Gender and organisational position: predicting victimisation of cyberbullying behaviour in working life

Rebecka Cowen Forssell

To cite this article: Rebecka Cowen Forssell (2018): Gender and organisational position: predicting victimisation of cyberbullying behaviour in working life, The International Journal of Human Resource Management, DOI: 10.1080/09585192.2018.1424018

To link to this article: https://doi.org/10.1080/09585192.2018.1424018

© 2018 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

Published online: 29 Jan 2018.

Submit your article to this journal

Article views: 287

View related articles

View Crossmark data
Gender and organisational position: predicting victimisation of cyberbullying behaviour in working life

Rebecka Cowen Forssell
Centre for Work Life Studies and Evaluation, Malmö University, Malmö, Sweden

ABSTRACT
The purpose of this study was to investigate possible predictors of cyberbullying behaviour in working life by examining previously known predictors of face-to-face bullying as well as demographic variables such as gender and formal position in the work organisation. Multiple regression analyses were conducted on a random sample of 3371 respondents. The results show that a poor social climate at work predicted exposure to cyberbullying behaviour. The study also found differences related to gender and organisational position. While low support from managers was related to higher exposure to cyberbullying behaviours for men managers, men non-managers and women non-managers, this relation did not apply to women managers. For women managers alone, low support from colleagues was associated with exposure to cyberbullying behaviours. Further, only for women managers age had no protective effect of exposure to cyberbullying behaviour. These findings imply that men and women have different social experiences in terms of holding power in working life. As women managers are in a minority in working life, other factors may be involved in predicting exposure to cyberbullying behaviour for women managers than for the other three groups. This article contributes to the sparse knowledge on cyberbullying in working life by recognising triggering factors.

Introduction
Severe negative outcomes for employees and work organisation due to bullying often make managers motivated to prevent bullying behaviour in the workplace (Salin, 2003b). Increased attention to face-to-face bullying in the last few decades has contributed to a rich body of knowledge (Hoel, Sheehan, Cooper, & Einarsen, 2011) that ultimately can help to prevent or mitigate the negative effects. However, with the development of communication technology such as e-mails, text messages and social network sites, new forms of deviant behaviour in workplaces have
emerged, referred to as cyberbullying. So far, most studies on cyberbullying have been conducted among children and adolescents, whereas few studies take their departure in a working life context (Brack & Caltabiano, 2014). Being a new area of study, those studies that have investigated cyberbullying in working life have mainly been engaged in determining its prevalence (Brack & Caltabiano, 2014; Forssell, 2016; Privitera & Campbell, 2009). Nonetheless, there are a growing number of studies on cyberbullying that show negative implications related to the health of the targets (Coyne et al., 2016; D’Cruz & Noronha, 2013; Farley, Coyne, Sprigg, Axtell, & Subramanian, 2015; Snyman & Loh, 2015) and job satisfaction (Coyne et al., 2016; Farley et al., 2015). Moreover, studies on cyberbullying in working life have shown differences regarding gender (Forssell, 2016) and hierarchical status (Forssell, 2016; Gardner et al., 2016) distinctively different from most studies on face-to-face bullying, hence bringing forward the idea that new strategies for individuals to impose power may arise with digital communication.

The focus for this study is the targets’ experiences and not the perpetrator's motives. Growing evidence of the existence of cyberbullying in working life and its negative implications indicates the importance of identifying predictors of victimisation of cyberbullying behaviour. Thus, identifying underlying factors is necessary in order to prevent and take action against cyberbullying behaviour in work organisations. There is a debate among scholars as to whether cyberbullying should be seen as an unique phenomenon or merely as an extension of face-to-face bullying (Li, 2007; Privitera & Campbell, 2009; Slonje & Smith, 2008). Thus, investigating factors that are previously known to predict face-to-face bullying can bring not only increased knowledge about cyberbullying as a phenomenon, but also help contribute to a theoretical understanding of its relationship to face-to-face bullying. Moreover, identifying new predictors can create enhanced understanding of the specific nature of cyberbullying. Thus, the aim of the present study is to examine predictors of cyberbullying behaviour in working life by (1) investigating the relationship to some previously known predictors of face-to-face bullying derived from the ‘work environment hypothesis’ and (2) analysing demographic variables such as gender and formal position in the workplace that may be specifically related to victimisation of cyberbullying behaviour in working life.

**Features of cyberbullying**

As cyberbullying is carried out via digital devices such as the smartphone and the computer and includes threatening or excluding messages sent via email, text messages or posts on social media, cyberbullying is suggested to have specific features of its own (Kowalski, Limber, Limber, & Agatston, 2012; Slonje & Smith, 2008). When communicating via digital devices, the perpetrator cannot see the facial or bodily reactions of the target. Consequently, the perpetrator becomes less aware of the responses the messages cause in the target, which can lead to decreased feelings of empathy (Slonje & Smith, 2008). In some cases, the sender
may have a perception of being anonymous when interaction is taking place online. When using pseudonyms or a temporary account, the sender can hide her/his true identity, which can create a disinhibiting effect (Kowalski et al., 2012). While these features of digital communication may affect the perpetrator's behaviour, the increased accessibility embodied in digital communication may have a direct impact on the target. When using digital devices, the targeted individual's possibilities to escape the harassing behaviour are reduced (Patchin & Hinduja, 2006; Slonje & Smith, 2008; Tokunaga, 2010). With the accessibility of email and social media the target can be reached at other places than the workplace, and at other times than during work hours. Moreover, digital messages are often saved, transparent and possible to forward in order to harm the targeted individual or to be used as evidence of the ill treatment suffered by the victim. Thus, the meaning of repetition in cyberbullying has been questioned as one status update on social media can be clicked on several times by its users (Patchin & Hinduja, 2006; Slonje & Smith, 2008).

Cyberbullying is defined in this study as

a situation where over time, an individual is repeatedly subjected to perceived negative acts conducted through technology (e.g. phone, email, web sites and social media) which are related to their work context. In this situation the target of workplace cyberbullying has difficulty defending him or herself against these actions. (Farley, Coyne, Axtell, & Sprigg, 2016)

Bullying is an escalating process that often starts with negative acts characterised by indirect, discreet and subtle aggressions that can be difficult to recognise and/or confront (Notelaers & Einarsen, 2013). As the bullying process continues, the frequency and intensity of the aggressions tend to increase. Frequently discussed in the bullying literature is how often a negative behaviour must occur to be categorised as bullying. Traditional approaches to separate victims from non-victims involve a cut-off criterion, often operationalised as weekly exposure over a duration of six months (Leymann, 1996). While this approach can be criticised for reducing the complexity of the victimisation process, recent research has addressed these issues by also including targets of less intensive bullying in the assessments (Notelaers & Einarsen, 2013).

Predictors of cyberbullying behaviour

Social organisational climate

The existence of organisational antecedents of bullying, often referred to as ‘the work environment hypothesis’, has been the dominating framework in explaining face-to-face bullying (Agervold & Mikkelsen, 2004; Einarsen, 2000; Johan Hauge, Skogstad, & Einarsen, 2007). The hypothesis highlights job-related factors such as role conflicts, role ambiguity and lack of clear goals related to how the work is organised and designed; team-related factors such as leadership; and organisational factors such as culture and climate (Baillien, Neyens, & De Witte, 2008;
Baillien, Neyens, De Witte, & De Cuyper, 2009; Bowling & Beehr, 2006; Hauge, Skogstad, & Einarsen, 2010; Johan Hauge et al., 2007; Salin et al., 2011).

From the very early research on bullying, organisational culture and climate has been argued to be of most importance for understanding workplace bullying. In the view of Brodsky (1976), bullying only exists if the organisational culture permits and rewards it. Hence, Einarsen (1999) suggest that bullying is prevalent in work environments where employees and managers feel that they have the support from upper management to engage in such behaviour. Similar reasoning about organisational tolerance is put forward by Salin (2003c), stating that if the risk of being punished for bullying is low the likelihood that the members of the organisation get involved in bullying behaviour increases.

Organisational climate can be defined as ‘those behaviour and attitudinal characteristics of people that are accessible to external observers’ (Moran & Volkwein, 1992) and can be seen in the contexts of the social climate of a workplace (Dallner, 2000). Social climate in the workplace has commonly been reported as one important contribution to the emergence of bullying (Agervold, 2009; Baillien et al., 2008; Einarsen, Raknes, & Matthiesen, 1994). In her study on risk factors of bullying, Vartia (1996) found bullying to be prevalent in workplaces described as sullen, strained, competitive and with an authoritarian way of settling differences. The association between competitive social climate and bullying was further supported by Salin (2003a), who reported a positive correlation between a high degree of organisational politics and bullying among business professionals. Moreover, a qualitative study by Baillien et al. (2008) found that bullying is related to a lack of balance concerning the organisational goals and employees well-being, the social atmosphere and hierarchy in the workplace.

As research on cyberbullying among adolescents has shown similar predictors to be present for cyberbullying and face-to-face bullying (Casas, Del Rey, & Ortega-Ruiz, 2013), some researchers argue for considering the same predictors for workplace cyberbullying as for face-to-face bullying (Vranjes, Baillien, Vandebosch, Erreygers, & De Witte, 2017). In line with this argumentation, a recent study by Gardner et al. (2016) showed a poor work environment to predict both cyberbullying and face-to-face bullying.

**Social support**

Low social support at work, i.e. resources provided by significant others for the individual, have shown to be associated with sick leave, job satisfaction, well-being and health (Cassidy, McLaughlin, & McDowell, 2014; Michie & Williams, 2003). Also in the bullying literature, low social support has been identified as a risk factor that can trigger bullying behaviour (Hubert, Furda, & Steensma, 2001; Zapf, Knorz, & Kulla, 1996). In line with this, Gardner et al. (2016) found in their study on cyberbullying among the New Zealand workforce that the perception of the work organisation as supportive reduced the reporting of cyberbullying.
exposure. Still, targets of bullying frequently rate support from managers as low (Einarsen, 1996; Zapf et al., 1996). As social isolation is a form of bullying, one common effect is the diminishing accessibility and availability of social support for the targeted individuals. Lewis and Orford (2005) suggest that bystanding, i.e. observing bullying without taking action against it, is a symptom of fear of bullies’ organisational power rather than an expression of the bystanders’ apathy. Similar reasoning is put forward by Hoel and Cooper (2000), arguing that depending on the colleague’s own hierarchical position in the work organisation, s/he may risk becoming a target herself/himself by intervening in the bullying situation.

Previous research on face-to-face bullying has shown gender differences associated with social support. In their meta-analysis to examine gender differences in coping with bullying, Tamres, Janicki, and Helgeson (2002) reported that women were more likely to use strategies that involved verbal expressions while men tend to avoid ventilating their problems with others in bullying situations. Different socialisation processes for women and men give insight into why women and men tend to act differently (Salin & Hoel, 2013). Women’s tendency to use indirect strategies such as seeking support of others, in contrast to men's self-reliant strategies, is in line with traditional gender norms, where men to a higher degree than women are permitted to show direct aggression (Jóhannsdóttir & Ólafsson, 2004).

Considering that more men than women are in superior positions in working life (Barreto, Ryan, & Schmitt, 2009; SCB, 2014; SOU 2014:80), Kanter (1977) argued that gender differences at work are primarily an expression of unequal access to power. Hence, belonging to the majority or minority group within the work organisation may affect individuals’ willingness to either seek or give support. As women managers are in a minority, they are exposed to high visibility and therefore often experience that they have little room for manoeuvre (Kanter, 1977). Being in a deviant position, it is argued that women managers often have to defend against constructions of being less competent than their male counterparts (Ely, 1995; Holgersson, 2003). Thus, violation of norms may have fatal consequences. Furthermore, the deviant position women managers often experience may prevent them from being included in a ‘homosocial practice’ in the workplace, i.e. turning to other women for help and support. In order to be included in the homosocial practices it is important to contribute a positive impact on the group’s standing (Lipman-Blumen, 1976). However, as bullying victimisation is often associated with weakness and shame (Felblinger, 2008; Lewis, 2004), bullying can be argued to have the opposite effect.

Influence over work

Another feature of the psychological work environment is the possibilities to influence one’s own work. In line with the job demands-control model of Karasek (1979), the level of influence over decision and control over work load may influence how demands are handled by individuals. When an individual experiences
a great deal of pressure but little or no control, the situation is thought to be particularly stressful (Boswell, Olson-Buchanan, & LePine, 2004). In line with the job demands-control model, little control over work in combination with a high-pressure work environment could be argued to create frustration that triggers workplace bullying. A relationship between influence over work and bullying has been observed in the early literature on face-to-face bullying. Vartia (1996) identified lack of possibilities to influence matters concerning work as having strong associations with bullying. Moreover, Einarsen et al. (1994) identified work control as a factor in the work environment that correlated most strongly with bullying. A more recent study by Baillien, De Cuyper, and De Witte (2011) showed that low job autonomy, i.e. the ability to make decisions about work activities, was associated with being a target of bullying. The relationship between job autonomy and face-to-face bullying was further reported in Baillien et al. (2008), whereas job autonomy was identified as one of the most important job-related risk factors of bullying.

Gender and formal position in the workplace

As with all forms of bullying, power imbalance is a central aspect. Power imbalance can be understood in relation both to formal position in the workplace, which refers to position in the organisational hierarchy, and to informal position, which relates to one’s standing in the work community, for instance belonging to a certain group. In this study power is related to organisational structure and is defined as organisational position within the workplace.

Most studies on face-to-face bullying have focused on ‘downwards’ bullying where the manager is identified as the perpetrator, or ‘horizontal’ bullying that refers to bullying between peers (Branch, Ramsay, & Barker, 2007). Less attention has been paid to managers’ exposure to bullying behaviour. Like employees, managers can be subjected to bullying behaviour from their managers as well as from their colleagues. As power imbalance can be established by other sources than formal power, such as position in the organisation, contacts and networks with other influential individuals, skills and expertise, control over information and knowledge of the targeted individuals’ vulnerabilities (Branch et al., 2007), managers can also be targeted by subordinates. Due to managers’ control over rewards and punishments, overcoming the formal power of a supervisor is difficult. Hence, earlier research on face-to-face bullying shows that managers are seldom bullied by subordinates, although for managers who receive low support from their managers or colleagues the risk of being targeted by a subordinate increases (Zapf, Escartín, Einarsen, Hoel, & Vartia, 2011).

Organisational power differences are often related to power differences on a societal level (Salin, 2003c). Research shows that gender inequality in work organisations creates obstacles for women’s career advancement (Eagly & Carli, 2007; Lee, 2002). In a broader social order and within workplaces, power is often
biased towards men and masculine values of power and control (Keashly, Fox, & Lituchy, 2012; Lee, 2002). Some argue that women’s advancement in working life may be perceived as challenging patriarchal power structures and therefore causes a reaction whereby increased face-to-face bullying towards women can be interpreted as way to retain patriarchal social control (Cortina et al., 2002). Due to gender-related power imbalance, it is reasonable to believe that women are more exposed to face-to-face bullying. However, empirical studies on bullying victimisation show a mix of results (Bowling & Beehr, 2006). While some studies indicate no gender differences (Hoel & Cooper, 2000), other studies show women more likely to be victims of face-to-face bullying than men (Bjorkqvist, Osterman, & Lagerspetz, 1994; O’Connell, Calvert, & Watson, 2007). Applying the perspective of organisational position to men’s and women’s exposure to face-to-face bullying enhances the understanding of gender influences. A study by Hoel, Cooper, and Faragher (2001) found that women managers were more likely to be bullied in management positions while men were more likely to be bullied as workers or supervisors. Moreover, in her study on business professionals, Salin (2003b) found that while women were bullied by managers, colleagues and subordinates, men were only bullied by the two first categories and not by subordinates.

Recent studies on cyberbullying in working life show differences regarding gender and organisational position distinctively different from most studies on face-to-face bullying (Forssell, 2016; Gardner et al., 2016). Unlike studies on face-to-face bullying, Forssell (2016) found that men and managers were exposed to cyberbullying to a higher extent than women and non-managers. A similar observation was made by Gardner et al. (2016), who found that managers experienced more cyberbullying than non-managerial employees, and that women were more exposed to face-to-face bullying but not more cyberbullied than men. Hence, these results suggest that gender and organisational position need to be taken into consideration when examining the phenomenon of cyberbullying in working life (cf. discussions on face-to-face bullying by Hoel et al., 2001; Keashly et al., 2012; Lee, Brotheridge, Salin, & Hoel, 2013).

Hypotheses

Previous studies on cyberbullying in working life have shown differences regarding gender and organisational position in the workplace (Forssell, 2016; Gardner et al., 2016). As possible effects might be concealed in the analyses if they are not divided by gender and formal position (Albertsen, Nielsen, & Borg, 2001), separate analyses were conducted for men managers, women managers, men non-managers and women non-managers. The following four hypotheses were tested:

- Hypothesis 1: Influence over work will be negatively related to cyberbullying behaviour.
• Hypothesis 2: Social climate at the workplace will be negatively related to cyberbullying behaviour.
• Hypothesis 3: Social support from managers at the workplace will be negatively related to cyberbullying behaviour.
• Hypothesis 4: Social support from colleagues at the workplace will be negatively related to cyberbullying behaviour.

Method

Procedure

The data were collected by TNS Sifo, a public poll and market research company with access to a representative sample of 140,000 individuals within Sweden. From this data-set, a questionnaire was sent out to a random sample of individuals in working age – in this case defined as individuals between the ages of 25 and 65 living in Scania in south Sweden. The main argument for restricting the sample in age was to obtain respondents in working life. The higher age was set because many people retire at this age, while the lower age takes into account that many young people, due to university studies and/or obstacles on the labour market, enter the labour market a few years after graduation.

In total 3885 respondents replied to the questionnaire. As the aim was to study cyberbullying behaviour in working life, respondents that had been unemployed during the last six months (n = 514) were excluded from the sample. The total number of respondents was therefore 3371, which gives the study a response rate of 42%.

Participants

Among the 3371 respondents in the sample, 51% were men and 49% women. The mean age of the respondents was 50 years. Moreover, 60% had a university degree and 32% of the respondents had a supervisory position at their workplace. Altogether, 73% of the respondents reported the use of digital devices such as computer, mobile phone or iPad as ‘very often’ or ‘always’ in their daily work.

Measures

Demographic variables and internet use

The questionnaire included demographic questions concerning gender (men/women), organisational position (manager/non-manager), and educational level (university degree/no university degree). One item also elicited the respondents’ use of digital devices in their daily work by using a five-point scale ranging from ‘never/almost never’ to ‘always/very often’.
Cyberbullying

Exposure to cyberbullying behaviour was measured by the cyberbullying behaviour questionnaire (CBQ) consisting of 20 items related to negative acts online (Jönsson, Muhonen, Forssell, & Bäckström, 2017). The CBQ is influenced by the negative act questionnaire (NAQ) developed by S. Einarsen, Hoel, and Notelaers (2009). The NAQ and revised NAQ-R are validated scales that are often used in research to measure exposure to face-to-face bullying in the workplace. However, the scales do not capture negative acts conducted via digital devices.

The following instruction was given to the respondents when answering the CBQ:

The following behaviours are often seen as examples of negative behaviour in the workplace that may occur via the use of technology. When responding consider every act in relation to these eight types of technologies: Text messaging; pictures/photos or video-clips; phone calls; email; chat rooms; instant messaging; websites; and social networking websites (e.g. Facebook, Twitter, YouTube). Over the last six months, how often have you been subjected to the following negative acts related to your work through different forms of technology?

Example items from the inventory were ‘not having email responded to,’ ‘receiving aggressively worded messages,’ ‘having the work performance commented upon in negative terms on the Internet,’ and ‘having false statements about oneself spread on the Internet’ (Jönsson et al., 2017).

A five-point Likert scale ranging from ‘never,’ ‘now and then,’ ‘monthly,’ ‘weekly’ to ‘daily’ was provided to the respondents. Exposure to at least one of the negative acts in the scale at least ‘now and then’ during the last six months has been categorised as being subjected to cyberbullying behaviour in this study. Face-to-face bullying is often a gradually escalating process that involves different stages (Nielsen et al., 2011). When applying a strict either-or criterion, individuals exposed to bullying acts but at a lower frequency are singled out from the sample. This study includes varying degrees of exposure to cyberbullying behaviour. Individuals who are ‘sometimes bullied’ are included in the sample with individuals who are exposed to bullying behaviour more frequently. When labelling the experiences as exposure to cyberbullying behaviour, the study captures early signs of mistreatment that may escalate into more frequent cyberbullying.

The internal consistency reliability of the CBQ, measured by Cronbach’s alpha, was .76.

Social organisational climate

Social climate was measured by using QPSNordic (Dallner et al., 2000). The respondents were asked ‘What is the social climate like in your work unit?’ Five examples of work atmospheres were given: (1) Competitive, (2) Encouraging and supportive, (3) Distrustful and suspicious, (4) Relaxed and pleasant, (5) Rigid and rule-based. The respondents were asked to respond using a five point-scale
ranging from ‘very little/not at all’ to ‘very much’. Responses were coded so that higher values indicated better social organisational climate.

Cronbach’s alpha was .78.

**Support from managers and colleagues**

Support from managers was measured by two items from COPSOQ II (Pejtersen, Kristensen, Borg, & Bjorner, 2010). One example item was ‘How often is your nearest superior willing to listen to your problems at work?’

Support from colleagues was also assessed by two items from COPSOQ. An example item was ‘How often do you get help and support from your colleagues?’ Both items were rated on a five-point scale ranging from ‘very often’ to ‘very rarely’. Before analyses the original values were reversed so that higher values indicate increasing support.

Cronbach’s alpha was .90 for the scale measuring support from managers, and .93 for the scale measuring support from colleagues.

**Influence over work**

Influence over one’s own work was measured by four items from COPSOQ II (Pejtersen et al., 2010). An example item was ‘Can you influence decisions that are important for your work?’ Answers were given on a five-point scale from ‘very often’ to ‘very seldom’. Responses were coded so that higher value indicated higher influence over work.

Cronbach’s alpha was .84.

**Statistical analyses**

Pearson’s correlations and descriptive statistics such as means and standard deviation were analysed for all studied variables and are presented in Table 1. Missing values were addressed by SPSS default setting and excluded listwise.

<p>| Table 1. Means, standard deviation and correlations for the continuous variables included in the study. |
|-------------------------------------------------|-------------------------------------------------|----------------|--------|--------|--------|--------|--------|--------|</p>
<table>
<thead>
<tr>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cyberbullying behaviour</td>
<td>3152</td>
<td>21.6</td>
<td>2.9</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Age</td>
<td>3355</td>
<td>49.9</td>
<td>9.6</td>
<td>–.12**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Use of digital devices</td>
<td>3367</td>
<td>4.6</td>
<td>.9</td>
<td>.07**</td>
<td>–.04*</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Influence over work</td>
<td>3308</td>
<td>13.4</td>
<td>3.9</td>
<td>–.09**</td>
<td>.09**</td>
<td>.13**</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Social climate</td>
<td>3297</td>
<td>18.8</td>
<td>3.8</td>
<td>–.27**</td>
<td>.06**</td>
<td>.04*</td>
<td>.40**</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>6. Support from managers</td>
<td>3276</td>
<td>8.0</td>
<td>2.1</td>
<td>–.24**</td>
<td>–.01</td>
<td>.11**</td>
<td>.29**</td>
<td>.48**</td>
<td>–</td>
</tr>
<tr>
<td>7. Support from colleagues</td>
<td>3290</td>
<td>8.7</td>
<td>1.7</td>
<td>–.17**</td>
<td>–.01</td>
<td>.11**</td>
<td>.15**</td>
<td>.39**</td>
<td>.54**</td>
</tr>
</tbody>
</table>

**Notes:** N = 3371–3152.
Cyberbullying behaviour.
*p < .05; **p < .01.
Multiple linear regression analyses were conducted to examine predictors of cyberbullying behaviour in the work environment and are presented in Table 2. In order to understand differences regarding gender and organisational position, four separate analyses have been conducted, one each for men managers, women managers, men non-managers and women non-managers.

When two or more independent variables correlate to a high extent the effect on the dependent variable becomes difficult to determine. To test the independent variables’ correlation, a multicollinearity test was conducted among the significant variables in model three. The cut-off criteria of <.8 was used to identify multicollinearity (Field, 2013). The correlations for the total group range between .15 and .54, thereby multicollinearity was not considered to be problematic. The largest correlation was observed between the variables support from managers and support from colleagues.

To further ensure that no problematic multicollinearity existed between the independent variables, a collinearity diagnostic test was conducted. Variance inflation factor (VIF) larger than 10 and tolerance statistics below .2 were used to indicate bias or potential problems with multicollinearity in the models (Bowerman & O’Connell, 1990; Field, 2013; Menard, 2002). The collinearity diagnostic test confirmed that the study has no signs of serious multicollinearity by identifying the VIF as not larger than 1.60 and tolerance statistics not lower than .63.

**Results**

Of the 3371 individuals participating in the study, 1542 reported exposure to cyberbullying behaviour at least ‘now and then’ during the last six months. Of these, 371 respondents were men managers, 200 respondents were women managers, 468 were men non-managers and 500 were women non-managers. Two of the respondents did not specify organisational position and one did not specify gender.

Table 1 shows means, standard deviations and correlations for the study’s variables. Cyberbullying behaviour correlates to all factors in the study. The strongest correlation is between cyberbullying behaviour and social climate at work ($r = -.27$).

**Predicting cyberbullying behaviour in working life**

The result of the linear multiple regression analysis for predicting cyberbullying in working life is presented in Table 2. In the first step, the demographic variable age was entered. Age was significantly correlated with cyberbullying for all groups except for women managers, meaning that the lower the age of men managers, male and women non-managers, the greater the likelihood of reporting exposure to cyberbullying behaviour. A negative correlation between educational level and exposure to cyberbullying behaviour was observed for men managers. This means
Table 2. Results of a linear multiple regression analysis that predicts cyberbullying among men and women managers, man and women non-managers.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Men managers (n = 680)</th>
<th>Women managers (n = 390)</th>
<th>Men non-managers (n = 1033)</th>
<th>Women non-managers (n = 1256)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>β</td>
<td>B</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>−.031</td>
<td>.014</td>
<td>−.086*</td>
<td>−.011</td>
</tr>
<tr>
<td>Educational level</td>
<td>−.556</td>
<td>.252</td>
<td>−.086*</td>
<td>−.447</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of digital devices in the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>daily work</td>
<td>.477</td>
<td>.185</td>
<td>.101**</td>
<td>−.108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influence over work</td>
<td>−.040</td>
<td>.040</td>
<td>−.043</td>
<td>−.031</td>
</tr>
<tr>
<td>Social climate</td>
<td>−.195</td>
<td>.039</td>
<td>−.227***</td>
<td>−.227</td>
</tr>
<tr>
<td>Support from managers</td>
<td>−.338</td>
<td>.071</td>
<td>−.25***</td>
<td>.088</td>
</tr>
<tr>
<td>Support from colleagues</td>
<td>.111</td>
<td>.081</td>
<td>.064</td>
<td>−.330</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05; **p < .01; ***p < .001.
that it was only for men managers that low educational level increased the risk of becoming a subject of cyberbullying behaviour.

In the second step, reported use of digital devices in the daily work was entered. The model showed that the use of digital devices has a positive correlation to exposure to cyberbullying behaviour for men managers and for women non-managers, but not for the other two groups.

Factors in the work environment, i.e. influence over work, social climate, support from managers, and support from colleagues were entered in step 3. The model showed no significant relation between influence over one’s work and being subjected to cyberbullying behaviour for any of the four examined groups, and hypothesis 1 was therefore rejected. Poor social climate in the respondents’ working life was strongly correlated with exposure to cyberbullying behaviour for all four groups. Thus, hypothesis 2 was supported regardless of gender and formal position in the workplace. A difference was observed between women managers and the other three groups regarding social support. For all observed groups except women managers, support from managers was significantly negatively related to exposure to cyberbullying behaviour. For these three groups, low support from managers increased the likelihood of being exposed to cyberbullying behaviour. The model thus partly supports hypothesis 3. As perceived level of support from managers did not predict women managers’ exposure to cyberbullying behaviour, the likelihood of this group being subjected to cyberbullying behaviour proved to be significantly related to the level of support they experienced from colleagues. Only for women managers did low support from colleagues increase the likelihood of being exposed to cyberbullying behaviour. Hence, hypothesis 4 was partly supported.

The total model fitted men managers ($R^2 = .151$) followed by women managers ($R^2 = .140$) better than men non-managers ($R^2 = .079$) and women non-managers ($R^2 = .127$).

**Discussion**

The aim of this study was to investigate possible predictors of victimisation of cyberbullying behaviour in working life by examining some previously known predictors of face-to-face bullying as well as demographic variables such as gender and formal position in the workplace.

Contrary to previous results reported by Einarsen et al. (1994) and Vartia (1996), the MR analysis showed no relation between the lack of possibilities to influence one’s own work and exposure to cyberbullying behaviour for any of the observed groups. Thus, the first hypothesis (H1) postulating that influence over work will be negatively related to cyberbullying behaviour was not supported for any of the four studied groups. As digital communication changes the setting for bullying it is likely that some variables lose their explanatory power. The specific features of cyberbullying, such as faceless communication, perception
of anonymity, increased accessibility and blurred boundaries between work and home, stress the relational aspects in bullying. Thus, job-related factors connected to how the work is carried out may become of less importance in explaining the existence of cyberbullying.

A significant relationship between poor social climate and exposure to cyberbullying behaviour was found for men managers, men non-managers, women managers and women non-managers. Therefore, the second hypothesis (H2) postulating that social climate at the workplace will be negatively related to cyberbullying behaviour was supported for all four studied groups. As being subject to cyberbullying behaviour may be linked to the perception of the work environment as poor, and/or poor social climate may create conditions for bullying behaviour to emerge, this result was one that could reasonably be expected. In line with research on face-to-face bullying, competitive work environments, rigid workplaces and non-supportive atmosphere create environments where bullying can flourish (Aquino & Lamertz, 2004; Bowling & Beehr, 2006; Einarsen et al., 1994; Salin, 2003a).

For the other variables in the MR analysis, the predictors vary with gender and organisational position. While factors predicting exposure to cyberbullying behaviour showed a similar pattern for men managers, men non-managers and women non-managers, the same factors did not predict exposure to cyberbullying behaviour for women managers. The result of the MR analysis showed that low support from managers was significantly related to exposure to cyberbullying behaviour for men managers, men non-managers and women non-managers. For these three groups, the third hypothesis (H3) postulating that social support from managers at the workplace will be negatively related to cyberbullying behaviour was supported. For women managers, however, no relationship between lack of support from managers and exposure to cyberbullying behaviour was observed. Thus, for women managers the third hypothesis (H3) was not supported. In contrast, only for women managers was low support from colleagues significantly related to exposure to cyberbullying behaviour. Thus, the fourth hypothesis (H4) postulating that social support from colleagues at the workplace will be negatively related to cyberbullying behaviour was supported for women managers, but not supported for the other three studied groups. Additionally, the results of the MR analysis showed that age was not related to exposure to cyberbullying behaviour for women managers, while for the other three observed groups, younger individuals were more likely to become targets of cyberbullying behaviour. As younger women managers were not more/less likely to be subjected to cyberbullying behaviour than their older counterparts, age had no protective effect for women managers.

Why is it that lack of support from managers was not related to exposure to cyberbullying behaviour for women managers while the opposite was the case for the other three observed groups? Moreover, why was lack of support from colleagues related to exposure to cyberbullying behaviour for women managers but not for the other groups? Women managers’ low rating of support from colleagues
may reflect a higher vulnerability to cyberbullying behaviour from peers, as well as a lower willingness from colleagues to take a stand for women managers in situations of bullying. While this study has focused on the target, the perpetrator of the cyberbullying behaviour has not been identified. However, it seems likely that men and women may be bullied by different sources and/or to a different extent by certain sources. Men and women have different social experiences in terms of holding power in working life. As women managers are in a minority in working life, other factors may be involved when predicting exposure to cyberbullying behaviour for women managers than for the other three groups. A study on face-to-face bullying by Hoel et al. (2001), which found that women managers have a higher risk of becoming victims of bullying in management positions than men, and a study by Salin (2003b), showing that women managers experience more face-to-face bullying from subordinates than their male counterparts, supports the analytical perspective on women managers’ vulnerability to bullying. Thus, the result may reflect that women managers to a larger degree than the other three observed groups are subjected to horizontal bullying, i.e. cyberbullying behaviour from their colleagues. However, more research is needed in this area. Furthermore, social power and informal status of the target may impact colleagues’ willingness to give support in situations of bullying. For colleagues witnessing bullying, acting upon and actively giving support involves taking a risk (Hoel & Cooper, 2000). Depending on the target’s informal standing in the organisation, active support may make the colleague appear to be associated with the targeted individual and increase the risk of becoming a target of bullying him or herself. The relationship between low rating of social climate in work organisation and reporting of cyberbullying behaviour supports this interpretation.

New practices in working life emerging from digital communication influence human resource management (HRM) as a field of practice. With the development of communication technology such as e-mails, text messages and social network sites that give rise to new expressions of bullying, traditional understanding of bullying may no longer be accurate. Hence, in order to prevent and mitigate the negative effects of cyberbullying behaviour it is important to identify factors that may trigger its existence. Considering the novelty of the phenomenon (Brack & Caltabiano, 2014; Farley et al., 2015) and the practical implications cyberbullying has on working life and human resource management, this study makes an important contribution to the field of research. However, cyberbullying is a complex phenomenon that involves many variables. The explanatory effects of the models can in total explain the variance of cyberbullying up to 15.1%.

Possible limitations to the findings should be noted. First of all, since this is a cross-sectional study causality cannot be tested. Previous studies have provided support for the assumption that psychosocial factors in the work environment may trigger the occurrence of face-to-face bullying (Agervold & Mikkelsen, 2004; Einarsen, 2000; Johan Hauge et al., 2007). However, when causality remains uncertain an inverse relationship cannot be ruled out. Thus, longitudinal studies are
needed to confirm the findings regarding the distinctive results of men managers, men non-managers, women managers and women non-managers. Second, the perpetrators of the cyberbullying behaviour were not identified. Not knowing the gender and organisational position of the aggressors hinders the ability to examine the relational aspects of the phenomenon and to further analyse power relations within cyberbullying. Third, the mean for cyberbullying behaviour is fairly low, which indicates that exposure to cyberbullying behaviour is not yet a frequent phenomenon in Swedish working life. This may have an effect on the generalisability of the results. However, while this study is based on a cross-sectional sample of the working population in Sweden, a study conducted on a specific work organisation may show different results. Fourth, the external validity connected to the study’s sample should be addressed. The study was carried out in a Swedish working environment, which limits the generalisation of the results to other cultural contexts. Moreover, the sample shows a relatively high mean age of 50 years as well as a fairly high educational level. The sample composition may impact the relations in the MR model. Fifth, given the size of the sample, even small correlations can emerge as significant. Thus, there is a need to be careful in the interpretation of the results.

Considering that cyberbullying in working life is a rather new phenomenon, more studies are needed. The results of this study indicate that there are reasons to particularly explore women managers’ vulnerability to cyberbullying behaviour. Moreover, there is a need for studies on cyberbullying in working life that identify the sources of bullying. This is particularly important as this study indicates that formal power structures in work organisations may be challenged with digital communication. Further research on work life cyberbullying needs to engage in such studies.

Note

1. The concept of 'homosocial practices' was developed in the 1970s by Lipman-Blumen to describe men's preferences for other men, and to explain why men dominate powerful positions in the workplace and society. However, the concept has also been used to describe relationships between women (cf. Höök (2001) and Sörensdotter (2008)).

Disclosure statement

No potential conflict of interest was reported by the author.

Funding

This research was supported by a grant from Swedish Research Council for Health, Working Life and Welfare (Forte) [grant number 2012-0230].
References


Einarsen, S. (1996). *Bullying and harassment at work: Epidemiological and psychosocial aspects:* Univ., Department of Psychosocial Science, Faculty of Psychology.


*Gedrag en Organisatie, 14*(6), 378–395.

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


through digital devices in working life: Two versions of a Cyberbullying Questionnaire (CBQ). 
*Psychology, 8*(03), 477.


*Gender and the Dysfunctional Workplace, 78–95*.


Lipman-Blumen, J. (1976). Toward a homosocial theory of sex roles: An explanation of the 
sex segregation of social institutions. *Signs: Journal of Women in Culture and Society, 1*(3, 


absence: A systematic literature review. *Occupational and Environmental Medicine, 60*(1), 
3–9.

climate. *Human Relations, 45*(1), 19–47.

Nielsen, M. B., Notelaers, G., Einarsen, S., Einarsen, S., Hoel, H., Zapf, D., & Cooper, C. 
(2011). Measuring exposure to workplace bullying. *Bullying and harassment in the workplace: 
Developments in theory, research, and practice, 149–174*.

Notelaers, G., & Einarsen, S. (2013). The world turns at 33 and 45: Defining simple cutoff scores 
for the Negative Acts Questionnaire-Revised in a representative sample. *European Journal of 
Work and Organizational Psychology, 22*(6), 670–682.


Pejtersen, J. H., Kristensen, T. S., Borg, V., & Bjorner, J. B. (2010). The second version of 


