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Workplace bullying and mental health problems in balanced and gender-dominated workplaces

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ABSTRACT

We investigate risks of exposure to workplace bullying and related mental health outcomes for men and women when being in a gender minority as opposed to working in a gender-balanced working environment or when belonging to a gender majority. Based on a social identity perspective, we tested hypotheses about the risks of bullying and differences in the increase in mental health problems in a probability sample of the Swedish workforce in a prospective design. The results showed an increased risk of bullying and an increase in mental health problems as an outcome for men when in a gender minority, however, there were no corresponding risks for women. The risks for men were most obvious for person-related negative acts and for anxiety as an outcome. Social identity may clarify why a minority might be more at risk as well as the outcome it may lead to. Deviating from the group prototype may be perceived as a threat to the group alienating the target and opening up for sanctions. The observed gender differences may further be understood using social role theory. Men in female-dominated workplaces may deviate more from the expected traditional gender role and may be more susceptible to sanctions and suffer graver consequences as a result. The outcomes may be more severe if exposed to person-related acts compared to acts related to one's work.

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workplace bullying; mental health problems; gender; minority; social identity theory; social role theory

Introduction

Being in a minority at work can be difficult in many ways, including the increased risk for minorities to become victims of workplace bullying. This risk has been shown for immigrants (Bergbom et al., 2015; Hogh et al., 2011; Rosander & Blomberg, 2022), being non-heterosexual (Di Marco et al., 2021; Hoel et al., 2019), belonging to a male gender minority at work (Eriksen & Einarsen, 2004; Lindroth & Leymann, 1993), and more generally for being non-prototypical in relation to one's work group (Glambek et al., 2020). Even if workplace bullying has been argued to be a highly gendered phenomenon (Salin et al., 2013; Zapf et al., 2020), studies combining gender and minority status

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in regard to workplace bullying are, however, scarce, and especially so for women being in a minority. Also, previous studies on male minorities have focussed on very specific occupations and contexts, e.g. nursing. The present study focusses on this knowledge gap and investigates the risks of being exposed to bullying for both genders when in a minority at work as opposed to being in a gender-balanced working environment. Furthermore, the present study investigates if mental health-related outcomes associated with such exposure to bullying vary depending on whether or not one belongs to a gender minority at work. These novel issues are investigated using a probability sample of the Swedish workforce and employing a prospective research design.

While there are industries with an equal or almost equal gender balance, for the majority of workplaces one gender is in a clear minority. According to Statistics Sweden (2017), up to 60% of workplaces in Sweden have a gender minority—in one-third of the workplaces women are in a minority and in one-fourth of the workplaces men are in a minority. Knowledge about the risks connected to bullying of minorities is important, and also whether or not the outcomes of exposure are more detrimental when being in a minority. That is, is being in a gender minority not only a risk for becoming a target of workplace bullying but also a risk factor for more detrimental outcomes when exposed to bullying? Drawing on a social identity perspective (Tajfel & Turner, 1979; Turner & Oakes, 1986), the present study investigates both the risk of being exposed and the mental health outcomes of workplace bullying for gender minorities over time—with mental health problems one and a half year later as an outcome.

Workplace bullying is a serious work stressor with grave consequences for its targets (Einarsen & Nielsen, 2015; Nielsen et al., 2014; Nielsen & Einarsen, 2012), characterised and defined by exposure to a systematic prolonged mistreatment at work by superiors and/or colleagues in situations where the target has difficulties defending themselves against these attacks (Einarsen et al., 2020). It seems to affect both male and female employees, occurring in all industries and on all organisational levels (Einarsen et al., 2020). Furthermore, bullying may come in different forms and intensities, involve work- and person-related negative acts, and often with an element of social exclusion. Work-related negative acts are behaviours that directly or indirectly have a negative effect on one's work tasks and performance, while, person-related negative acts are behaviours that attack the personal integrity of the target (Einarsen & Raknes, 1997).

The outcomes following exposure to bullying behaviours have been widely documented and may involve sleep problems (e.g. Hansen et al., 2014; Nielsen, Harris, et al., 2020, 2021), long-term sickness and absenteeism (e.g. Grynderup et al., 2017), and unemployment (e.g. Glambek et al., 2015). Many studies have documented a range of health problems in those targeted, be it in the form of PTSD symptoms, anxiety and depression or muscle-skeletal problems (Boudrias et al., 2021; Mikkelsen et al., 2020; Nielsen et al., 2012; Nielsen & Einarsen, 2012; Verkuil et al., 2015). Individual genetic, epigenetic and biological mechanisms behind these health problems are also starting to be addressed (e.g. Rajalingam et al., 2021). Yet, contextual or structural mechanisms have been less looked at when it comes to understanding the potential outcomes of exposure to workplace bullying (see Einarsen et al., 2016; Law et al., 2011 as notable exceptions).

Minorities at work, bullying, and social identity

Most studies on gender minorities and bullying, putting studies on sexual harassment apart, have exclusively focused on male minority (Eriksen & Einarsen, 2004; Lindroth & Leymann, 1993; Wang & Hsieh, 2015)—all showing a higher risk for men when being a gender minority at the workplace. One exception is a study by Archer (1999) who focussed on women as a minority in fire brigades. He provided accounts of the effects of a “white male culture” (p. 98) where bullying of minorities, in particular women and coloured men, could be seen as a mean to preserve the prevailing culture. Salin (2015) studied gender-incongruence at work, that is, men and women working with tasks normally performed by the opposite sex in the organisation. That approach is, however, a slightly different way of looking at a gender minority, as it does not necessarily say anything about the gender composition at the workplace, but is still relevant in the context of the present study. The results showed an increased risk of bullying—but for men only when working with tasks generally dominated by women. The question is then what makes an employee particularly at risk for mistreatment when belonging to a gender minority and how this works for both men and women in working life in general.

Glambek et al. (2020) studied the effects of dissimilarity to others in the workgroup in terms of social identity theory (Tajfel & Turner, 1979) and self-categorisation theory (Hogg & Terry, 2000; Turner & Oakes, 1986) in particular—referred to as non-prototypicality. Self-categorisation theory suggests that people tend to categorise themselves and others into social groups based on what gives the best fit to the current situation or what is salient in the situation (Hogg & Terry, 2000). As part of the process, a part of one’s personal identity will be connected to a common social identity of the group to which one belongs. This becomes a shared idea about the group and what it stands for, and a representation of an ideal group member—the group’s prototype. One driving force behind these processes is the uncertainty reduction hypothesis (Hogg, 2000), which suggests that a common social identity and a group prototype can provide stability and predictability. Another driving force is the self-esteem hypothesis (Abrams & Hogg, 1988), which states that people use self-comparison to achieve a positive self-image. A strong social identity in which there is a clear intergroup discrimination will enhance self-esteem, and in case of a low or threatened self-esteem intergroup discrimination is promoted in the group (Abrams & Hogg, 1988). Minorities as part of one’s group at work may be interpreted as a threat to the prevailing social identity and the group’s prototype. One way to deal with this is to change the idea of the group to include all members as a basis for the social identity. However, a more probable strategy is to re-categorise the minority as an outgroup and thereby retaining the strong idea of “us” as opposed to “them.” This could motivate group members to reject and mistreat members of the minority. Indeed, Glambek et al. (2020) found an increased risk of exposure to workplace bullying for group members that differed from the group prototype.

In line with this, Jansen et al. (2016) showed that gender dissimilarity at work was connected to social exclusion. Also, in a review of research on bullying, Schuster (1996) also proposed a link between social exclusion and deviation from the group’s characteristics or manners. Hence, there are both theoretical and empirical reasons to believe that being in a gender minority at work is a risk factor for exposure to workplace bullying:

Hypothesis 1. Being in a gender minority increases the risk of being exposed to workplace bullying, that is, there is a higher risk for men at female-dominated workplaces, and a higher risk for women at male-dominated workplaces. There will be no increased risk for either gender at gender-balanced workplaces.

Gender differences in health-related outcomes of workplace bullying

Following from this line of argument, the next question is whether there are gender differences in the individual outcomes of exposure to bullying and if these outcomes are particularly pronounced when belonging to a gender minority. Gender differences in the consequences of workplace bullying have been shown in previous studies. In a random sample of Norwegian employees Einarsen and Nielsen (2015) found an increased risk for psychological distress as long as five years after being bullied, but only for men (OR 4.22). To further understand these findings, they investigated anxiety and depression symptoms separately showing a significant association only for anxiety and only for men. A stronger association between bullying and anxiety for men compared to women has also been shown by Attell et al. (2017). Rosander et al. (2020) showed a stronger association for men between baseline bullying and subsequent mental health problems, but only for those who self-labelled as victims of bullying. There are also examples of studies that have investigated gender differences in regard to other individual outcomes of bullying than mental health problems. Nielsen et al. (2017) studied disability retirement as an outcome of bullying and found a higher risk for women. Glambek et al. (2018) focused on gender differences in neck pain as an outcome of bullying. The findings were very different for men and for women where the level of pain for women was higher than for men in general but did not seem to be affected by the level of exposure to bullying, whereas there was a clear positive association between level of exposure to bullying and neck pain among men.

Several theoretical explanations for the mental health outcomes of workplace bullying have been suggested, for example, the cognitive trauma theory (Janoff-Bulman, 1989), and the cognitive activation theory of stress (Ursin & Eriksen, 2004). Exposure to workplace bullying can be seen as a traumatic stressor (Einarsen & Mikkelsen, 2002) that may shatter basic assumptions of the world for the victim (Janoff-Bulman, 1989) leading to reduced well-being and mental health problems. Any stressful event can lead to arousal and a readiness to react (Ursin & Eriksen, 2004), however, exposure to bullying is likely to last over a longer period, making the expectations of a positive outcome of the situation less likely and one's possibility to cope effectively with the situation being reduced. According to the cognitive activation theory, reduced mental and psychosomatic health result from the more or less chronic stress suffered when being a victim of prolonged bullying.

That bullying may lead to mental health problems among those targeted has been shown empirically in a wide range of studies (Mikkelsen et al., 2020; Nielsen & Einarsen, 2012). The gender differences found are not as clear. Theoretical explanations for potential differences in health outcomes for men and women are also less obvious. Possible starting points may be the social power theory stating that people in power try to maintain inequality by using discrimination and a negative treatment against the less powerful (Salin, 2018; Sidanius et al., 2004). There may be differences in social power related to

genders, as when being in a gender majority versus minority. Hence, differences in the nature and/or severity of the treatment may then again also be reflected in the consequences suffered by those targeted.

Being exposed to bullying may also be interpreted differently by men and women. Being viewed as a victim and weak could be seen as a threat to a man's self-image according to social role theory (Eagly & Wood, 2012). As Lewis (2004) pointed out, showing signs of vulnerability could be connected to feelings of shame and by extension more severe mental health consequences for a man. Yet, an open question is whether being in such a non-prototypical and outsider role as a minority gender member, not only predicts exposure but also may account for more severe outcomes as there may be less social support and less sympathy from bystanders and managers when exposed. Postmes et al. (2019) argued that social identification may influence mental health and well-being in many ways. In addition to social support, social identification may satisfy basic psychological needs such as the need to belong and the need for self-esteem, hence, being less vulnerable when exposed to bullying. There are also cognitive benefits such as a reduction in negative attribution, and finally it gives opportunities for shared understanding and meaning protecting against existential anxiety.

Hypothesis 2. Being in a gender minority will increase subsequent mental health problems if exposed to workplace bullying, that is, there is a stronger association between the level of exposure to bullying behaviours and (a) anxiety symptoms and (b) depression symptoms for men at female-dominated workplaces, and for women at male-dominated workplaces. There will be no gender differences for these associations at gender-balanced workplaces.

An additional issue is whether this extra risk of reduced health outcomes when being in a gender minority holds for all forms of bullying. For instance, it may be the case that minorities are not only exposed to more bullying, but also exposed to more severe forms of bullying than are prototypical members. They may even be exposed to certain forms of bullying more frequently than majority targets. For example, Rosander and Blomberg (2022) found that there was an increased risk of exposure to more person-related forms of bullying for immigrants working in Sweden. Lewis and Gunn (2007) found that minorities more often were exposed to what they called personalised, or personal, bullying in which being ignored or excluded are typical elements. Being at the receiving end of insulting or offensive remarks are other typical forms of person-oriented bullying. Treatment focusing on one's personal weaknesses, habits, values and personality may then be more harmful than when the job and one's work tasks are afflicted. As proposed by Zapf and Einarsen (2005), the very reason that bullying is so harmful is that it prays on the very coping capabilities of the target. Such forms of bullying may also be more difficult to defend against, which is a core element of the very definition of workplace bullying. In addition, being an outsider in terms of gender may strengthen the feeling of being excluded and non-included resulting in less social support and perceived psychological safety. Hence, there are reasons to assume more severe health outcomes when being exposed to person-related bullying as a gender minority in the workplace. For these reasons we propose the following additional hypothesis:

Hypothesis 3. There will be a stronger association between exposure to bullying behaviours and subsequent mental health problems for person-related bullying compared to work-related bullying for men and women when being in a minority role (as described in hypothesis 2).

Materials and methods

The study is based on a prospective probability sample of the Swedish workforce. As the study has focus on workplace bullying, workplaces with less than 10 employees were excluded from the population the sample was drawn from. This left a potential population of about 3.3 million employees. The sampling and distribution of questionnaires were handled by Statistics Sweden. They sent out invitation letters to participants providing all necessary information to get informed consent. Baseline data were collected in the autumn of 2017 ($n = 1853$) and follow-up in the spring of 2019 ($n = 1095$). The time lag was not chosen specifically for the present study as the data used were part of a larger data collection. We discuss this possible limitation in the Strengths and Limitations section. After the first data collection, Statistics Sweden added demographic information from the Swedish population register before delivering the data to us—the same procedure was used after the follow-up. This contributed to the research ethics of the study as all data received for research were anonymous. The project was approved by the Regional Ethical Review Board at Linköping University, protocol number: 2017/336-32.

Balanced and gender-dominated workplaces

In this, Statistics Sweden provided the Swedish Standard Industrial Classification (SNI) for each participant. It contains classifications of workplaces based on the activities and line of work carried out. Statistics Sweden also provides general statistics on the number of men and women for all SNI classifications (Statistics Sweden, 2017). To be categorised as a male- or female-dominated workplace in the present study, the minority needed to be less than 30% of the employees. For gender-balanced workplaces, men and women needed to be more than 40% and less than 60%. Our categorisation of the SNI and workplaces in Sweden in 2017 resulted in an average of 22% women at male-dominated workplaces (10–28% women) working in, for example, construction, manufacturing, agriculture, and information and communication. In gender-balanced workplaces, there were 51% women (43–59% women) working in, for example, retail trade, finance, and public administration. Finally, there were 24% men in female-dominated workplaces (21–27% men) working in, for example, education and healthcare. In total 72 employees who had changed jobs to a different workplace category between baseline and follow-up were excluded. This left us with a sample of 1023 participants that answered at both times, and who had stayed in the same workplace category. There were 283 participants working at male-dominated workplaces (27% women), 347 participants working at gender-balanced workplaces (53% women), and 393 participants working at female-dominated workplaces (18% men).

Participants

In total, there were 57% women in the sample (as the data were taken from the national population register, we only had access to biological sex). The mean age of the participants was 49.6 years ($SD = 9.9$). They had worked at their current workplace for 14.1

years ($SD = 11.6$), with 15% holding a managerial position. Altogether 97% had a fixed contract. The majority (55%) had some form of university or college education, about 5% had 10 or less years of schooling (compulsory school), with 40% having 11–12 years.

Measures

Exposure to workplace bullying was measured using the Swedish version of the Negative Acts Questionnaire–Revised (NAQ-R, Einarsen et al., 2009; Rosander & Blomberg, 2019). The NAQ-R comprises 22 negative and unwanted work-related or person-related behaviours that may take the form of bullying if happening systematically over time. Respondents indicate on a five-point frequency scale from *never* to *daily* how often they had been exposed during the preceding 6 months to each of these. In the present study, we used the full scale measured at baseline – internal consistency (Cronbach’s alpha) being .89. We also analysed the two dimensions work-related and person-related negative acts separately. Examples of work-related bullying (WRB) items are “Someone withholding information which affects your performance” and “Excessive monitoring of your work.” The internal consistency of the WRB was .79. Examples of person-related bullying (PRB) items are “Being ignored or excluded” and “Being the subject of excessive teasing and sarcasm.” The internal consistency of the PRB was .89. When investigating the risk of bullying we used a cut-off of the NAQ-R, a sum score on or above 33 as suggested by Notelaers and Einarsen (2013). We also used the corresponding cut-offs for WRB and PRB on or above a score of 15 as suggested by Rosander and Blomberg (2022).

Mental health problems were measured using the Hospital Anxiety and Depression Scale (HADS, Zigmond & Snaith, 1983). The HADS has 14 items measuring anxiety and depression symptoms experienced the preceding week. It uses a response scale with four alternatives, for example, for anxiety symptoms (HADS-A), “I feel tense or ‘wound up’” with possible responses from *not at all* to *most of the time*. An example item for depression symptoms (HADS-D) is “I have lost interest in my appearance.” We measured HADS at follow-up, but also at baseline for stability adjusted increases in mental health problems over time. The internal consistency for the full HADS, HADS-A, and HADS-D were at T1 .90, .85, and .84; and at T2 .89, .84, and .84, respectively.

There were significant negative correlations between the participants’ age and bullying, and age and mental health problems, respectively (see Table 1). Comparing men and women showed that 18% of the men and 10% of the women had a managerial position, $X^2(1) = 26.1$, $p < .001$. Managerial position in the study reflects the gender inequalities found in Sweden and elsewhere in this respect. Age and managerial position were added as covariates in the study.

Statistical analyses

All analyses were conducted using IBM SPSS version 27. To explore the occurrence of bullying in the three organisational categories and corresponding gender differences we used ANOVA. We also calculate the risk of being exposed to bullying using logistic regression and odds ratio for the three organisational categories separately. Investigating

Table 1. Means, standard deviations, and intercorrelations for all variables used in the study.

			1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Age	49.57	9.89	–								
2. Position	0.15	0.35	.02	–							
3. Gender	0.57	0.50	.03	–.10***	–						
4. NAQ-R (T1)	1.24	0.32	–.14***	–.02	–.07*	–					
5. WRB (T1)	1.44	0.49	–.13***	–.04	–.07*	.90***	–				
6. PRB (T1)	1.14	0.30	–.12***	–.00	–.06	.88***	.60***	–			
7. HADS-D (T1)	0.49	0.46	–.07*	–.06	.00	.48***	.46***	.40***	–		
8. HADS-D (T2)	0.48	0.45	–.06	–.05	–.02	.37***	.36***	.31***	.62***	–	
9. HADS-A (T1)	0.76	0.56	–.14***	–.08**	.12***	.42***	.41***	.34***	.70***	.50***	–
10. HADS-A (T2)	0.74	0.55	–.14***	–.09**	.13***	.31***	.32***	.24***	.49***	.66***	.68***

Note. Position: co-workers = 0, managers = 1. Gender: men = 0, women = 1; NAQ-R = Negative Acts Questionnaire-Revised; WRB = Work-Related Bullying; PRB = Person-Related Bullying; HADS-D = Hospital Anxiety and Depression Scale – Depression; HADS-A = Hospital Anxiety and Depression Scale – Anxiety.

* $p < .05$; ** $p < .01$; *** $p < .001$.

gender and gender-domination at the workplace as moderators for the association between bullying and mental health problems we used model 3 in the PROCESS macro (Hayes, 2018). In the moderation analyses age and managerial position were added as covariates.

Results

Means, standard deviations and intercorrelations for all study variables are presented in Table 1.

Bullying and mental health problems at gender-balanced and gender-dominated workplaces

We used the full baseline sample ($n = 1853$) to compare the bullying levels at gender-balanced, male- and female-dominated workplaces, respectively. The level of workplace bullying was almost identical for the three types of organisational settings (all three had a mean NAQ-R score of 1.26 and standard deviations were 0.36–0.37). There was a main effect of gender showing that men had a higher mean score (1.29, $SD = 0.38$) compared to women (1.25, $SD = 0.36$), $F(1, 1841) = 6.86$, $p = .009$ (see Figure 1). In hypothesis 1, we expect there would be a higher risk for men in female-dominated workplaces, and a higher risk for women in male-dominated workplaces of being exposed to workplace bullying, while we did not expect any gender differences in gender-balanced workplaces. Controlling for age and managerial position, there was an equal risk of becoming bullied (NAQ-R ≥ 33) for men and women at male-dominated workplaces. In gender-

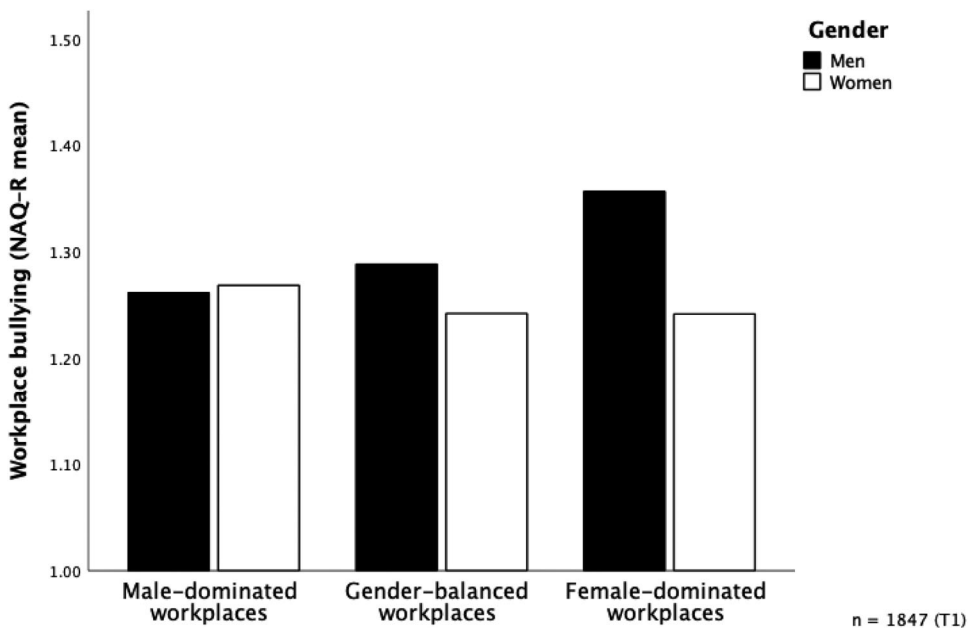


Figure 1. Workplace bullying for men and women working at gender-balanced and gender-dominated workplaces.

balanced workplaces, there was a significantly increased risk for men compared to women, OR = 1.79, 95% CI [1.18; 2.71], and at female-dominated workplaces, the risk for men was even greater, OR = 2.06, 95% CI [1.26; 3.36]. However, these risks were there for person-related bullying only—there were no significant results when investigating work-related bullying for any of the three types of organisation. As above, the increased risk of exposure to person-related bullying for men was found in gender-balanced workplaces, OR = 1.72, 95% CI [1.12, 2.64], and in female-dominated workplaces, OR = 1.89, 95% CI [1.14; 3.14]. Hence, hypothesis 1 was only partly supported.

Three-way interactions

We used model 3 in Hayes' PROCESS macro with gender and gender-domination at the workplace as moderators, controlling for age and managerial position, and adjusting for the baseline of the dependent variable (mental health problems) to test hypotheses 2 and 3. In hypothesis 2, we postulated that being in a gender minority will increase subsequent mental health problems if exposed to workplace bullying, that is, a stronger association between the level of exposure to bullying behaviours and (a) anxiety symptoms and (b) depression symptoms for men at female-dominated workplaces, and for women at male-dominated workplaces. In hypothesis 3, we expected the associations to be more evident for person-related bullying compared to work-related bullying. Table 2 shows the results for six combinations of bullying predicting mental health problems. For bullying, the different measures were the full NAQ-R scale as well as work-related bullying (WRB) and person-related bullying (PRB), and for mental health problems, the different measures were depression symptoms (HADS-D) and anxiety symptoms (HADS-A).

For *workplace bullying* and *depression symptoms*, there was a significant three-way interaction comparing balanced and female-dominated workplaces. The interaction means that there was a significant association between bullying and depression for men, but not for women at female-dominated workplaces (men: $b = 0.35$, $p = .004$, women: $b = 0.02$, $p = .841$) compared to gender-balanced workplaces where there was a small but significant association for women only (men: $b = 0.13$, $p = .063$, women: $b = 0.21$, $p = .035$). For *workplace bullying* and *anxiety symptoms*, there were significant three-way interactions comparing both male- and female-dominated

Table 2. Different combinations of bullying and mental health measures.

IV		DV	Three-way interactions (gender and gender-domination)			
			Male- vs. female-dominated workplaces		Balanced vs. female-dominated workplaces	
			<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>
NAQ-R	→	HADS-D	0.20	.321	0.41	.028
NAQ-R	→	HADS-A	0.55	.019	0.47	.028
WRB	→	HADS-D	0.14	.270	0.23	.050
WRB	→	HADS-A	0.25	.094	0.16	.238
PRB	→	HADS-D	0.21	.349	0.39	.046
PRB	→	HADS-A	0.66	.008	0.61	.007

Note. NAQ-R = Negative Acts Questionnaire-Revised; WRB = Work-Related Bullying; PRB = Person-Related Bullying; HADS-D = Hospital Anxiety and Depression Scale – Depression; HADS-A = Hospital Anxiety and Depression Scale – Anxiety.

workplaces, and balanced and female-dominated workplaces. Comparing male- and female-dominated workplaces, there was only a significant association for men at female-dominated workplaces (men: $b = 0.32$, $p = .026$, women: $b = -0.01$, $p = .899$). Finally, comparing balanced and female-dominated workplaces we see the same pattern where the only significant association was for men at female-dominated workplaces (men: $b = 0.32$, $p = .026$, women: $b = -0.00$, $p = .976$). Thus only men as a minority showed an increase in mental health problems at follow-up if exposed to workplace bullying. This means hypothesis 2 was only partially supported.

Work-related bullying and *depression symptoms* showed no significant three-way interaction comparing male- and female-dominated workplaces, and just barely an interaction for the association between work-related bullying and depression symptoms comparing balanced and female-dominated workplaces. The interaction means that there was an association between work-related bullying and depression symptoms for men working at female-dominated workplaces (men: $b = 0.24$, $p = .001$, women: $b = 0.09$, $p = .049$), compared to gender-balanced workplaces (men: $b = 0.01$, $p = .822$, women: $b = 0.09$, $p = .137$). A similar pattern could be discerned for the association between *person-related bullying* and *depression symptoms* (female-dominated workplaces, men: $b = 0.28$, $p = .034$, women: $b = 0.09$, $p = .225$; balanced workplaces, men: $b = 0.01$, $p = .876$, women: $b = 0.22$, $p = .037$). The absolutely clearest associations were found for *person-related bullying* predicting *anxiety symptoms*—for both male- vs. female-dominated workplaces ($b = 0.66$, $p = .008$), and balanced vs. female-dominated workplaces ($b = 0.61$, $p = .007$). The result of this analysis is presented in Table 3, and the interaction is shown in Figure 2. The result showed more evident effects for person-related bullying compared to work-related bullying. This means hypothesis 3 was supported.

Discussion

The present study focussed on the role of being in a gender minority with respect to workplace bullying, that is, how being in a gender minority affects the risk of exposure to bullying as well as regarding the effects of bullying on mental health problems as related to one's exposure. First, we hypothesised an increased risk of bullying for men and women if being in a gender minority and no increased risk if working at a gender-balanced workplace. The

Table 3. A three-way moderation analysis predicting anxiety symptoms at T2.

	<i>B</i>	<i>SE b</i>	95% <i>CI b</i>	<i>p</i>
Person-related bullying, PRB (T1)	0.34	0.15	[0.05; 0.63]	$p = .021$
Gender	-0.07	0.05	[-0.17; 0.04]	$p = .201$
PRB x Gender	-0.43	0.17	[-0.76; -0.10]	$p = .011$
Z1 (Male vs. Female-dominated)	-0.14	0.06	[-0.25; -0.03]	$p = .013$
Z2 (Balanced vs. Female-dominated)	-0.13	0.06	[-0.24; -0.01]	$p = .032$
PRB x Z1	-0.36	0.18	[-0.71; -0.01]	$p = .042$
PRB x Z2	-0.36	0.17	[-0.69; -0.02]	$p = .038$
Gender x Z1	0.19	0.08	[0.04; 0.34]	$p = .012$
Gender x Z2	0.15	0.07	[0.02; 0.29]	$p = .027$
PRB x Gender x Z1	0.66	0.25	[0.17; 1.14]	$p = .008$
PRB x Gender x Z2	0.61	0.22	[0.17; 1.05]	$p = .007$
Age	-0.00	0.00	[-0.00; 0.00]	$p = .125$
Position	-0.03	0.04	[-0.11; 0.04]	$p = .375$
Anxiety symptoms, HADS-A (T1)	0.65	0.02	[0.60; 0.69]	$p < .001$

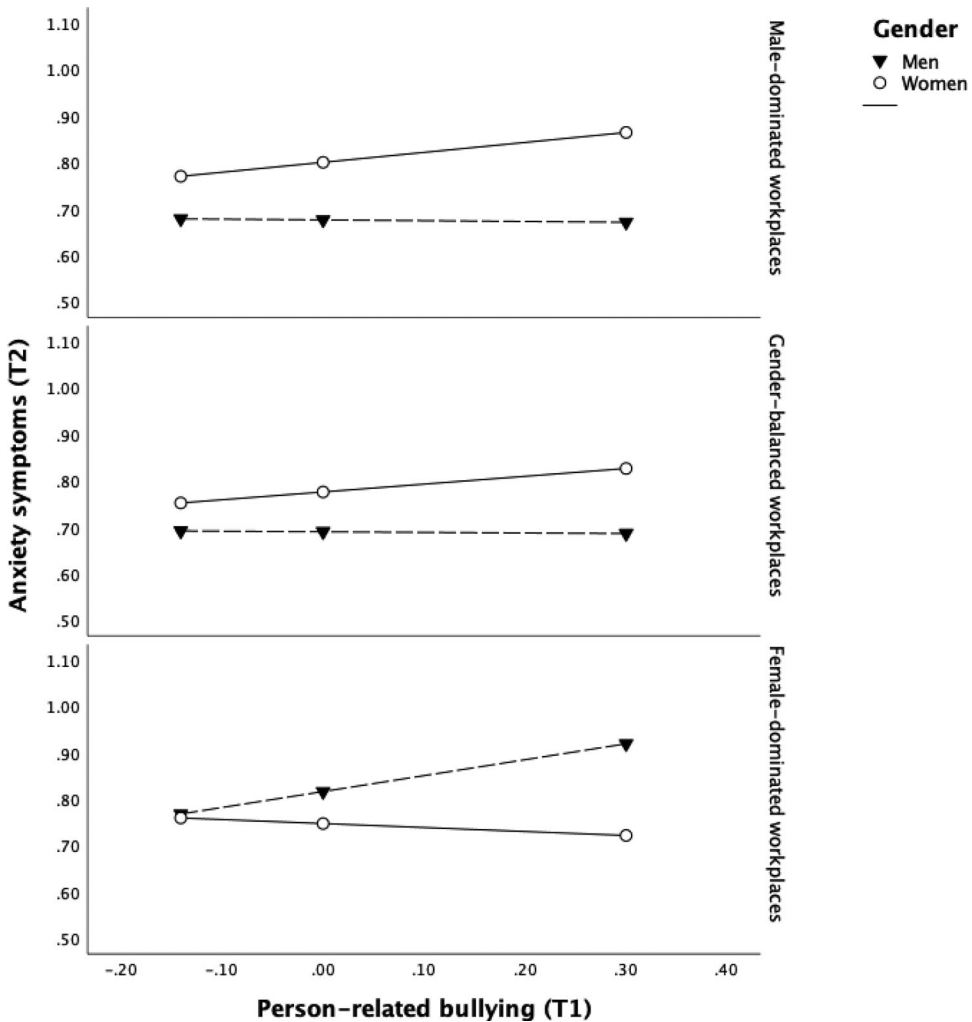


Figure 2. The interaction between gender, gender-domination, and person-related bullying with regard to anxiety symptoms at T2.

results showed only partial support for this hypothesis. There was an increased risk of bullying if being in a gender minority, but only for men in female-dominated workplaces, and mainly for person-related bullying. For work-related bullying, there was no increased risk. For women working in male-dominated workplaces, there was no increased risk of being bullied, so being in a gender minority only seems to affect men working at female-dominated workplace. There was however also an increased risk of bullying for men in gender-balanced workplaces. Second, we hypothesised that the gender minority status would increase subsequent mental health problems if exposed to bullying. And third, that this increase would be more evident for person-related bullying.

The results showed partial support for hypothesis 2 while hypothesis 3 was supported in full. There were increased anxiety symptoms for bullied men working at female-dominated workplaces compared to balanced and male-dominated workplaces, yet only in relation to exposure to person-related bullying. There was also a small, but significant

increase in depression symptoms for men working at female-dominated workplaces associated with both work- and person-related bullying. There were no corresponding increases in depression or anxiety symptoms for women working in male-dominated workplaces. However, in general, women had a higher level of anxiety symptoms compared to men regardless of minority status and exposure to bullying.

The increased risk of being bullied by men as a minority in female-dominated workplaces is what previous studies also have shown (Eriksen & Einarsen, 2004; Lindroth & Leymann, 1993; Wang & Hsieh, 2015). Compared to the study of male nurses by Eriksen and Einarsen (2004), the risk for the male minority in the present study was almost identical (OR = 2.29 compared to OR = 2.06 in the present study). However, the previous studies left out an important part—women as a minority in male-dominated workplaces. They also studied very specific occupations and contexts such as nursing and pre-schools.

Lacking studies focussing on bullying of women when in a minority at work, it may be tempting to interpolate the effects found for men to also include women using the concept of non-prototypicality. Being a man in a female-dominated workplace or a woman in a male-dominated workplace may reduce the possibilities to be viewed as prototypical, at least in one aspect. Gender may easily be used to categorise people into social groups, and in stressful, frustrating times this categorisation can be the basis for aggression or exclusion. Being viewed as non-prototypical has been connected to an increased risk of exposure to bullying (Glambek et al., 2020). According to the self-categorisation theory (Hogg & Terry, 2000; Turner & Oakes, 1986), this treatment of a minority could be a reaction to perceived threats to the stability and predictability of the group and the group members' self-esteem (Hogg & Terry, 2000). Although the present study shows that social identity theory may be a starting point, there is a need for additional explanations to fully understand the risk of bullying for gender minorities. The important question is why does minority status affect men and not women in this regard.

Men in female-dominated workplaces, such as healthcare, may need to exhibit more stereotypically female traits, such as nurturing, caring and communion, which may make them deviate from the expected, traditional gender roles. According to social role theory (Eagly & Wood, 2012), one is rewarded for conforming to an expected gender role, while deviating may lead to sanctions. Social role theory provides a framework for understanding stability, but also change of gender roles. Shifts in societal patterns where women move into more traditional male-dominated arenas have led to an increase in women's self-reported agency over time (Eagly & Wood, 2012). However, gender differences in communion have not seen the corresponding changes. This could imply that a woman in a male-dominated workplace is not deviating as much from the expected gender role as a man in a female-dominated workplace. This could help explain the one-sided increased risk of negative treatment being in a gender minority for men, but not for women, that is, the more deviant from the expected gender role, the more at risk of exposure to negative behaviours.

Then to the final piece of the puzzle, the issue of the impact on mental health from exposure to bullying when being in a gender minority. In general, the negative consequences of workplace bullying have been explained by theories such as the cognitive trauma theory (Janoff-Bulman, 1989) and the cognitive activation theory of stress (Ursin & Eriksen, 2004). Yet, social identity theory may also be relevant in this regard. According to Postmes et al. (2019), a social identity may satisfy our need to belong

and the need for self-esteem, and hence reduce negative attributions and existential anxiety. If categorised as an outsider, as non-prototypical, one's safety net of belonging is taken away. Without social support from one's group, the target's coping possibilities may be reduced, and one may face chronic stress. Yet, according to our results, the minority status only seems to affect men in this regard. Men in a gender minority reported an increase in subsequent mental health problems, particularly anxiety, whereas the corresponding increase for women in a gender minority was absent.

If targeted women in male-dominated workplaces are not categorised as an outgroup to the same extent as men are in female-dominated workplaces, the consequences in terms of mental health problems may be less severe. In terms of social role theory (Eagly & Wood, 2012), if a man sees himself as a victim of bullying, it is not only a threat to the self-image in general—it contradicts the stereotype of a man as strong and capable. Others' expectations and one's self-standard or gender identity become an internalised self-concept in part based on gender roles. When shattered, the consequences may be more severe in terms of health and well-being. Studies on long-term effects of bullying have shown a greater risk of mental health problems for men than for women regarding anxiety (Einarsen & Nielsen, 2015)—a finding that was replicated by Attell et al. (2017), and in line with the present study. Rosander et al. (2020) suggested that the threshold for admitting to oneself being a victim of bullying is higher for men than for women. If so, waiting longer before seeking help may also contribute to graver consequences for men.

The strongest effect on mental health in the present study was for exposure to person-related negative acts as opposed to the more work-related ones. This result corresponds to what previous studies have shown (e.g. Escartín et al., 2011; Lewis & Gunn, 2007; Rosander & Blomberg, 2022). From a social identity perspective, a probable action to handle a perceived threat to the group identity is to alienate the target, the one deemed to be non-prototypical. In itself, this implies the use of social exclusion and other person-related acts of bullying. If targeting and attacking a person's weaknesses, habits, or values the consequences in a situation with a lack of social support, outcomes are probably more severe as compared to acts related to one's work situation. Being targeted by social exclusion, non-inclusion and with attacks on your integrity, as is the case for personalised bullying, is likely to be particularly stressful and difficult to cope with when also being in a minority. In a theoretical model on why bullying is so detrimental to health and well-being, Zapf and Einarsen (2005) showed how bullying is not only stressful in its own right, it tends to deplete one's personal coping resources as well as lowering one's possibilities for social support. This double or even triple effect of bullying then resembles more of a trauma than a mere stressor. These effects should then, theoretically, be stronger when in a minority and have a stronger effect when targeted with personalised forms of bullying as opposed to the more non-personal attacks on your work situation, job requirements and job performances. Furthermore, from a conflict perspective and bullying as a process developing through stages (see also Reknnes et al., 2021; Rosander & Blomberg, 2019) being targeted by personalised bullying may also indicate a more escalated conflict than is the case when facing more work-related negative acts, which may also help to explain why personalised bullying is so associated with subsequent mental health symptoms.

Strengths and limitations

The present study has some notable strengths as it is based on a probability sample drawn from the entire Swedish workforce, employing a prospective design. Yet, there are also limitations to be mentioned. All measures were self-report measures susceptible to social desirability and common method variance (Podsakoff & Organ, 1986). However, as workplace bullying by definition has strong subjective components and is influenced by individual perceptions, it is difficult to assess this phenomenon by using more objective methods (Nielsen, et al., 2020). The use of a time lag of 18 months between baseline and follow-up should alleviate the risk of common method variance (Podsakoff et al., 2003). As the time lag was not chosen specifically for the present study as noted in the methods section, the time lag needs to be discussed. An optimal time lag for investigating mental health problems associated with exposure to bullying behaviours is not self-evident for several reasons. Workplace bullying is defined as prolonged mistreatment (Einarsen et al., 2020), that is, it is not one-off incidents or even short-term conflict episodes, but rather long-lasting processes where targets continually get exposed to negative treatment, which however may be rather subtle and indirect in the first stages of the process (Zapf et al., 2020). Zapf et al. presented an overview of 18 studies reporting duration and on average the duration was 2.7 years. In a meta-analysis, Ford et al. (2014) showed “that cumulative exposure to chronic work stressors increases reactions to those stressors” (p. 27). In regard to exposure to bullying behaviours, Rosander and Blomberg (2019) showed that mental health problems were significantly higher already at occasional exposure compared to people not exposed, yet the problems grew for more severe forms of exposure. A time lag of 18 months puts us below the average duration of workplace bullying based on Zapf et al. (2020), so it is reasonable to assume that we can capture the consequences of workplace bullying with that time lag. Yet, future research should also investigate these associations employing both shorter and longer time intervals. Theoretically, there is not yet clear what would be the optimal time frame for such a study.

When testing hypotheses 2 and 3, we excluded all participants that had changed jobs to a different workplace category between baseline and follow-up. Some had changed jobs but remained at a workplace with the same or similar gender composition. Changing jobs in general may have a positive effect on bullying (Rosander et al., 2022), so the associations between bullying and mental health problems will probably not be overestimations due to those participants, rather the opposite.

The use of NAQ-R as a measure of bullying, as opposed to other more direct ways to measure bullying, may help reduce the risk of social desirability as the measure does not mention bullying or being a victim of bullying. Previous research have shown a higher threshold to admit to being a victim of bullying as compared to the results of exposure to more specific behaviours and treatment—especially for men (Rosander et al., 2020).

Conclusion

We have studied risks and consequences for gender minorities in regard to workplace bullying and mental health problems, that is, men working at female-dominated workplaces and women working at male-dominated workplaces, as opposed to working at

gender-balanced workplaces. The results showed that a gender minority status first and foremost affects men—both in terms of exposure to workplace bullying, and in reported health-related outcomes. There was a doubled risk for men compared to women to be bullied if working in a female-dominated workplace. The risk was also there for men in gender-balanced workplaces, although not as high. There were no increased risks for women irrespectively of the gender mix. To understand this, we turned to social identity theory and social role theory, the former may clarify why a minority might be at risk, but to understand the gender differences we turned to the latter. Men may deviate more from the expected, traditional gender role, that is, deviating more from the group prototype. This may be particularly pronounced for men working in female-dominated workplaces than for women in male-dominated workplaces. If so, men in a minority gender role may be more susceptible to sanctions and their consequences as a result of this deviation.

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