A hostile work climate and workplace bullying: reciprocal effects and gender differences

Michael Rosander

Department of Behavioural Sciences and Learning, Linköping University, Linköping, Sweden, and

Denise Salin

Department of Management and Organization, Hanken School of Economics, Helsinki, Finland

Abstract

Purpose – In this paper the authors argue that organizational climate and workplace bullying are connected, intertwined and affect each other. More precisely, the focus of the present study is how a hostile climate at work is related to workplace bullying. A hostile work climate is defined as an affective organizational climate permeated by distrust, suspicion and antagonism. The authors tested four hypotheses about the reciprocal effects and possible gender differences.

Design/methodology/approach – The study is based on a longitudinal probability sample of the Swedish workforce ($n = 1,095$). Controlling for age, the authors used structural equation modelling and cross-lagged structural regression models to assess the reciprocal effects of a hostile work climate on workplace bullying. Gender was added as a moderator to test two of the hypotheses.

Findings – The results showed a strong reciprocal effect, meaning there were significant associations between a hostile work climate and subsequent bullying, $\beta = 0.12$, $p = 0.007$, and between baseline bullying and a subsequent hostile work climate, $\beta = 0.15$, $p = 0.002$. The forward association between a hostile work climate and bullying depended on gender, $\beta = -0.23$, $p < 0.001$.

Originality/value – The findings point to a possible vicious circle where a hostile work climate increases the risk of bullying, which in turn risks creating an even more hostile work climate. Furthermore, the findings point to gender differences in bullying, showing that the effect of a hostile work climate on workplace bullying was stronger for men.

Keywords Workplace bullying, Hostile work climate, Gender differences

Paper type Research paper

Introduction

In this paper we argue that organizational climate and workplace bullying are connected, intertwined and affect each other. Workplaces where bullying occurs have been described as confrontational, strained and unfriendly (Vartia, 1996). In fact, that the organizational climate may play an important role for the occurrence of workplace bullying has been put forth since the pioneering work of Brodsky (1976), who argued that there needs to be a climate or culture that permits mistreatment for bullying to occur. An organizational climate can broadly be defined as "psychologically meaningful molar descriptions that people can agree characterize a system's practices and procedures" (Schneider, 1975, p. 474). The focus of the present study is on how a

hostile climate at work is related to workplace bullying. A hostile work climate is defined as an affective organizational climate permeated by distrust, suspicion and antagonism (Mawritz *et al.*, 2014). It is not about negative behaviours of a select few individuals, but describes a general tendency among employees to behave in a more antisocial way (Robinson and O'Leary-Kelly, 1998). Workplace bullying, in turn, is defined as a systematic prolonged mistreatment of an employee in situations that gradually become more difficult to defend against (Einarsen *et al.*, 2020). In essence, it is about repeated negative social behaviour towards specific individuals (Salin, 2003). In this study, we contribute to existing research by investigating the reciprocal effects of a hostile work climate and bullying, as well as possible gender differences in these associations, that is, if the relationship between a hostile work climate and workplace bullying looks the same for men and women.

A hostile work climate as a breeding ground for workplace bullying
Previous research has shown that the work environment plays an important role when it comes to the risk of workplace bullying (Salin and Hoel, 2020). According to the work environment hypothesis (Einarsen *et al.*, 1994; Leymann, 1996) deficiencies in the work environment are important predictors of workplace bullying (Hauge *et al.*, 2011; Skogstad *et al.*, 2011). More, specifically, the three-way model, introduced by Baillien *et al.* (2009), elaborates on how different facets of the work environment, sometimes in connection with individual traits, may operate to enable and stimulate bullying through three different routes. In essence, deficiencies in the work environment may increase the risk of bullying by giving rise to conflicts that can escalate into bullying, by causing frustration which results in aggressive behaviour or by directly enabling or stimulating bullying.

First, previous research has shown a strong association between interpersonal conflicts and subsequent bullying (Baillien *et al.*, 2009; Einarsen *et al.*, 2020). Central to the concept of a hostile work climate is that it is an affective climate coloured by feelings of suspicion, distrust and opposition towards others (Mawritz *et al.*, 2012, 2014); feelings that may be a breeding ground for conflicts. It is important to stress that interpersonal conflicts are not the same as bullying (Baillien *et al.*, 2017; Notelaers *et al.*, 2018). However, an interpersonal conflict can escalate and turn into bullying if prolonged, where threats turn into enactment, and one party becomes weaker with reduced ability to defend themselves (Zapf and Gross, 2001). This process has been referred to as dispute-related bullying (Einarsen, 1999). It may be conflict behaviours that escalate where one party becomes the victim and one the perpetrator (Baillien *et al.*, 2016). The way one handles a conflict, by using a problem-focussed approach or by an assertive, forcing approach, may predict becoming the target or the perpetrator (Baillien *et al.*, 2014).

Second, when employees perceive deficiencies in the work environment, such as contradictory expectations and perceived unfair or unequal treatment, it may give rise to frustration. Frustrations in turn may give rise to aggressive behaviour (Baillien *et al.*, 2009; Berkowitz, 1989). In a hostile work climate misunderstandings fuelled by distrust, suspicion and antagonism may create frustration, which in combination with ineffective coping may lead frustrated employees to lash out onto others. High levels of frustration may also lead them to break norms that in turn lead others to aggress towards them (cf. Baillien *et al.*, 2009).

Third, some characteristics of the work environment may directly enable or stimulate bullying. Baillien *et al.* (2009) suggested that the way team members interact with each other on a daily basis could affect if negative behaviours are perceived as allowed or punishable and thereby affect the risk of future bullying. In line with this, research has pointed to the importance of the social context and climate. For instance, a strained atmosphere has been found to be a risk factor (Vartia, 1996), whereas the risk has been found to be lower at workplaces with high psychological safety climate (Law *et al.*, 2011) or high levels of group identification (Escartín *et al.*, 2013). In a hostile work climate, permeated by distrust, suspicion and antagonism (Mawritz *et al.*, 2014), employees overall tend to behave in a more antisocial

way (Robinson and O'Leary-Kelly, 1998). It may signal acceptance of such behaviours and normalize hostile and aggressive behaviour. Such a social climate and such team dynamics can thus directly stimulate bullying.

Based on the three-way model of bullying (Baillien *et al.*, 2009) and the three routes it specifies it is therefore reasonable to assume that a hostile work climate can be a breeding ground for bullying. Thus, we hypothesize:

H1. A hostile work climate is associated with an increased risk of exposure to workplace bullying at follow-up.

Exposure to workplace bullying and subsequent increase in hostile work climate
In the previous section, we discussed how a hostile work climate can provide a breeding ground for workplace bullying. However, we also argue for a reverse relationship, that is, that bullying of specific individuals can give rise to a more hostile work climate overall. Below we present arguments for this, drawing primarily upon social learning theory (Bandura, 1973) and social information processing theory (Salancik and Pfeffer, 1978).

Based on a social learning perspective (Bandura, 1973), O'Leary-Kelly *et al.* (1996) suggested a reciprocal association between the group climate and individual acts of violence. Individuals getting a positive outcome from aggressive behaviour will continue to behave in that way contributing to an aggressive environment, and individuals in an aggressive environment are likely to also start exhibit aggressive behaviours—"monkey se, monkey do" (Robinson and O'Leary-Kelly, 1998, p. 658). Individual models for antisocial behaviour may be extra important when it comes to aggression as a trial-and-error approach may be associated with high stakes (Bandura, 1973).

In line with the above, Baillien *et al.* (2017) showed that victims of workplace bullying reported experiencing more conflict incidents at work than non-victims. Antisocial behaviour occurring in a work group may influence other individual group members' level of antisocial behaviours, which may create norms that preserve and prolong such behaviours (Robinson and O'Leary-Kelly, 1998). The existence of bullying may thus affect workplace norms, leading to situations where distrust, suspicion and antagonism spread, especially if witnesses do not try to intervene (Rosander and Nielsen, 2023).

Social information processing theory (Salancik and Pfeffer, 1978) may also inform us about how mistreatment spreads. The theory suggests that individuals gather information from their social environments to understand what is happening around them and to determine behavioural expectations leading to a tendency to change their behaviour accordingly. In a hostile work climate, the social information gathered may lead to a normalization of hostility and a change of one's attitude towards negative behaviour.

Vranjes *et al.* (2022) showed that there is an association between bullying exposure and perpetration. This association has also been found in related research areas such as workplace incivility (Gallus *et al.*, 2014), where experiences of incivility were connected to increased incivility perpetration. There are similarities, but also differences comparing workplace bullying and incivility. While both are about negative social behaviour, incivility is largely about rudeness and characterized by its relatively low intensity (Andersson and Pearson, 1999). However, many times bullying behaviours and incivility may go hand in hand, and it may be possible to learn from how incivility is spread (e.g. Foulk *et al.*, 2016), and apply these findings to how bullying behaviours may be spread and turn into a hostile work climate.

Like incivility, workplace bullying is regarded as an escalating process (Einarsen, 2000; Rosander and Blomberg, 2019). Andersson and Pearson (1999) described a possibility for incivility to escalate into coercive action, that is, into more severe actions with a clearer intent to harm. The incivility spirals involve mutual incivility from original perpetrator and initial target that may escalate through loss of face, identity threats and anger that fuel a desire for

revenge. This is similar to the association between exposure to bullying behaviours and own perpetration as shown by Vranjes *et al.* (2022). Andersson and Pearson (1999) also suggested that there may be secondary incivility spirals created through a process of norm erosion from witnessing and participating in incivility at work. This is highly relevant when considering how situations where individual employees are exposed to bullying may turn into a general hostile work climate over time. In a climate where bullying is more or less allowed and where employees act in an uncivil way, there is a risk of a shift in norms and a normalization of negative behaviours and mistreatment—a ripple effect (Barsade, 2002) in which an emotional, affective mode may be transferred among people in a work group (Barsade and Gibson, 2012).

Based on a social learning perspective (Bandura, 1973) and the social information processing theory (Salancik and Pfeffer, 1978), bullying behaviours seem to be prone to spread creating a normalization of distrust and hostility, and an even more hostile work climate. Thus, we hypothesize:

H2. Exposure to workplace bullying is associated with increased hostile work climate at follow-up.

Gender and a hostile work climate
There is strong evidence that factors in the work environment, such as unclear roles and role conflict, are important antecedents of workplace bullying (Salin and Hoel, 2020). However, whether these risk factors are the same for men and women remains open and has received little attention. In a study based on a representative sample of Finnish employees, Salin (2015) showed that there are reasons to believe such gender differences exist; however, more research is needed. How men and women are affected by different organizational climates in general and by a hostile work climate, in particular, is unclear.

Overall, many studies have addressed how gender may affect workplace bullying (for overviews see, e.g. Salin, 2021; Salin and Hoel, 2013). These studies demonstrate that the role of gender in bullying is complex and that gender may affect exposure to negative acts, interpretations of these acts, health consequences, as well as response and coping patterns. When it comes to the relationship between a hostile work environment and bullying, it can be argued that the last point, responses and coping pattern, may be of particular relevance to understand this dynamic.

In line with this, studies on gender differences in reaction to aggression may help understand what a hostile work climate could mean in terms of actions and reactions for men and women. Winstok (2006) investigated intentions to act when faced with aggression at the workplace. The results showed that escalatory tendencies towards men were higher than towards women in general. The highest escalatory tendencies were found for men against other men. Similar results were found in a study of relational aggression and counterproductive work behaviours (Spector and Zhou, 2013). They found higher levels of relational aggression for men, and that gender moderated the association between interpersonal conflict and counterproductive work behaviours directed towards others—with a stronger association for men. This thus suggests that when facing hostility, men may be more inclined to respond in ways that escalate this behaviour. Given that even in a country with relatively high levels of gender equality, such as Sweden, most occupations are strongly gender-segregated (Rosander *et al.*, 2022a; Statistics Sweden, 2022) it means that men are also more likely to work with other men rather than women, thus the targets of their retaliation also more likely being men. This would suggest that men face a higher risk that a hostile work climate could result in or escalate into actual bullying.

As for the role of different coping styles, Vranjes *et al.* (2022) compared two different coping styles, problem- and emotion-focused coping, and their consequences for

victimization and perpetration of workplace bullying. Problem-focused coping involves attempts to control the perceived stressor or seeking instrumental support from others, while in emotion-focused coping one tries to reduce the emotions stirred by the stressor without actually dealing with the underlying problem. Vranjes and colleagues found that a problem-focused coping style was associated with a higher probability of enacting bullying behaviour as a response. Ólafsson and Jóhannsdóttir (2004) found gender differences in the choice of coping style in response to negative behaviour. Men more often responded actively by confronting the perpetrator, whereas women more often sought help and emotional support or tried to avoid the negative situation altogether. These two studies taken together suggest that by using a more active coping style men may be more likely to escalate the situation than women. Based on social role theory (Eagly and Wood, 2012), stereotypical images of being a man and what masculinity entails may also create expectations of men taking a more active response to negative behaviour. Such role expectations may thus set fire to an already hot situation.

The reasoning above suggests there may be differences in regard to how a hostile work climate affects men and women with regard to conflict escalation tendencies. Men have a higher probability of using active coping styles confronting the perpetrator when exposed to negative behaviours (Ólafsson and Jóhannsdóttir, 2004), increasing the likelihood of conflict escalation. In addition, there are role expectations on men to behave in a more assertive and aggressive way based on social role theory (Eagly and Wood, 2012). This leads us to hypothesize the following:

H3. The association between a hostile work climate and subsequent bullying is stronger for men than for women.

Men interpret many forms of bullying behaviours as less severe than women (Escartín *et al.,* 2011) which may lead to a higher acceptance and higher likelihood of acting in a counterproductive way. Appropriate behaviour may be understood in terms of the social information processing theory (Salancik and Pfeffer, 1978) as discussed earlier. Women as third parties expect more negative outcomes of bullying and perceive such treatment as more severe compared to men (Salin, 2011). In line with the reasoning above, this may make women more cautious about taking part in such behaviour, thus reducing the chances of negative behaviour spreading among women. Witnesses try to evaluate the severity of what is observed as part of a sense-making process (Ng *et al.,* 2019) and based on this decide on a response, for example, constructive or destructive behaviour. Ng *et al.* (2019) suggested that the decision may be followed by rationalizations for one's choice using moral disengagement (Bandura, 2016). This rationalization and decision-making may follow from social information processing based on what one perceives others do. If an observed negative behaviour is regarded as less severe, it is more likely that distrust, suspicion and antagonism may spread. As discussed above, previous research has suggested that men regard negative behaviour as less severe. As such, there may be fewer restraints which in turn may lead to a higher likelihood that negative behaviours may spread among men. Based on the social information processing theory (Salancik and Pfeffer, 1978) and the sense-making model of workplace bullying bystanders (Ng *et al.,* 2019) we hypothesize the following:

H4. The association between exposure to bullying and a hostile work climate at follow-up is stronger for men than for women.

Methods
The data used in the study are from a longitudinal national probability sample drawn from the whole working population of Sweden. The baseline data are from the autumn of 2017 (T1) and the follow-up data were collected in the spring of 2019 (T2). Workplaces with less than ten

employees were not included when the sample was drawn as bullying in such microenterprises is less likely (Lagabrielle *et al.*, 2022). There were 1853 respondents at baseline. Those who responded were invited to participate in the follow-up data collection (*n* = 1,095). During the 18 months that passed between T1 and T2, 174 respondents had changed jobs and were excluded from the current study as their answers at T2 are connected to a new work climate. Previous studies have also shown a dramatic drop in exposure to bullying when changing jobs (Rosander *et al.*, 2022b). That left us with a total of 921 participants. The project was approved by the Regional Ethical Review Board at Linköping University, protocol number: 2017/336-32.

Participants
In the final sample, 42% were men (all demographic information was taken directly from the Swedish population register which means we only have access to biological sex), 55% of the participants were married, and 90% were born in Sweden. The mean age was 50.1 years (SD = 9.8). The majority (59%) had some form of university or college education, 35% had 11–12 years, 4% had only 9–10 years (compulsory school) and 1% had less than 9 years of education. The participants had worked 14.2 years (SD = 11.8) at their current workplace, 97% had a fixed contract and 14% held a managerial position.

Measures
Workplace bullying was measured using the nine-item version of the Negative Acts Questionnaire, SNAQ (Einarsen *et al.*, 2009; Notelaers *et al.*, 2019). It uses a five-point frequency scale, from *never* to *daily*. Cronbach's alpha for the scale was 0.83 (T1) and 0.85 (T2).

A Hostile Work Climate (HWC) was measured using five items from the Psychosocial Work Environment Questionnaire (PSYWEQ, Rosander and Blomberg, 2018): "My workplace is characterized by suspicion, conflicts, misunderstandings and rudeness", "There are ongoing conflicts that affect activities and operations negatively", "There are co-workers who are treated badly at our workplace", "I feel safe and secure at my workplace" and "At our workplace, the atmosphere is good". The two latter items were reversed when creating the scale. All items use a seven-point Likert scale. Cronbach's alpha for the scale was 0.80 (T1) and 0.82 (T2). As a climate factor, the HWC is suitable for group-level analysis; however, our data do not contain information on work groups as it is a random sample. The wording of the items clearly addresses the conditions at one's workplace, that is, characteristics of the workplace, rather than measuring and requiring personal exposure to mistreatment.

Given that our measure of HWC is new and has not previously been validated, we first wanted to investigate if the HWC behaved as predicted. To test this, we used measures of health, depression, anxiety, job satisfaction and joint job satisfaction. Health was measured using the Salutogenic Health Indicator Scale (SHIS, Bringsen *et al.*, 2009). It has a six-point semantic differential scale, twelve items and Cronbach's alpha was 0.95 (T1). Depression and anxiety symptoms were measured using the Hospital Anxiety and Depression Scale (HADS–D and HADS-A, Zigmond and Snaith, 1983). It uses a four-point scale from *never* to *most of the time* (or similar wording depending on the question); seven items measuring depression symptoms and seven anxiety symptoms. Cronbach's alpha for HADS–A was 0.84 (T1) and for HADS–D 0.80 (T1). Job satisfaction and joint job satisfaction were measured using scales from the PSYWEQ (Rosander and Blomberg, 2018). Both measures use a seven-point Likert scale. Perceived Job Satisfaction (PJS) has six items capturing feeling proud and committed, having stimulating tasks, liking the job and like going to work. Cronbach's alpha was 0.89 (T1). Finally, Joint Job Satisfaction (JJS) captures a more general, common experience of job satisfaction using two items. Cronbach's alpha was 0.87 (T1).

Statistical analyses
We used Stata 17.0 for all analyses. Structural equation modelling (SEM) and the maximum likelihood with missing values (MLMV) were used as the main analytic method. For determining model fit we used chi-squared (χ^2), root mean square error of approximation (RMSEA), comparative fit index (CFI) and Tucker–Lewis index (TLI). For the RMSEA values below 0.05 and for the CFI and TLI values close to 0.95 was used as indication of a good fit (Hu and Bentler, 1998). Investigating the HWC measure we first conducted an explorative factor analysis using eigenvalues >1 as extraction rule followed by SEM to empirically determine differences between the concepts HWC and workplace bullying. In testing the hypotheses, a time-lagged reciprocal approach using latent variables was adopted. We tested four models, a stability model and three cross-lagged models (forward, reversed and reciprocal) to determine the causal/bidirectional relationship between a hostile work climate and workplace bullying. For hypotheses 3 and 4 interaction terms for the two cross-lagged directions were added.

Results
Table 1 shows descriptive statistics and intercorrelations for the variables used in the study.

As hostile work climate is a new measure, we first investigated its dimensions using an exploratory approach. A factor analysis showed that all five items of the HWC loaded on a single factor (eigenvalue >1 as extraction rule) explaining 57% (T1) and 60% (T2) of the variance. We then used a confirmatory approach to determine if HWC was empirically different from workplace bullying. We tested a one-factor model and compared it to a two-factor model (i.e. the two latent factors that we described in the methods section). The results clearly showed a better fit for the two-factor model, $\chi^2(1) = 308.19, p < 0.001$. The fit statistics for the baseline measures were $\chi^2(71) = 324.49$, $p < 0.001$, CFI = 0.95, TLI = 0.93, RMSEA = 0.062 (95% CI = 0.056–0.069). The fit statistics for the one-factor model were $\chi^2(72) = 631.68, p < 0.001$, CFI = 0.88, TLI = 0.85, RMSEA = 0.092 (95% CI = 0.085–0.099). The results were basically the same for the follow-up measures. A hostile work climate is expected to correlate negatively with health ($r = -0.39$), job satisfaction ($r = -0.45$) and joint job satisfaction ($r = -0.66$), and positively with anxiety ($r = 0.34$) and depression ($r = 0.39$) symptoms. We thus concluded that the HWC behaved as can be expected of a construct capturing suspicion, conflicts, rudeness, and lack of safety and good atmosphere. Having established that the HWC is empirically different from bullying and that it behaves in predicted ways in relation to other relevant measures, we continued to investigate the cross-lagged effects.

We tested and compared four models, a stability model, a forward and a reversed model, and a reciprocal model using latent variables and their respective items in the models. The models were initially tested using age and sex as covariates, but as none of them showed any significant associations the final models were tested without them.

	Mean	SD	1	2	3	4	5
1. Gender	0.58	0.49	–				
2. Age	50.07	9.76	0.00	–			
3. SNAQ T1	1.20	0.34	−0.05	−0.11***	–		
4. SNAQ T2	1.19	0.33	−0.05	−0.11***	0.63***	–	
5. HWC T1	2.51	1.24	0.04	0.02	0.51***	0.39***	–
6. HWC T2	2.51	1.27	0.04	−0.05	0.47***	0.55***	0.58***
Source(s): Created by the authors							

Table 1.
Means, standard deviations and intercorrelations of the study variables

As seen in Table 2, model 4 had the best fit of all four models meaning there were significant associations between a hostile work climate and subsequent bullying, $\beta = 0.12, p = 0.007$, and between baseline bullying and a subsequent hostile work environment, $\beta = 0.15, p = 0.002$ (see Figure 1). Significant cross-lagged associations in both directions in the reciprocal model mean that both hypotheses 1 and 2 got support.

Adding gender as a moderator for both cross-lagged associations in model 4, $\chi^2(375) = 1,408.72, p < 0.001$, CFI $= 0.92$, TLI $= 0.90$, RMSEA $= 0.055$, 95% CI $= 0.052$–0.058, showed that gender only moderated the forward association between a hostile work climate at baseline and bullying at follow-up, $\beta = -0.23, p < 0.001$. The interaction between bullying and gender with regard to hostile work climate at follow-up was not significant, $\beta = -0.07, p = 0.158$. The interaction between a hostile work climate and gender with regard to subsequent bullying is displayed in Figure 2 showing a stronger association for men, $b = 0.14, p < 0.001$, compared to women, $b = 0.08, p < 0.001$, that is, the results support hypothesis 3. Hypothesis 4 did not get support.

		χ^2	df	CFI	TLI	RMSEA (90% CI)	Comparison	$(df)\,\chi^2$
				Test statistics			Model comparison	
M1	Stability model	1,127.14***	324	0.93	0.92	0.052 (0.049–0.055)		
M2	Forward model (Hostile T1 → Bullying T2)	1,116.72***	323	0.93	0.92	0.052 (0.048–0.055)	M2 vs M1	(1) 10.43**
M3	Reversed model (Bullying T1 → Hostile T2)	1,114.90***	323	0.93	0.92	0.052 (0.048–0.055)	M3 vs M1 M3 vs M2	(1) 12.24*** (−) 1.83 ns
M4	Reciprocal model (Hostile T1 → Bullying T2 and Bullying T1 → Hostile T2)	1,107.79***	322	0.93	0.92	0.052 (0.048–0.055)	M4 vs M1 M4 vs M2 M4 vs M3	(2) 19.35*** (1) 8.92** (1) 7.11**

Note(s): *$p < 0.05$. **$p < 0.01$. ***$p < 0.001$. ns = not significant
Source(s): Created by the authors

Table 2.
Results of four cross-lagged structural regression models between a hostile work climate and workplace bullying
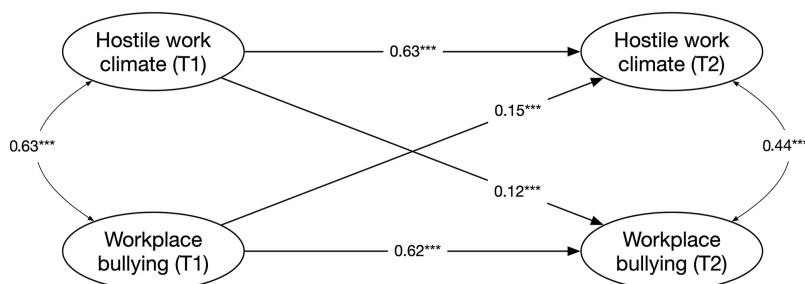
Note(s): CFI $= 0.932$, TLI $= 0.920$, RMSEA $= 0.052$ (0.048–0.058) ***$p < 0.001$, standardized coefficients
Source(s): Created by the authors

Figure 1.
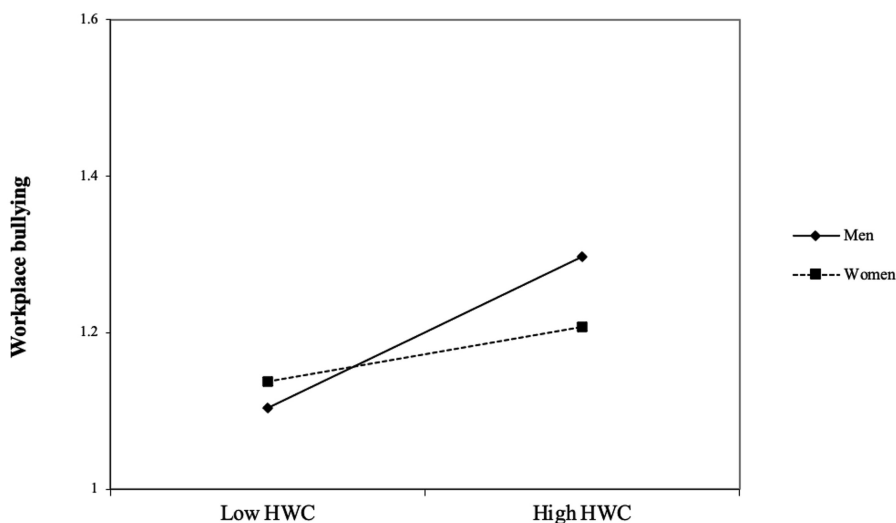Associations between a hostile work climate and exposure to workplace bullying (M4 model)

Note(s): HWC = Hodtile Work Environment; Low HWC is equal to –1 SD and high HWC is equal to +1 SD
Source(s): Created by the authors

Discussion

The present study contributes to our understanding of the reciprocal associations between a hostile work climate and workplace bullying, and gender differences in these associations. The results showed that a hostile work climate was associated with an increased risk of exposure to workplace bullying (hypothesis 1), and that exposure to workplace bullying was associated with increased hostile work climate at follow-up (hypothesis 2). In regard to gender differences, the association between a hostile work climate and subsequent bullying was stronger for men than for women (hypothesis 3). For the reversed association, no gender difference was found, that is, hypothesis 4 was not supported.

The results may be understood in the light of two distinct processes, escalation of conflict and spread of distrust, suspicion and antagonism—two processes that seem to be intertwined and affect each other. *The spread of distrust, suspicion and antagonism*, that workplace bullying is associated with an increase in hostile work climate, may be understood using a social learning perspective (Bandura, 1973) and the social information processing theory (Salancik and Pfeffer, 1978). Individual perpetrators may serve as models for antisocial behaviours which could influence norms preserving such behaviours (Robinson and O'Leary-Kelly, 1998). This is what Barsade (2002) referred to as a ripple effect, meaning that an emotional and affective mode may spread to others at the workplace (Barsade and Gibson, 2012). At workplaces where bullying exists, evaluations of witnessed bullying may lead to uncertainty and distrust, and a possible threat of future mistreatment not only for the target but also for witnesses (Sprigg *et al.*, 2019). The social information gathered may lead to a normalization of hostility and changing one's perception of what is regarded as acceptable behaviour. In the related field of workplace incivility, Gallus *et al.* (2014) showed that incivility easily spread at work.

In a hostile work climate, there is also a risk of *escalation of conflict* reflected in the positive association with subsequent exposure to workplace bullying in the present study. Dispute-related bullying involves highly escalated conflicts turning into bullying (Einarsen, 1999;

Zapf and Gross, 2001) something that also has been suggested in the three-way model of bullying (Baillien *et al.*, 2009). In a hostile work climate there is also a risk of third party instigation in conflicts, something that has been found to increase the risk of a more serious conflict and escalation (Felson, 1982). In the related field workplace incivility, research points to the importance of an organizational climate tolerant of such mistreatment as a predictor of exposure (Gallus *et al.*, 2014). Early on, studies on workplace bullying identified the importance of a climate at work that more or less permits mistreatment for bullying to occur (Brodsky, 1976). Vartia (1996) found that the climate at workplaces where bullying occurred could be categorized as more confrontational, strained and unfriendly compared to what she referred to as no-bullying workplaces.

The reciprocal association between a hostile work climate and workplace bullying found in the present study points to a risk of a vicious circle of distrust, suspicion, conflicts and antagonism escalating into exposure to workplace bullying, which in turn may lead to further distrust, suspicion, conflicts and antagonism, and so on. That there may be a reciprocal association between the work climate and acts of violence has been suggested before (O'Leary-Kelly *et al.*, 1996). Keashly *et al.* (2020) reviewed studies that suggested that the organizational climate may affect the risk of harassment and aggression. However, they also raised the question of whether aggression may affect the organizational climate in turn: "does a prevalence of abuse poison an organization's culture?" (p. 81). Keashly *et al.* (2020) called for longitudinal research to explore the possible bi-directional relationship between organizational culture and aggression, something this study has sought to address. Although violence or aggression between employees are not the same as workplace bullying they are related (Notelaers *et al.*, 2018). Violent and aggressive behaviour may be part of workplace bullying, but is not bullying *per se* as framing something as bullying also requires the behaviour to be systematic and a target that ends up in an inferior position (Einarsen *et al.*, 2020). The spreading of mistreatment and aggression may lead to a normalization of such behaviours (Barsade, 2002), and expressions of aggression are likely to escalate (Felson, 1982). If there are no clear sanctions and no one tries to intervene or stop the mistreatment there is an increased risk for others at the workplace to become the next victim of workplace bullying (Rosander and Nielsen, 2023).

The results showed that not all of this were the same for men and women. For the escalation processes, from a hostile work climate to exposure to workplace bullying, the association was stronger for men. Felson (1982) showed that men are more likely to respond to verbal insults than women, and by doing that they are more likely to escalate a dispute. A similar result was found in terms of coping style, where men more often than women used a problem-focused coping style, confronting the bully (Ólafsson and Jóhannsdóttir, 2004). Vranjes *et al.* (2022) found that such a coping style was associated with a higher probability of responding with bullying behaviour, increasing the risk of escalation. The stereotype of men being more agentic than women (Eagly and Wood, 2012) may also play a part in this meaning men's reactions to conflict may be more confrontative in part due to the expectations one may have based on one's social role and that conflict escalation would be more likely for men. The present study showed that men were more likely than women to report that a hostile work climate escalated into personal experiences of workplace bullying. In contrast, men were not more likely than women to experience that bullying resulted in a more hostile work climate, that is, mistreatment spreading from specific individuals to general conflicts and suspicion in the broader work community. Thus, the paper also contributes valuable insights into the gendered nature of workplace bullying and when gender does and does not affect bullying dynamics.

Practical implications
The results of the study have important implications. The results highlight the risk of a hostile work climate escalating into bullying and the risk of bullying spreading further by giving rise to a more hostile work climate in turn. This points to the importance of swiftly

addressing problems when either signs of a hostile work environment or bullying are discovered. This is important given the severe negative consequences associated with exposure to bullying (Nielsen and Einarsen, 2012). Managers need to be trained to quickly spot warning signs and to without delay engage in constructive conflict management when needed (Salin, 2013). Recent research points to the importance of creating an ethical infrastructure to reduce the risk of bullying and increase chances of successfully addressing it (Einarsen *et al.*, 2017). Ethical infrastructure refers to formal and informal systems that enable ethical behaviour and disable unethical behaviour in organizations. It may contain elements such as having a zero-tolerance policy towards inappropriate interpersonal behaviour, recurrent communication in the form of awareness campaigns and training, formal surveillance in the form of work climate surveys and formal sanctions to help detect an unhealthy climate at an early stage. The ethical infrastructure also contains informal elements, such as social norms condemning inappropriate treatment and a good conflict management climate (Einarsen *et al.*, 2017, 2018). Such elements may also help prevent the tendencies of escalation and spreading that have been reported in this study.

The results of this study further point to the importance of paying attention to the increased risk of bullying in a hostile work climate for men—as discussed, probably a result of escalated conflicts. There may also be a need to more closely monitor or act on indications of a stereotypical male type of jargon and interaction at the workplace to reduce the risk of escalation from hostile work climate to actual bullying.

Strengths and limitations

A major strength of the current study is that it is based on a longitudinal probability sample drawn from the whole Swedish workforce. Using a time-lagged approach using structural equation modelling allowed us to investigate the reciprocal associations. There are also some limitations. The measures of a hostile work environment and exposure to bullying behaviours are self-report measures that are susceptible to social desirability and common method variance (Podsakoff and Organ, 1986). A way to alleviate the risk for common method variance is to use measures separated in time (Podsakoff *et al.*, 2003). In the present study there is an 18-month time-lag that should reduce this risk.

We used a new measure in the study, which means it has not previously been validated. However, for this reason we started by investigating and testing the validity of the measure. All results in these analyses point to a measure that behaves as expected and therefore we conclude that it is a valid measure of a hostile work climate. As such our study also contributes to research on hostile work climates by introducing and validating a new measure that can also be used in future studies. Ideally, as a climate variable, the measure should have been treated as a group-level variable. However, as the study is based on a probability sample there is no information available about work groups. Although the wording of the items measuring a hostile work climate focus on the perception of characteristics of the workplace, the results may be affected by a more negative view of the workplace of targets resulting in a possible overestimation of the associations. We therefore recommend that future studies try to replicate the findings using group-level data. A focus on the mechanisms behind the current results, such as norm erosion in the escalation from hostility to bullying, would also be of importance for future studies.

Conclusion

We have investigated the reciprocal association between a hostile work climate and workplace bullying. The results support the notion that the organizational climate and

bullying affect each other. In other words, a hostile work climate increases the risk of subsequent bullying and bullying in turn increase the risk that the climate becomes permeated by distrust, suspicion and antagonism. This could lead to vicious circles where the well-being of both current targets and future ones are at risk and where there is a risk of developing a toxic environment affecting the employees in general. This is especially true for men, who seem to be more at risk of becoming the next target at workplaces with high levels of a hostile work climate. Breaking a vicious circle probably becomes harder and harder with time, so early measures against bullying and taking signals of suspicion, misunderstandings and conflicts permeating a workplace seriously is of utmost importance—a stitch in time saves nine.

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About the authors
Michael Rosander is an Associate Professor of Psychology at Linköping University, Sweden. His
research interests are mainly workplace bullying and other social stressors at the workplace, and the
organizational conditions, such as the organizational and social work environment and leadership, that
may contribute to a well-functioning workplace. His work is published in, for example, *Work & Stress*,
*The International Journal of Human Resource Management, European Journal of Work and
Organizational Psychology, and Psychology of Violence*. Publications in recent years in peer-reviewed
journals by Rosander include more than 15 papers on different aspects of workplace bullying. Michael
Rosander is the corresponding author and can be contacted at: michael.rosander@liu.se

Denise Salin is a Professor of Management and Organization at Hanken School of Economics,
Helsinki, Finland. Denise's research centres mostly around the dark side of organizational behaviour
and her research interests include antecedents and outcomes of workplace bullying and mistreatment.
She has been doing research in this field since the late 1990s. Currently she is undertaking a project on
high-performance work practices and bullying. She has also conducted research on workplace bullying
as a gendered phenomenon. Denise's work has been published in, among other journals, *Human
Resource Management Journal, Human Relations, Journal of Occupational Health Psychology and Work
& Stress*.