes, almost daily</th>
<th>Total bullied</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>71</td>
<td>12</td>
<td>10</td>
<td>4</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>%</td>
<td>68.9%</td>
<td>37.5</td>
<td>31.3%</td>
<td>12.5%</td>
<td>15.6%</td>
<td>3.1%</td>
</tr>
</tbody>
</table>
By combining the frequencies in the “Yes, several times per week” with the “Yes, almost daily” categories there were 18.7% (6) respondents who could be classified as victims of workplace bullying according to Leymann’s criteria.

Of the 35 respondents who reported being subjected to negative acts on a daily or weekly basis on the behaviour inventory section of the NAQ-R only 17.1% (n = 6) self-reported being subjected to victimization according to the given definition. However, all of the respondents who self-reported experiencing victimization also indicated they had experienced bullying via the NAQ-R as per Leymann’s definition. Therefore, there were no respondents who identified themselves as being victimized who did not fit Leymann’s criteria used in the operational definition.

**Discussion**

The aim of the present study was to ascertain the prevalence of face-to-face bullying and cyberbullying in the manufacturing workplace. The results suggest that negative acts via technology are emerging alongside those enacted face-to-face in the workplace and may represent the new form of bullying, though to a much more limited extent.

Overall, the results revealed that one-third of the respondents reported being recipients of at least one negative act weekly over the previous six months. Using Leymann’s operational definition of workplace bullying these respondents could be considered to have experienced workplace bullying. A quarter of these respondents reported having experienced more than one negative act towards them weekly with the average number of negative acts experienced weekly being nearly nine. Furthermore, the vast majority of all the respondents reported experiencing some form of negative act on a ‘now and then’ basis over the same period.
All 34% of victims of workplace bullying, as identified using Leymann’s 8 operational definition, had been subjected to face-to-face bullying. Nearly one-third of these respondents also experienced negative acts via modern technologies, either by email, telephone or both email and telephone, on at least a weekly basis. This represented one-in-ten of all respondents suggesting that when applying Leymann’s 8 operational definition of workplace bullying of one negative behaviour on at least a weekly basis in the last six months, 11% of all respondents could be considered to have experienced some form of cyberbullying. This figure increased to over half of all respondents when the criteria for cyberbullying were relaxed to include respondents who were subjected to a negative act on a ‘now and then’ basis. Every respondent who reported negative acts by email had been subjected to cyberbullying as per Leymann’s 8 criteria of workplace bullying. The negative acts reported by SMS were not experienced frequently enough to fit the criteria of workplace bullying as per Leymann’s 8 definition. It is interesting to note that at this time, victims who were considered to have experienced cyberbullying were also bullied face-to-face, contrary to recent preliminary findings with children who reported experiencing cyberbullying without face-to-face bullying.37

There were no significant differences found when the prevalence of face-to-face bullying was compared across several organisational types. This demonstrated an equal risk of exposure to face-to-face bullying regardless of the size and type of organisation and the hierarchical status held within the workplace by the respondent. As cyberbullying could not be statistically analysed in this sample it was not possible to find out whether this held true for cyberbullying.

The self-report question on the NAQ-R requesting the respondent to respond to the given definition of bullying provides an opportunity to capture respondents who identify themselves as victims of workplace bullying even though they were not identified as such due
to the above-mentioned limits of the operational definition in the behaviour inventory section of the NAQ-R. Nonetheless, there were no respondents who self-reported as victims of workplace bullying who were not also identified in the behavioural inventory. Of the 35 workers who reported being subjected to negative acts on a daily or weekly basis there were 29 who did not self-report as victims of bullying.

The higher prevalence rates found using the behavioural inventory compared with the self-report of being a victim of workplace bullying, confirms the findings of previous studies. This disparity may be explained by factors relating to culture. Shopfloor culture, especially in male-dominated organisations, may impact on self-reporting of workplace bullying if negative behaviours are accepted as the norm. Awareness that negative acts may constitute bullying behaviours may therefore be low among respondents who were subjected to negative acts and/or men may be reticent to label themselves as victims. This may be due to male stereotypes within the wider culture.

**Limitations**

This exploratory study was limited by several factors. The sample size was small with a response rate of only 7.3% and Queensland based which prevents the findings being generalised to the overall experience of members of the AMWU or extended to include all employees working in manufacturing as a whole. Additionally, only males participated which also limits these results. It is also possible that individuals who had experienced negative acts in the workplace may have been more motivated to respond and were subsequently over-represented.

In addition the survey did not include information about the respondents’ levels of access to email, fixed-line or mobile telephones. Workers in manufacturing may not have continual access to modern technologies which may have impacted on the frequency of cyberbullying. Subsequently, it could not be verified that every respondent was at equal risk.
of exposure to cyberbullying and if cyberbullying by telephone was on a fixed-line telephone or a mobile telephone. It remains for future research to undertake further study with a different population. Another limitation could be that some negative acts are easier to imagine happening face-to-face than by technology.

There are significant benefits however, in incorporating online surveys into future research on workplace cyberbullying, such as the potential to improve response rates, eliminate missing data, minimise human data input error, and maximise cost effectiveness.

**Conclusion**

In summary, the present study contributes to the literature of workplace bullying through the exploration of prevalence rates of both face-to-face bullying and cyberbullying in the workplace in particular in the manufacturing sector in Queensland, Australia. The results suggest that the ICT revolution has the potential to change the face of bullying which now includes victims being subjected to negative behaviours via modern communication technologies such as email and telephones.

As many countries impose a duty of care to protect the health, safety, and welfare of employees, organisational management need to be aware that cyberbullying exists in the workplace. Codes of practice need to be updated to ensure that workplaces implement policies and procedures to address this issue. Future research into this relatively new field of study of cyberbullying is essential in order to further understand the extent of the phenomenon, the impact on employees, organisations, and society as well as establishing preventative measures for cyberbullying in the workplace.

*Author Disclosure Statement*

No competing financial interests exist.
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