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EDITED BY
Stacy Tye-Williams,
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Andreia de Bem Machado,
Federal University of Santa Catarina, Brazil

*CORRESPONDENCE
Karen Harlos
ka.harlos@uwinnipeg.ca

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Gender and perceived organizational support as moderators in the relationship between role stressors and workplace bullying of targets

Karen Harlos[1]*, Duygu Gulseren[2], Grace O'Farrell[1], Wendy Josephson[3], Larry Axelrod[4], Aynslie Hinds[3] and Cassandra Montanino[3]

[1]Department of Business and Administration, University of Winnipeg, Winnipeg, MB, Canada, [2]School of Human Resources Management, York University, Toronto, ON, Canada, [3]Department of Psychology, University of Winnipeg, Winnipeg, MB, Canada, [4]The Neutral Zone Coaching and Consulting Services, Vancouver, BC, Canada

Previous research suggests that role stressors (role ambiguity, role conflict, role overload) are risk factors for workplace bullying, but little is known about when and for whom role stressors affect the risk of being bullied at work. These studies provide a first empirical examination of gender and perceived organizational support (POS) as moderators among targets in role stressor–bullying relationships. We propose that each role stressor relates positively to workplace bullying. We also propose that women experience higher levels of workplace bullying than men and that role stressors relate to workplace bullying more strongly for women than men. We hypothesize that POS relates negatively to workplace bullying and further, that POS has a buffering effect with role stressor–bullying relationships being weaker when POS is high. We propose that the two-way interaction of role conflict and POS is further moderated by gender; specifically, women experiencing high role conflict and low POS are especially likely to be bullied. Data collected in two cross-sectional surveys 3 years apart from a Canadian provincial education association (Study 1; $n = 2{,}142$; Study 2, $n = 2{,}008$) showed across both studies that role conflict was the strongest predictor of workplace bullying, followed by role ambiguity, and that POS was negatively related to bullying. Results partially supported gender moderation of the role conflict–bullying relationship; both studies showed higher bullying of both women and men under high role conflict, and in Study 1 women were targeted most but in Study 2 men were targeted most. POS moderated role stressor–workplace bullying relationships across both studies. High POS had its strongest buffering effects for role ambiguity and role conflict across both studies, with partial support for role overload in Study 2. Although the three-way interaction was not supported, Study 2 demonstrated higher bullying for both genders under high role conflict and low POS; however, bullying was highest for men, not women. Results affirm the importance of moderators in role stressor–bullying relationships, suggesting that POS can offset negative impacts of these stressors and that gendered bullying risk in stressful work environments warrants closer scrutiny.

KEYWORDS

role ambiguity, role conflict, role overload, gender, perceived organizational support, workplace bullying, role stressors

Introduction

Over 30 years of research has established workplace bullying as a serious social and organizational problem of global scope that harms employees, mentally and physically (Conway et al., 2021; Hansen et al., 2021), and impairs organizational processes, performance, and profits (Hogh et al., 2021). It is widely understood as an escalating, persistent form of abuse involving hostile and unwelcome behaviors experienced through interactions and practices that leave targeted employees feeling defenseless, unable to escape the situation or stop unwanted treatment (Einarsen et al., 2011; Nielsen and Einarsen, 2018). Understanding risk factors for bullying, including conditions under which risk is heightened or reduced, is critical to prevent its disruptive, sometimes devastating, effects. Knowing when and for whom workplace bullying is more (or less) likely to occur will help organizations adapt prevention strategies for the workforce composition and tailor policies for context-focused interventions. Although a considerable body of scholarship has examined direct relationships between predictors and workplace bullying, very few studies have examined moderators of these relationships (see reviews by Nielsen and Einarsen, 2018; Rai and Agarwal, 2018). To advance knowledge of boundary conditions, in these studies we focus on role stressors as a key situational risk factor with particular interest in whether gender and perceived organizational support (POS) moderate role stressor-bullying relationships.

A growing volume of research shows role stressors—role ambiguity, role conflict and, to a lesser extent, role overload—as among the strongest situational predictors of workplace bullying (Salin and Hoel, 2011; Balducci et al., 2021; Harlos and Holmvall, 2021). Most studies in this research stream are rooted in the *work environment hypothesis,* which states that bullying occurs from the stress of poorly organized workplaces and poor psychosocial environments (Agervold and Mikkelsen, 2004; Salin and Hoel, 2011). However, the review by Nielsen and Einarsen (2018) calls for further research because of contradictory results for role stressor predictions of workplace bullying in recent prospective studies that render current evidence inconclusive. Gender also warrants further study as an under-explored risk factor in exposure to workplace bullying (Lippel et al., 2016) with evidence of gender differences in prevalence rates of bullying also considered inconsistent and inconclusive (see review by Salin, 2021). Moreover, little is known about gender as a potential moderator in antecedent–bullying relationships in general (Rai and Agarwal, 2018) and role stressor–bullying relationships in particular.

In examining this aspect of persons both separately and together with situational role stressors, we apply an interactionist perspective in understanding the occurrence of bullying as recent reviews suggest for broadening the scope of research (Nielsen and Einarsen, 2018; Rai and Agarwal, 2018). Because the inconsistent, inconclusive results noted above may indicate the potential role of moderators, testing the boundary conditions of role ambiguity, role conflict, and role overload in bullying relationships thus may yield insights to help resolve contradictory findings. Among actors involved in workplace bullying (e.g., targets, observers, perpetrators), we focus on targets consistent with past theory and research on individual-level role stressors and bullying exposure (e.g., Bowling and Beehr, 2006; Hauge et al., 2011). We conducted two cross-sectional research surveys 3 years apart in a Canadian provincial education association, assessing the same constructs with the same measures to examine patterns of relationships over time.

The research context we focus on is public school education (pre-Kindergarten or pre-K to Grade 12) wherein both role stressors and workplace bullying may be rife (Djurkovic et al., 2008). Although growing scholarship on bullying in higher education provides important insights into work environment factors uniquely conducive to bullying, such as tenure and the principle of academic freedom, it is beyond the scope of our focus on pre-K−12 education. A study of US urban public school teachers, for example, found that nearly 65 percent of respondents reported being targets of pervasive bullying (Fox and Stallworth, 2010). Recently, de Wet and Jacobs (2021) provided a review of the international literature on workplace bullying in schools, which found consistent evidence that teaching is among the high-risk occupations for workplace bullying. Such heightened risk stems, in part, from diverse and demanding social relations that educators must manage. Relational strain emerging as conflicts can escalate to bullying by peers, school management and administrative staff, parents, and students (McKay et al., 2010; de Wet and Jacobs, 2021). Similarly, schools as work environments are often demanding and stressful with evidence that work overload, role conflict, emotional demands, handling angry stakeholders, tasks with unreasonable deadlines, withheld praise or recognition, and exclusion from decision-making among key conditions conducive to bullying of educators (Riley et al., 2011; Ariza-Montes et al., 2016). A recent interview study of US K−12 teachers bullied by administrators found, among work conditions, that a lack of classroom autonomy contributed to bullying experiences and perceptions (Orange, 2018). Importantly, POS has been found to be associated with workplace bullying in Australian high schools, and, more specifically, as a moderator such that high levels of POS can buffer or offset effects of workplace bullying on intention to leave (Djurkovic et al., 2008). Taken together, these findings highlight the importance of studying work environment factors (both stressful and supportive) and the potential role of gender in this high-risk sector for bullying. In their global literature review, de Wet and Jacobs (2021) noted that most research on workplace bullying in schools is under-theorized. Addressing this concern, we developed a conceptual model and associated hypotheses, which are described below and depicted in Figure 1.

Role stressors: theoretical background and research hypotheses

Role stress refers to negative reactions that individuals experience when they feel unable to meet the demands and expectations of their work roles and to perform roles well (Kahn et al., 1964; Beehr, 1995). Role stressors reflect three distinct but interrelated concepts: role ambiguity, involving lack of information and clarity about work role expectations or requirements and how to fulfill them (Rizzo et al., 1970); role

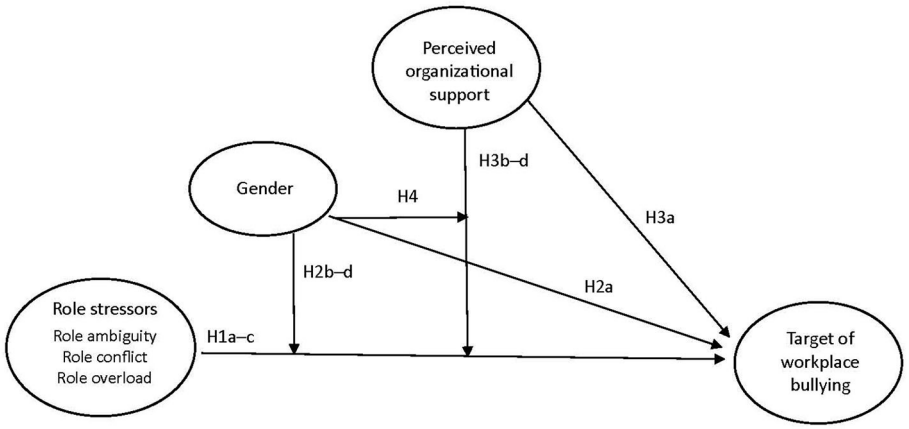

FIGURE 1
Conceptual model of gender and perceived organizational support, respectively, as moderators in role stressor-workplace bullying relationships (being a target of workplace bullying). H = Hypothesis. H4 indicates the three-way interaction of role conflict × gender × perceived organizational support only.

conflict, involving incompatible expectations and demands within the work role (Rizzo et al., 1970); and role overload, wherein expectations and demands about work performance exceed available time or resources (Beehr, 1995). Past research has shown strong relationships to employee anxiety and depression, poor performance, and turnover (see reviews by Bowling and Beehr, 2006; Örtqvist and Wincent, 2006) as well as negative behaviors, including bullying. Consistent with the work environment hypothesis, studies have shown role conflict and role ambiguity as among the strongest predictors of workplace bullying (Salin and Hoel, 2011; Van den Brande et al., 2016) and harassment (Bowling and Beehr, 2006). In contrast, less is known about role overload in role stressor–bullying relationships (Harlos and Holmvall, 2021), although numerous studies have examined work intensification through workload (Van den Brande et al., 2016). However, workload and role overload, while related, are distinct concepts; an increasing or even high workload does not necessarily mean excessive demands. Although past work has provided important insights, we heed Nielsen and Einarsen's (2018) call for further research given recent conflicting evidence. For example, one longitudinal study of the three stressors failed to find significant relationships with subsequent exposure to workplace bullying (Hauge et al., 2011) whereas in another prospective study, role ambiguity and role conflict predicted subsequent bullying exposure (Reknes et al., 2014). We also address the relative neglect of role overload, following the recommendation from Örtqvist and Wincent (2006) to study all three stressors individually.

Poorly organized and implemented work roles are believed to create conditions conducive to bullying by provoking counterproductive or undesirable reactions, including victimization of employees (Bowling and Beehr, 2006; Balducci et al., 2021). One theoretical vein tapped to explain how bullying occurs draws on the *social interactionist perspective* (Tedeschi and Felson, 1994) by which employees' emotional and behavioral responses to high role stressors encourage others to act aggressively toward them. Employees may respond to stressors by withdrawing, frequently complaining or being uncivil, in turn prompting others to closely monitor their performance, escalate incivility, or take other negative actions toward them that employees experience as bullying (Neuman and Baron, 2011). Another theoretical explanation for the occurrence of bullying amid high role stress draws on the *frustration–aggression hypothesis* (Berkowitz, 1989), which argues that employees displace their negative emotional reactions to pressures from high role stress onto others in socially aggressive ways (Spector and Fox, 2005). Aggression in such situations is supported by longitudinal (Balducci et al., 2012) and cross-sectional (Hauge et al., 2009) evidence that role conflict predicts perpetrators' bullying of others.

In terms of hypotheses, we might expect that an employee experiencing high role conflict selectively responds to incompatible or conflicting demands by focusing on one supervisory demand while ignoring or refusing the other, risking being seen as disrespectful, a poor performer, or even insubordinate. Although one supervisor may be satisfied by met expectations, the other may be irritated or frustrated and act on this frustration by enacting bullying behavior toward the employee. Similarly, employees experiencing high role ambiguity or role overload may risk being perceived as poor performers given their uncertainty about how to fulfill expectations of their work role (ambiguity) or their inability to meet excessive demands (overload). Their work thus may be more closely scrutinized, which can be experienced as bullying. Consistent with this view, Örtqvist and Wincent (2006) found in their meta-analysis that high levels of role stressors impair performance. Moreover, the three role stressors are considered "hindrance" stressors that can block personal growth or goal attainment and are associated with negative attitudes and behaviors, including frustration (Podsakoff et al., 2007; Balducci et al., 2012). Amid high role stressors, employees' frustration from blocked goals along with poor coping responses may encourage bullying by others consistent with the social interactionist perspective noted earlier. Lastly, high role overload may be conducive to workplace bullying according to a resource-based perspective wherein employees can become resource deficient (Rousseau et al., 2014). This resource deficiency

leads to increased psychological distress (e.g., Hobfoll, 2011), which may make employees vulnerable to being bullied. Thus, we predict that:

> H1: Employee perceptions of (a) role ambiguity, (b) role conflict, and (c) role overload will be positively related to workplace bullying of targets.

Gender: theoretical background and research hypotheses

In their recent review, Nielsen and Einarsen (2018) signaled the need to examine knowledge gaps about demographic-based risk groups for better understanding of who is at greater risk of being bullied at work. Gender has been the focus of growing research attention in this regard, although it remains an under-explored risk factor in studies of exposure to workplace bullying (Lippel et al., 2016) as mentioned. Emerging evidence from this nascent research stream provides mixed support for the assertion that women are more likely than men to be targets of bullying. The review by Salin (2021) of global large-scale studies on gender differences in bullying prevalence found slightly higher bullying rates for women in studies asking respondents whether they were bullied but gender prevalence rates were inconsistent in studies asking respondents whether they had experienced various negative acts. Such inconsistencies may also reflect differences in cultural values across regions where studies were conducted, Salin (2021) argued, noting that most large-scale studies of gender prevalence rates originate in Europe (particularly Scandinavia) with far fewer in North America and very few in Canada. Thus, further research on gender differences in bullying rates is needed to expand the growing international evidence base, especially in understudied regions such as Canada. It is argued here (as mentioned) that the potential influence of moderators may underlie some of the inconsistent results and therefore, the interactions proposed and tested here (described below) may shed light on conflicting findings. For example, the mixed evidence in past research for women being at greater risk of being bullied than men (as a main effect) may reflect heretofore unknown influences from situational moderators.

It is reasonable to expect that women are at greater risk of being targets of workplace bullying than men given women's historical disadvantage in employment access, career progression, and pay equity, for example, through continued underrepresentation in jobs with higher pay, more security, and more influence (Elliott and Smith, 2004; Ely and Padavic, 2007; Broadridge and Hearn, 2008) that may make them more likely to be bullied. These disadvantages largely derive from stereotypical gender roles for women and consequent disadvantages may increase the risk of becoming vulnerable to discrimination, including violence (European Institute for Gender Equality, 2016). According to *gender role socialization theory* (e.g., Eagly, 1987), societal expectations produce different roles and norms of accepted behavior for men and women. People learn behaviors believed appropriate to each gender and tend to behave in ways that maximize rewards from gender norms while minimizing sanctions from counter-normative behavior (Ely and Padavic, 2007). Female roles prescribe interpersonal connection, caring demeanor, and a focus on domestic responsibilities as proper for women whereas male roles prescribe self-reliance, independence and a focus on work obligations as appropriate for men (Eagly, 1987).

Within this research context, we expect that gender will be positively related to workplace bullying as a main effect with higher bullying levels for women than men. Consistent with this assertion, of the few studies on gender differences in bullying rates conducted in Canada, a large-scale study by Lippel et al. (2016) using Quebec provincial data found higher rates of psychological harassment for women than men across nine industrial sectors. Within the education sector (the context of the current study), psychological harassment rates also were higher for women than men. Moreover, women working in education were more likely to be exposed to psychological harassment than women working in any sector, with the exception of healthcare. In addition, the review by Salin (2021) noted a large-scale study of Canadian public sector employees that reported higher rates of workplace harassment for women than men. Thus, we predict that:

> H2a: Women will experience higher levels of workplace bullying as targets than men.

Taking the above two arguments on gender and role stressors together, it is plausible that role stressors relate to workplace bullying more strongly for women than men given that, fundamentally, these stressors are perceptual, subjective experiences of the work environment. The stress literature provides strong evidence that employees perceive and respond to role stressors in different ways. For example, a meta-analysis by Davis et al. (1999) found that women report greater levels of work stress than men. Gender differences in stress may arise because women are exposed to greater stress than men (*differential exposure hypothesis*) or because they perceive identical stressors as more stressful than men (*differential vulnerability hypothesis*) as Roxburgh (1996) proposed. In support of the latter explanation, Day and Livingstone (2003) found that women perceive identical work (and other) stressors as more stressful than men. Whether because stress is more intense for women or because they are exposed to more of it, they appear to be positioned for it at work. Most research linking gender and role stressors to date has focused on work-family conflict (see Duxbury et al., 2018) while studies looking at the role of gender as a moderator of role stressor–bullying relationships are scarce (as mentioned). Of the latter, Di Salvo et al. (1988) found that workload (conceptual cousin of role overload) is a greater stressor for women than for men. For these reasons, we expect that gender will heighten the positive relationship between role stressors and bullying, with higher bullying levels experienced by women than men (as targets) under these conditions. To our knowledge, no previous study has tested these moderating effects of gender in relation to workplace bullying. Thus, we predict that:

> H2b–H2d: Gender will moderate the positive relationships between (b) role ambiguity, (c) role conflict, and (d) role

overload and workplace bullying of targets, such that the relationships will be stronger for women than men.

POS: theoretical background and research hypotheses

Rooted in organizational support theory, POS refers to employees' belief that the organization values their contributions and cares for their wellbeing (Eisenberger et al., 1986). The theory argues that POS spurs a social exchange process such that when the organization supports employees by meeting their socioemotional needs and providing needed resources, employees respond by helping the organization achieve its goals. A large volume of research has demonstrated that POS is associated with increased employee wellbeing and engagement, organizational citizenship behaviors, and decreased turnover intentions and withdrawal (see meta-analyses by Rhoades and Eisenberger, 2002; Kurtessis et al., 2017). Most notably, abusive supervision, role ambiguity, role conflict, and role overload are antecedent to negative relationships with POS (Kurtessis et al., 2017).

Yet POS has been understudied in workplace bullying research (Parzefall and Salin, 2010). Preliminary evidence indicates significant negative correlations between POS and workplace bullying (Djurkovic et al., 2008; Cooper-Thomas et al., 2013), and it has been shown to predict lower levels of being targeted in cyberbullying but not face-to-face bullying (Gardner et al., 2016). In a study of interrole conflict, Foley et al. (2005) found that POS predicted lower levels of work-to-family and family-to-work conflict. Recent studies have examined POS as a moderator of workplace bullying–outcome relationships with evidence of its buffering effects on turnover intentions (Djurkovic et al., 2008) and job performance (Cooper-Thomas et al., 2013). In contrast, little is known about POS as a potential moderator of antecedent–bullying relationships. A recent review by Van den Brande et al. (2021) found few studies on the moderating effects of organizational coping resources (including organizational support) in attenuating associations between work stressor antecedents and bullying. A study on burnout, however, found that POS buffered the role conflict–emotional exhaustion relationship: under high POS, emotional exhaustion was lower than under low POS (Jawahar et al., 2007). The work stress literature offers insights into why POS may buffer antecedent or outcome relationships with workplace bullying. It appears that individuals' perceptions of stress depend on coping resources available to them in stressful situations (Lazarus and Folkman, 1984). POS may lessen the perceived severity of stressors by helping employees meet heightened needs for socioemotional support during stressful times (Armeli et al., 1998; as argued by Kurtessis et al., 2017).

We extend POS theory and research to address knowledge gaps on its main effect in role stressor–bullying relationships and to shed possible light on inconsistent role stressor predictions of bullying (noted earlier). Specifically, we expect that POS will be negatively related to workplace bullying as a main effect. When employees believe that their organization values them and cares for their wellbeing (i.e., it is supportive), they psychologically identify with the organization and develop a positive emotional bond (Eisenberger et al., 1986). This identification and bond may reinforce the possibility proposed by Parzefall and Salin (2010) that targets view the perpetrator and organization separately, thus allowing perceptions of POS and workplace bullying to co-exist because targets may attribute misconduct more to individuals than to the organization. The myriad sources of POS and range of potential perpetrators (e.g., peers, subordinates, and managers in or outside of reporting relationships) support the notion that POS and bullying are not necessarily conflated (Parzefall and Salin, 2010). It is argued here that organizations providing anti-bullying training (Gardner and Cooper-Thomas, 2021) and policies of known effectiveness (Ferris et al., 2021) should reinforce POS by conveying assurance that dedicated help is available. Consistent with a social exchange perspective, POS may encourage targets to respond with positive behaviors and refrain from negative ones, psychologically detaching from the dynamics of bullying (see Colquitt et al., 2013). Thus, we predict that:

H3a: POS will be negatively related to workplace bullying of targets.

In terms of moderating effects, it is argued here that in organizations perceived as supportive, the help for employees with greater needs for socioemotional support during stressful times will buffer the positive relationship between role stressors and bullying exposure. Supporting this view, Kurtessis et al. (2017) proposed that employees may regard role stressors as intrinsic to occupations or industries rather than as situational factors under the organization's control. Thus, paralleling the argument that perceptions of POS and being the target of workplace bullying can co-exist, perceptions of role stressors and POS can co-exist because targets may attribute role stressors more to external than internal influences on the organization. Taken together, these two arguments suggest that when role stressors are high, targets nonetheless may count on the emotional support and help that POS provides. Thus, it is plausible that each role stressor relates less strongly to being bullied in the workplace when employees believe the organization values them and cares about their wellbeing (high POS) than when they feel the organization cares little about their contributions and wellbeing (low POS). Consistent with this view, Foley et al. (2005) found support for POS in buffering the positive relationship between role overload and work-to-family conflict: the relationship was weaker when POS was high (although at a liberal significance level, $p < 0.10$). Thus, we predict that:

H3b–H3d: POS will moderate the positive relationships between (b) role ambiguity, (c) role conflict, and (d) role overload and workplace bullying of targets, such that the relationships will be weaker when POS is high (vs. low).

Role conflict, gender, and POS research hypothesis

Taking above arguments on these areas together, we posit that there will be a three-way interaction effect of role conflict,

POS, and gender on workplace bullying. That is, we expect that gender will moderate the two-way interaction of role conflict and POS (H3c) with a stronger relationship between role conflict and bullying experienced by women than men (as targets) when POS is low. The stress of dealing with contradictory, competing demands is amplified by women's stereotypical gender roles valorizing interpersonal connection and caring, and with an accompanying belief that the organization cares little for their welfare, will mean that women experience heightened risk of being bullied. We focus on role conflict for statistical and theoretical reasons. Sample size requirements for effect size detection (i.e., statistical power) compound considerably in three-way interactions, calling for judicious testing of hypothesized relationships. Additionally, role conflict has been shown as one of the strongest predictors of bullying among work environment factors (as noted). To our knowledge, no previous study has tested this higher-order interaction on workplace bullying. Thus, we predict that:

> H4: Gender will moderate the two-way interaction effect of role conflict and POS on workplace bullying of targets, such that the relationship between role conflict and workplace bullying will be stronger for women than men when POS is low (vs. high).

The assumption underlying all hypotheses is that the predicted relationships are consistent at the two time points (i.e., the initial study and second one conducted 3 years later). No major organizational developments or government initiatives affecting the education sector occurred over the study period; political, economic, and public health arenas were relatively stable. We might expect differences in the strength of perceptions and attitudes across the two periods given changes in organizational membership from normal turnover and ongoing educator recruitment (as evidenced by a modest increase in membership that occurred). However, one would expect role stressor and POS characteristics, along with gender, to be key influences on workplace bullying of targets despite possible changes in work environments or other contextual factors. With hypothesized relationships expected at both time points, we expect results to be consistent across the 3-year period, and thus results found at time 1 should also be found at time 2.

Materials and methods

All active members of a provincial association of all public school educators across pre-K−12 grade levels were invited to take part in an anonymous online survey administered in 2016 (Study 1) and repeated in 2019 (Study 2). Surveys were distributed in Canada's two official languages (English and French). A technical issue in the 2016 survey precluded complete data from francophone members (10% of the membership). For cross-sample comparisons, only English results are reported here. At both time points, association-wide membership data were available for age, organizational tenure, and gender. In both samples, respondents were marginally older, had slightly longer tenure, and were more likely to be female than the membership as a whole (differences were not statistically significant at either time point). To improve inferences regarding the membership population, parameter estimates presented below were modestly adjusted by an aggregate weighting calibrated from these demographic characteristics rendering each sample more representative of its overall membership (see Lippel et al., 2016).

Samples

Study 1

Email invitations to participate in the survey using an embedded link were sent to 14,360 members (90% of the organization). Surveys could also be accessed through members' organizational web-portal account, by which 10% of members without active email addresses were invited to participate. Data were gathered over 8 weeks (late May-July) for a final sample of 3,030 respondents. The estimated response rate (21%) is an approximation because the technical issue above and possibly inactive email addresses made precise distribution uncertain. The majority of the sample was female (71%). The mean age was 41 years (*SD* 10.6) and mean school tenure was 13 years (*SD* 9.5). Of the respondents, 67% were classroom teachers, 21% were specialists (e.g., music, physical education), 9% were resource teachers, 7% were principals or vice-principals, 4% were counselors, and 3% were clinicians (these roles were not mutually exclusive). Most respondents (88%) were on permanent contract and worked full-time (89%). They were predominantly both heterosexual (95%), with 5% self-identified as lesbian, gay, bisexual, queer or questioning, and White (87%), with 8% self-identified as Indigenous and 5% of other racialized identities.

Study 2

Survey invitations were emailed to 16,330 members (nearly 100% of the organization), along with survey access through organizational web-portal accounts, for a 12-week data gathering period (early June-September). To align with data collection period at time 1, respondents in September were asked to consider the same 6-month period of the preceding school year. This final sample comprised 3,540 respondents (estimated 22% response rate). Most respondents were female (72%). The mean age was 41 years (*SD* 10.3) and mean school tenure was 13 years (*SD* 9.3). Of the respondents, 65% were classroom teachers, 18% were specialists (e.g., music, physical education), 11% were resource teachers, 8% were principals or vice-principals, 4% were counselors, and 4% were clinicians across non-exclusive roles. Most respondents (85%) were on permanent contract and worked full-time (89%). They were predominantly both heterosexual (94%), with 6% self-identified as lesbian, gay, bisexual, queer or questioning, and White (86%), with 9% self-identified as Indigenous and 6% of other racialized identities (exceeds 100% due to rounding).

The demographic profiles of the two samples thus aligned closely. Estimated response rates are consistent with field studies of workplace bullying in educational settings (e.g., Djurkovic et al., 2008). Although current rates are lower than those in studies of less sensitive topics, research has shown that lower response rates in self-report survey studies do not necessarily denote bias in effects of

interest (Schalm and Kelloway, 2001). The current rates, therefore, were considered acceptable for analysis.

Measures

The same measures were used in each study. Means were calculated for scales on which respondents provided at least 70% of complete data. Missing item-level data ranged from 1–5% in no apparent pattern and thus mean substitution was used to replace missing data (Roth, 1994).

Role ambiguity and *role conflict* were measured with scales from Rizzo et al. (1970). Role ambiguity comprised six items, reverse scored for analyses, such as "I know exactly what is expected of me." Cronbach's alphas in Study 1 and 2 were 0.83 and 0.82, respectively. Role conflict was assessed using seven items (e.g., "I receive incompatible requests from two or more people"). Cronbach's alphas in Study 1 and 2 were 0.85 and 0.86, respectively. *Role overload* was measured with Seashore et al. (1982) 3-item scale (e.g., "I have too much work to do to do everything well"). Cronbach's alphas in Study 1 and 2 were 0.82 and 0.81, respectively. Each role stressor measure used 5-point Likert scales from *strongly disagree* (1) to *strongly agree* (5) with higher scores reflecting higher role stressor levels. Respondents were asked about these perceptions over the last 6 months to align with the bullying measurement time frame (below).

Perceived organizational support (POS) was assessed using the 8-item scale developed by Lynch et al. (1999), which we adapted to the education context (e.g., "My school cares about my opinions"). Responses were measured on a 5-point Likert scale from *strongly disagree* (1) to *strongly agree* (5) with higher scores reflecting higher POS. Cronbach's alphas were 0.93 in both studies.

Gender was measured by asking respondents to self-identify beyond traditional binary classifications as *men* or *women* to include *transgender* (men or women) and *gender neutral (or gender free)* identities, consistent with the recommendation for expanded gender identity measurement in bullying research (Salin, 2021). Low endorsement of non-traditional categories, however, precluded their statistical analysis and thus gender was coded as "0" for men and "1" for women.

Workplace bullying was measured with the 22-item Negative Acts Questionnaire (NAQ; Einarsen et al., 2009) used in most published studies on workplace bullying (Nielsen and Einarsen, 2018). The NAQ does not use the term *bullying* to avoid priming effects and response bias. Negative act frequencies over the past 6 months were assessed on a 5-point scale from *never* (1) to *on a daily basis* (5). Sample items include "Having insulting or offensive remarks made about your person, attitudes or private life" and "Excessive monitoring of your work." Cronbach's alphas in Study 1 and 2 were 0.91 and 0.92, respectively.

For a more conservative test of hypotheses, we included four control variables shown in past research to heighten bullying risk: ethnicity (Bergbom and Vartia, 2021); age (categorical) and organization (school) tenure (Nielsen and Einarsen, 2018); and negative affectivity, or the dispositional tendency to experience aversive emotional states, that in workplace bullying situations can predispose individuals to interpret innocuous experiences as hostile or offensive (Matthiesen and Einarsen, 2004) and strengthen the positive relationship between role conflict and exposure to bullying (Reknes et al., 2019). This trait can also bias self-reports of work stressors (Watson et al., 1987). We measured it with three items, such as feeling generally *distressed* or *scared* (Kercher, 1992; Mackinnon et al., 1999), using a 5-point scale from *very slightly or not at all* (1) to *very much* (5) with higher scores reflecting higher negative affectivity. Cronbach's alphas in Study 1 and 2 were 0.77 and 0.76, respectively. Control measures, role stressors, and POS were placed in the survey before negative acts items to avoid priming effects and response bias. Analyses were conducted among respondents with full-time positions and permanent contracts to ensure that the analytic sample comprised respondents whose potential exposure to bullying behaviors was equivalent over the 6-month period assessed. As mentioned, the NAQ measures frequencies of bullying behaviors and thus we excluded respondents whose employment conditions constrained potential exposure to these behaviors (i.e., part-time positions and temporary contracts) to avoid employment-related differential effects of bullying risk. All scales were sufficiently reliable with most Cronbach alpha coefficients above 0.80.

Analytic approach

Hierarchical moderated multiple regression was used to test Study 1 hypotheses, which we then replicated in Study 2, with IBM SPSS Version 28. Variables were mean-centered before creating interaction terms to reduce unnecessary multicollinearity (Aiken and West, 1991). Control variables were entered in step 1 followed by independent variables in step 2. Two-way interaction terms were entered as independent variables in step 3 while step 4 introduced the three-way interaction term.

Results

Table 1 presents descriptive statistics and correlations for variables in both studies for ease of comparison. Regression results are presented in Table 2 (Study 1) and Table 3 (Study 2). Two control variables—age and negative affectivity—were significantly related to workplace bullying in the full regression model (step 4) in both studies. In Study 2, ethnicity also was significantly related to workplace bullying at step 4.

Role stressors and workplace bullying (main effects)

H1a–H1c predicted that role ambiguity, role conflict, and role overload, respectively, were positively related to workplace bullying. Table 2 (step 2) shows that role ambiguity and role conflict were positively related to workplace bullying, respectively ($\beta = 0.09$, $p < 0.001$; $\beta = 0.32$, $p < 0.001$) over and above the effects of control variables in Study 1. The main effect for role overload was not significant. Similarly, Table 3 (step 2) shows that role ambiguity and role conflict were positively related to workplace bullying, respectively ($\beta = 0.13$, $p < 0.001$; $\beta = 0.34$, $p < 0.001$) over and

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TABLE 1 Descriptive statistics and correlations for study variables (Study 1, S1; Study 2, S2).

Variables		*M*	*SD*	1	2	3	4	5	6	7	8	9	10
1.	Age[a] (S1)	2.74	1.09										
	(S2)	2.75	1.07										
2.	Ethnicity[b] (S1)	0.87	0.33	0.00									
	(S2)	0.86	0.35	−0.01									
3.	Tenure (S1)	8.13	6.78	0.52**	0.06**								
	(S2)	8.24	6.69	0.49**	0.06**								
4.	Negative affectivity (S1)	2.09	0.82	−0.06**	0.02	−0.01							
	(S2)	2.17	0.86	−0.02	−0.06**	−0.01							
5.	Gender[c] (S1)	0.69	0.46	−0.09**	0.02	−0.07**	0.11**						
	(S2)	0.70	0.46	−0.09**	0.03	−0.04*	0.07**						
6.	POS (S1)	3.33	0.90	−0.08**	0.01	−0.06**	−0.34**	−0.01					
	(S2)	3.30	0.92	−0.14**	0.04	−0.09**	−0.33**	−0.01					
7.	Role ambiguity (S1)	2.43	0.77	−0.02	0.03	−0.04	0.40**	0.07**	−0.61**				
	(S2)	2.51	0.78	0.03	−0.04	−0.02	0.39**	0.04*	−0.61**				
8.	Role conflict (S1)	3.01	0.80	0.01	−0.05*	−0.02	0.37**	−0.02	−0.60**	0.58**			
	(S2)	3.04	0.81	0.07**	−0.04*	0.03	0.39**	−0.05*	−0.56**	0.59**			
9.	Role overload (S1)	3.53	0.93	−0.02	−0.02	0.02	0.35**	0.12**	−0.33**	0.42**	0.46**		
	(S2)	3.64	0.90	−0.01	−0.01	0.03	0.35**	0.12**	−0.32**	0.37**	0.44**		
10.	Workplace bullying (S1)	1.39	0.43	0.07**	−0.01	0.02	0.45**	0.04	−0.54**	0.50**	0.58**	0.35**	
	(S2)	1.42	0.48	0.12**	−0.10**	0.05*	0.41**	−0.01	−0.52**	0.52**	0.58**	0.33**	

POS, perceived organizational support. [a]1 = 20–29 years; 2 = 30–39 years; 3 = 40–49 years; 4 = 50–59 years; 5 = 60 years and over. [b]0 = Indigenous or other racialized identities, 1 = White. [c]0 = male, 1 = female. *$p < 0.05$. **$p < 0.01$.

above the effects of control variables in Study 2. Again, the main effect for role overload was not significant. Thus, in both studies H1a and H1b are supported whereas H1c is not supported in Study 1 or 2.

Gender as moderator

Main and interaction effects

H2a predicted that women will experience higher levels of workplace bullying than men. Table 2 (step 2) shows that in Study 1 there was no association between gender and workplace bullying after adjusting for control variables (β = 0.01, ns). Similarly, Table 3 (step 2) shows that in Study 2 there was no association between gender and workplace bullying over and above the effects of control variables (β = −0.01, ns). Thus, H2a is not supported across the two studies.

H2b–H2d predicted that the positive relationships between role ambiguity, role conflict, and role overload, respectively, and workplace bullying would be stronger for women than men. Table 2 (step 3) shows that for role conflict in conjunction with gender, the interaction in Study 1 was significant (β = 0.08, $p < 0.05$) with the effect stronger for women than men as expected. Two-way interactions of role ambiguity and role overload, respectively, with gender were not significant. Thus in Study 1, H2c is supported whereas H2b and H2d are not supported. Table 3 (step 3) also shows that the two-way interaction in Study 2 of role conflict and gender was significant (β = −0.09, $p < 0.05$). The effect was stronger for men than women, however, and thus not in the expected direction. Again, interactions of role ambiguity and role overload, respectively, with gender were not significant. Thus in Study 2, H2b–H2d are not supported.

To probe the nature of these significant interactions (including the Study 2 interaction term for exploratory insight), we tested simple slopes for the association between role conflict, using low (1.5 SD below the mean) and high (1.5 SD above the mean) levels, and workplace bullying for women and men. Figure 2 plots the simple slopes for the Study 1 interaction between role conflict and gender. Each simple slope test revealed a significant positive association between role conflict and workplace bullying with role conflict more strongly related to bullying for women (β = 0.19, $p < 0.001$) than for men (β = 0.14, $p < 0.001$). Figure 3 plots the simple slopes for the Study 2 interaction between role conflict and gender. Each simple slope test again revealed a significant positive association between role conflict and workplace bullying, but here role conflict was more strongly related to bullying for men (β = 0.25, $p < 0.001$) than for women (β = 0.19, $p < 0.001$).

POS as moderator

Main and interaction effects

H3a predicted that POS will be negatively related to workplace bullying. Table 2 (step 2) shows that there was a main effect for POS

10.3389/fcomm.2023.1176846

TABLE 2 Hierarchical regression analysis of workplace bullying (Study 1).

	Step 1	Step 2	Step 3	Step 4
Control variables				
Age[a]	0.12***	0.08***	0.06**	0.06**
Ethnicity	−0.02	0.00	−0.01	−0.01
Organization (school) tenure	−0.04	−0.02	−0.02	−0.02
Negative affectivity	0.44***	0.21***	0.20***	0.20***
(R^2)	(0.20***)	(0.20***)	(0.20***)	(0.20***)
Main effects				
Gender[b]		0.01	0.01	0.01
Perceived organizational support (POS)		−0.20***	−0.21***	−0.21***
Role ambiguity (RA)		0.09***	0.07	0.07
Role conflict (RC)		0.32***	0.28***	0.27***
Role overload (RO)		0.03	0.06	0.06
(ΔR^2)		(0.24***)	(0.24***)	(0.24***)
2-Way interaction terms				
RA × Gender			0.00	0.00
RC × Gender			0.08*	0.08*
RO × Gender			−0.03	−0.03
RA × POS			−0.09***	−0.09***
RC × POS			−0.12***	−0.12***
RO × POS			0.04*	0.04*
POS × Gender			0.04	0.04
(ΔR^2)			(0.03***)	(0.03***)
3-Way interaction term				
RC × POS × Gender				0.00
(ΔR^2)				(0.00)
Total R^2	0.20***	0.44***	0.47***	0.47***
Adj. R^2	0.20***	0.44***	0.47***	0.47***
F-value	135.14***	189.23***	119.26***	112.19***

N = 2,142. Regression coefficients represent standardized parameters (betas). [a]1 = 20–29 years, 2 = 30–39 years, 3 = 40–49 years, 4 = 50–59 years, 5 = 60 years and on. [b]0 = male, 1 = female. *$p < 0.05$. **$p < 0.01$. ***$p < 0.001$.

TABLE 3 Hierarchical regression analysis of workplace bullying (Study 2).

	Step 1	Step 2	Step 3	Step 4
Control variables				
Age[a]	0.15***	0.09***	0.08***	0.08***
Ethnicity	−0.07***	−0.06***	−0.06***	−0.06***
Organization (school) tenure	−0.05*	−0.04*	−0.03	−0.03
Negative affectivity	0.42***	0.17***	0.15***	0.15***
(R^2)	(0.20***)	(0.20***)	(0.20***)	(0.20***)
Main effects				
Gender[b]		−0.01	0.00	0.02
Perceived organizational support (POS)		−0.18***	−0.17***	−0.14**
Role ambiguity (RA)		0.13***	0.06	0.06
Role conflict (RC)		0.34***	0.44***	0.45***
Role overload (RO)		0.02	0.07*	0.08*
(ΔR^2)		(0.26***)	(0.26***)	(0.26***)
2-Way interaction terms				
RA × Gender			0.04	0.05
RC × Gender			−0.09*	−0.10*
RO × Gender			−0.03	−0.03
RA × POS			−0.08***	−0.08***
RC × POS			−0.13***	−0.20***
RO × POS			−0.03	−0.04
POS × Gender			0.01	−0.01
(ΔR^2)			(0.05***)	(0.05***)
3-Way interaction term				
RC × POS × Gender				0.08*
(ΔR^2)				(0.001)*
Total R^2	0.20***	0.46***	0.50***	0.50***
Adj. R^2	0.20***	0.46***	0.50***	0.50***
F-value	123.92***	187.69***	125.85***	119.09***

N = 2,008. Regression coefficients represent standardized parameters (betas). [a]1 = 20–29 years, 2 = 30–39 years, 3 = 40–49 years, 4 = 50–59 years, 5 = 60 years and on. [b]0 = male, 1 = female. *$p < 0.05$. **$p < 0.01$. ***$p < 0.001$.

in the expected direction, after adjusting for control variables (β = −0.20, $p < 0.001$) in Study 1. Similarly, Table 3 (step 2) shows a main effect POS as predicted, over and above the effects of control variables (β = −0.18, $p < 0.001$) in Study 2. Thus, H3a is supported across the two studies.

H3b–H3d predicted that POS moderates the positive relationships between role ambiguity, role conflict, and role overload, respectively, and workplace bullying, such that the relationships will be weaker when POS is high (vs. low). Table 2 (step 3) shows that the two-way interactions in Study 1 of role ambiguity and role conflict, respectively, with POS were significant (β = −0.09, $p < 0.001$; β = −0.12, $p < 0.001$). The interaction of role overload and POS also was significant (β = 0.04, $p < 0.05$). Similarly, Table 3 (step 3) shows significant interaction effects in Study 2 of role ambiguity and role conflict, respectively, with POS (β = −0.08, $p < 0.001$; β = −0.13, $p < 0.001$). Here, the interaction term involving role overload was not significant.

We probed these significant interaction effects by testing simple slopes for the associations between role stressors, using low (1.5 SD below the mean) and high (1.5 SD above the mean) levels, and workplace bullying at low (1.5 SD below the mean) and high (1.5 SD above the mean) levels of POS. Figure 4 plots the simple slopes for the Study 1 interaction between role ambiguity and POS.

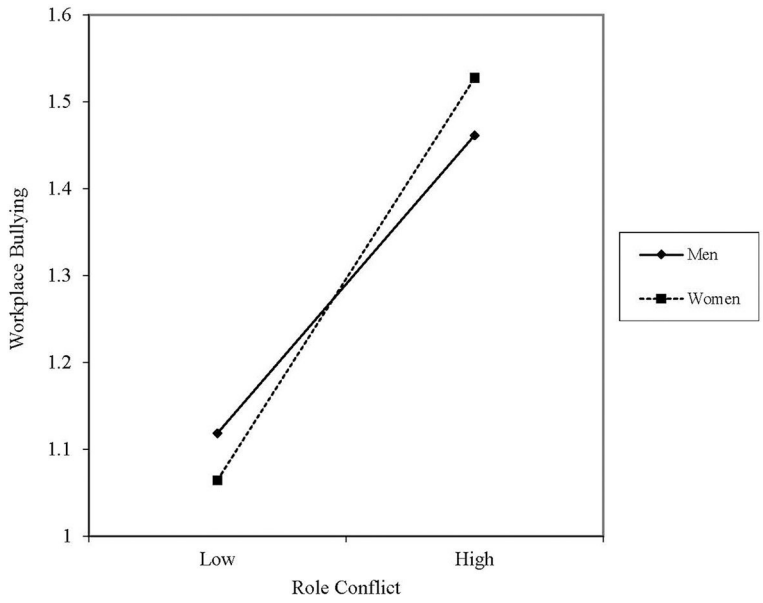

FIGURE 2
Gender as moderator in the relationship between role conflict and workplace bullying (Study 1). Low = 1.5 SD below the mean. High = 1.5 SD above the mean.

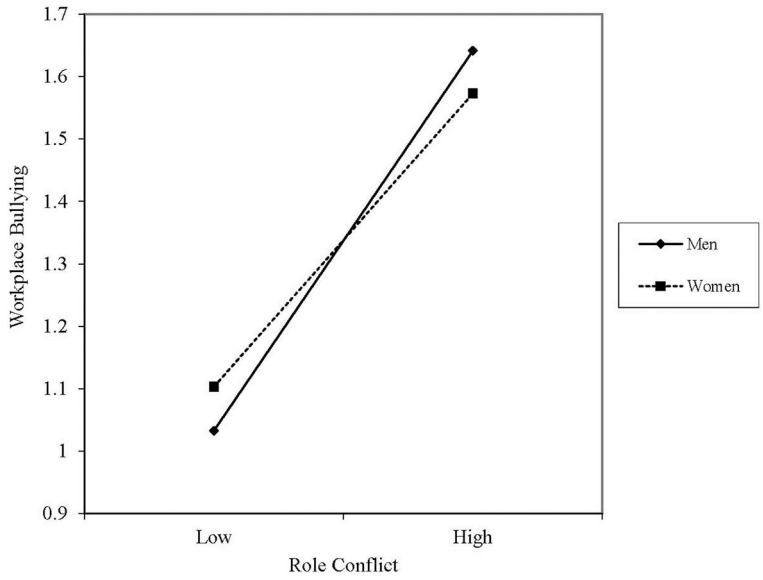

FIGURE 3
Gender as moderator in the relationship between role conflict and workplace bullying (Study 2). Low = 1.5 SD below the mean. High = 1.5 SD above the mean.

The simple slope test for low POS revealed a significant positive association between role ambiguity and workplace bullying with role ambiguity more strongly related to bullying when POS was low ($\beta = 0.10$, $p < 0.001$). The association between role ambiguity and workplace bullying was not significant when POS was high ($\beta = -0.03$, ns). Next, Figure 5 plots the simple slopes for the Study 1 interaction between role conflict and POS. Here, each simple slope test revealed a significant positive association between role conflict and workplace bullying with role conflict more strongly related to bullying when POS was low ($\beta = 0.23$, $p < 0.001$) than when POS was high ($\beta = 0.06$, $p < 0.05$). Figure 6 then plots the simple slopes for the Study 1 interaction between role overload and POS, which revealed that the association between role overload and workplace bullying was not significant when POS was low ($\beta = 0.00$, ns). In contrast, the simple slope test for high POS revealed a significant positive association between role overload and workplace bullying ($\beta = 0.05$, $p < 0.01$). Figure 6 results thus indicate that workplace bullying was lower at high POS than low POS, and that bullying

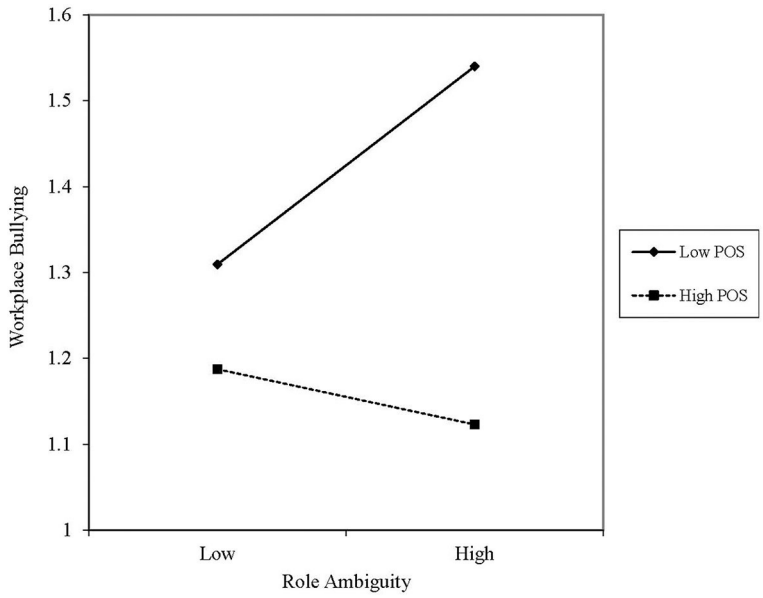

FIGURE 4
POS as moderator in the relationship between role ambiguity and workplace bullying (Study 1). Low = 1.5 SD below the mean. High = 1.5 SD above the mean. POS, perceived organizational support.

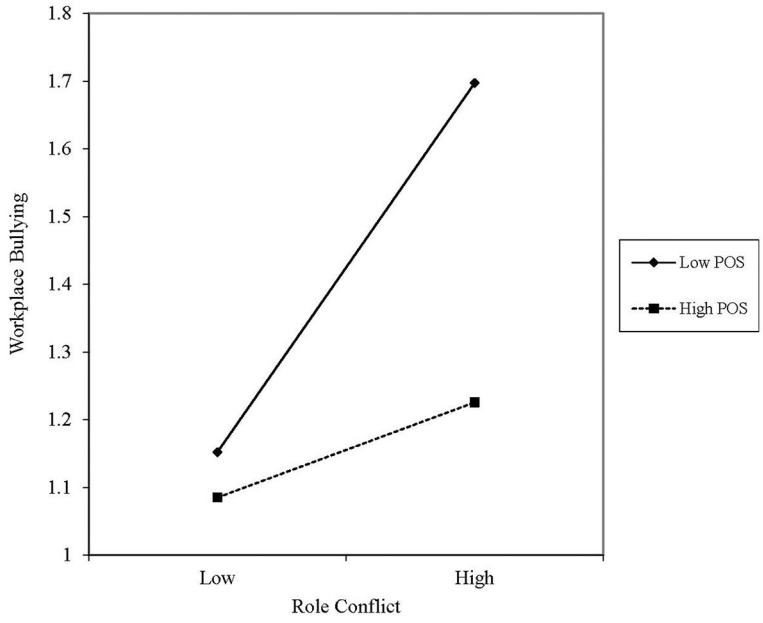

FIGURE 5
POS as moderator in the relationship between role conflict and workplace bullying (Study 1). Low = 1.5 SD below the mean. High = 1.5 SD above the mean. POS, perceived organizational support.

levels were invariant to changes in role overload when POS is low. Thus in Study 1, H3b–H3d are supported.

Figure 7 plots the simple slopes for the Study 2 interaction between role ambiguity and POS, which revealed that the association between role ambiguity and workplace bullying was not significant when POS was high ($\beta = -0.03$, ns). In contrast, the simple slope test for low POS revealed a significant positive association between role ambiguity and workplace bullying with role ambiguity more strongly related to bullying when POS was low ($\beta = 0.11$, $p < 0.001$). Figure 8 next plots the simple slopes for the Study 2 interaction between role conflict and POS. Here, each simple slope test revealed a significant positive association between role conflict and workplace bullying with role conflict more strongly related to bullying when POS was low ($\beta = 0.35$, $p < 0.001$) than when POS was high ($\beta = 0.15$, $p < 0.001$). Thus in Study 2, H3a and H3b are supported whereas H3c is not supported.

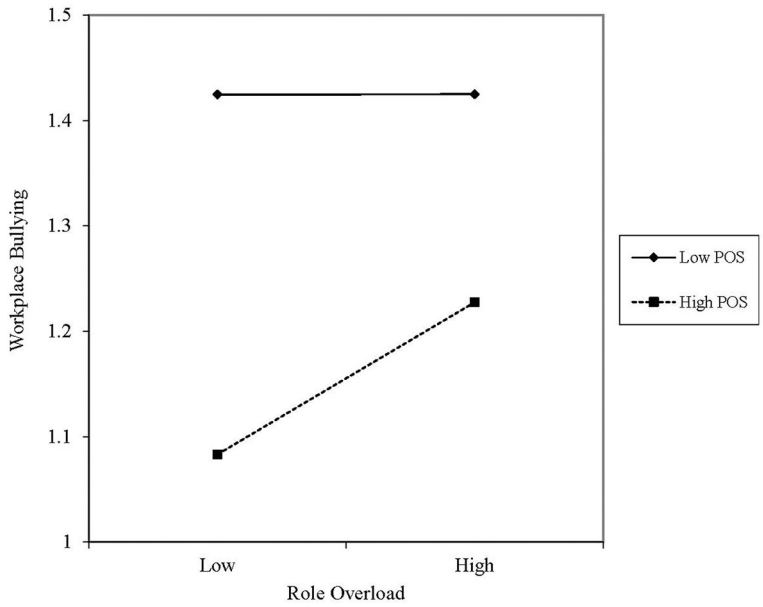

FIGURE 6
POS as moderator in the relationship between role overload and workplace bullying (Study 1). Low = 1.5 SD below the mean. High = 1.5 SD above the mean. POS, perceived organizational support.

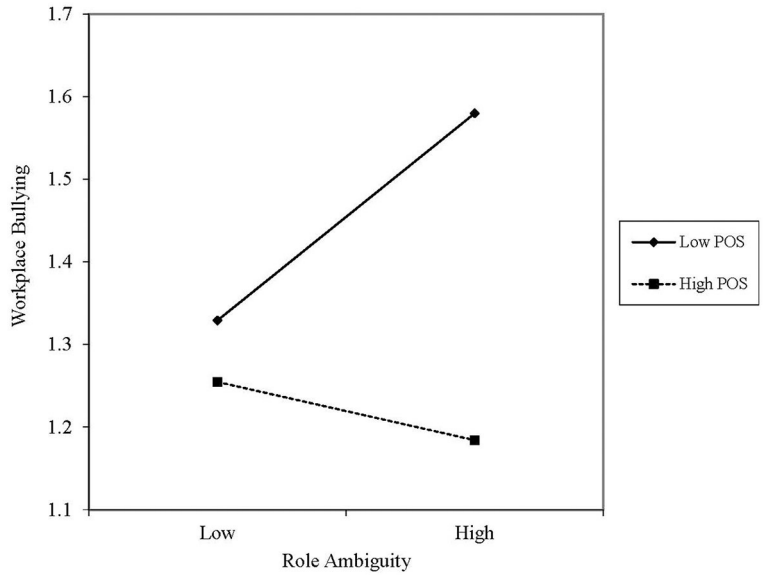

FIGURE 7
POS as moderator in the relationship between role ambiguity and workplace bullying (Study 2). Low = 1.5 SD below the mean. High = 1.5 SD above the mean. POS, perceived organizational support.

Three-way interactions of role conflict, POS, and gender

H4 predicted that the relationship between role conflict and workplace bullying would be stronger for women (rather than men) when role conflict is high and POS is low. Table 2 (step 4) shows that this three-way interaction was not significant ($\beta = 0.00$, ns). Thus in Study 1, H4 is not supported. Table 3 (step 4), however, shows that in Study 2 this interaction was significant ($\beta = 0.08$, $p < 0.05$) with a significant (although minimal) incremental gain in variance ($\Delta R^2 = 0.001$, $p < 0.05$). To probe the nature of the three-way interaction, we tested simple slopes for the associations between role conflict, using low (1.5 SD below the mean) and high (1.5 SD above the mean) levels, and workplace bullying at low (1.5 SD below the mean) and high (1.5 SD above the mean) levels of POS. Figure 9 plots the simple slopes for this interaction between role conflict,

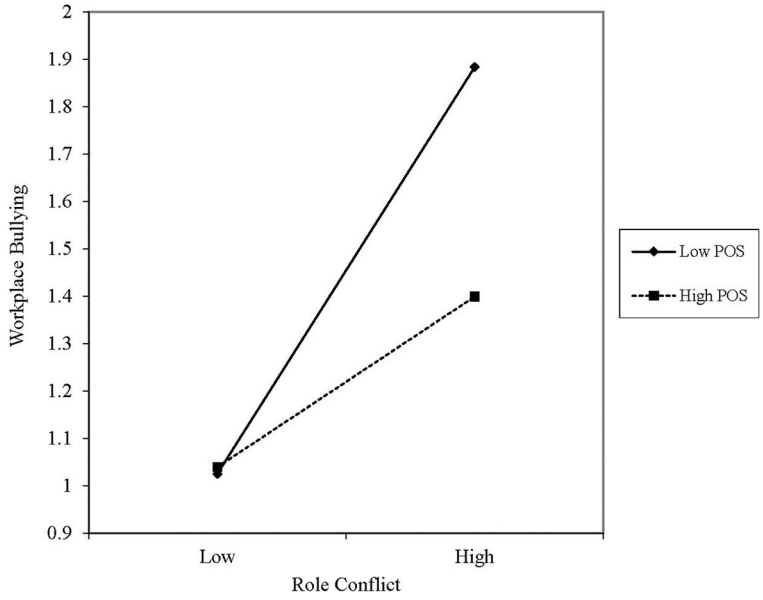

FIGURE 8
POS as moderator in the relationship between role conflict and workplace bullying (Study 2). Low = 1.5 SD below the mean. High = 1.5 SD above the mean. POS, perceived organizational support.

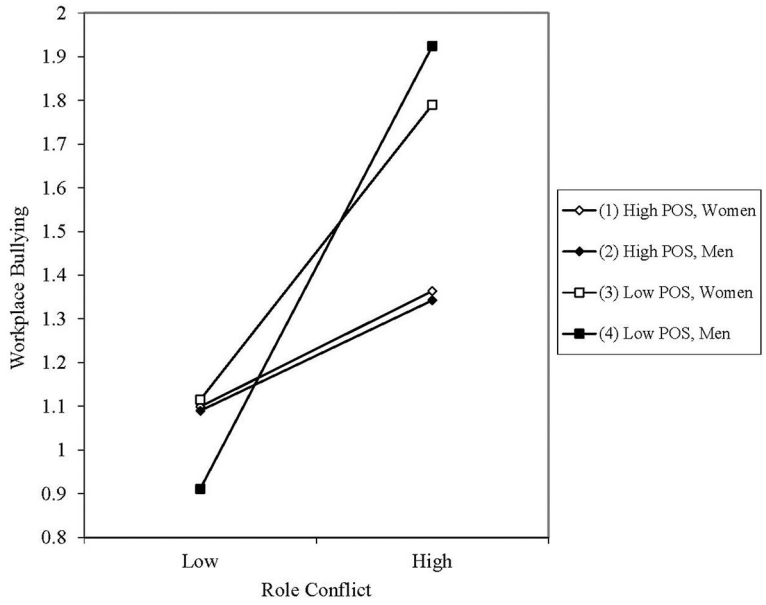

FIGURE 9
Gender as moderator in the interaction between role conflict and POS on workplace bullying (Study 2). Low = 1.5 SD below the mean. High = 1.5 SD above the mean. POS, perceived organizational support.

POS, and gender. Each simple slope test revealed a significant positive association between role conflict and workplace bullying moderated by POS. Consistent with expectations, role conflict more strongly related to bullying for both genders when POS was low than when POS was high. Contrary to expectations, however, under low POS conditions the role conflict–POS interaction was more strongly related to bullying for men ($\beta = 0.42$, $p < 0.001$) than for women ($\beta = 0.28$, $p < 0.001$). Under high POS conditions, we observe notably similar levels of workplace bullying for women and men when role conflict was both low and high ($\beta = 0.11$, $p < 0.001$, women; $\beta = 0.10$, $p < 0.001$, men). Although the results indicate that H4 is not supported in Study 2, we sought to learn more about the moderating effect of gender in this significant interaction. We therefore compared slopes using the approach recommended by Dawson and Richter (2006) to test the differences across the four slopes. This analysis revealed that the slope for men experiencing

low POS (and the highest workplace bullying) was significantly different from each of the three other conditions ($p < 0.001$ for the two high POS conditions and $p < 0.01$ for women in the low POS condition).

Discussion

These studies investigated the relationships among role stressors, gender, POS, and workplace bullying of targets for insights into when and for whom role stressors affect bullying risk. In identifying when bullying risk varies by different levels of role stressors, POS, as well as gender, this research contributes to the literature by highlighting the boundary conditions of role stressor–bullying relationships, an approach not yet taken in studies to date to our knowledge. This research responds to calls for further studies on role stressor antecedents of bullying (Nielsen and Einarsen, 2018) in light of recent inconsistent results. In support of the work environment hypothesis, role conflict was shown to be strongest predictor of workplace bullying, followed by role ambiguity, across the two studies consistent with prior cross-sectional studies. Although role overload did not predict bullying, results at time 1 suggest it nonetheless may be conducive to experiences of being bullied when organizations are perceived as unsupportive. Indeed, even when organizations are considered supportive, high role overload may foster bullying experiences as the two-way interaction results showed. By examining POS and gender as moderators of the relationship between role stress and being a target of workplace bullying, we had hoped to resolve some of the contradictory findings in the workplace bullying literature. But, in fact, we found inconsistencies between our two studies in similar fashion to those elsewhere in the literature (further discussed below). POS and gender were important moderators in our studies and our findings suggest it would be of interest both in future longitudinal studies and qualitative research to investigate POS, gender or other potential moderators of role stressor-bullying relationships to allow more finely-grained analyses and explanations when expected role stressor or gender main effects are not supported. Nevertheless, the inconsistencies we found suggest that there are other moderators to discover. It would also be interesting to compare patterns of moderating influences in longitudinal studies that include analysis of reverse effects (i.e., exposure to workplace bullying in predicting subsequent role stressor levels) for even more nuanced understanding of these relationships.

These studies underscore the value, theoretically and empirically, of closer attention to gender in role stressor—bullying relationships. In so doing, we respond to calls for further research on demographic-based risk groups and risk settings (Nielsen and Einarsen, 2018) and use of an interactionist perspective on bullying (Nielsen and Einarsen, 2018; Rai and Agarwal, 2018). Because few large(r)-scale bullying studies have examined gender in Canada, this research contributes to the growing international literature on gender prevalence. The fact that main effects for gender were not observed but moderating effects involving role conflict were observed suggests its influence is material, nevertheless, in assessing bullying risk. The lack of support for the prediction that women would be at greater risk than men of being bullied and the inconsistencies in the two studies about who was at greater risk amid role conflict warrant further discussion. One possibility for the failure to find expected main effects relates to the research context, namely the education sector. Prior research has shown that bullying risk is greater for employees working in male-dominated organizations (Nielsen and Einarsen, 2018) and in an occupation dominated by the other sex (Salin, 2021). The organization we studied was predominantly female and was in the education sector where women work in a field dominated by women. Yet, because education is increasingly regarded as a high-risk occupation for bullying (de Wet and Jacobs, 2021), we nonetheless might expect results to reveal a greater bullying risk for women. It appears that larger contextual factors related to workforce composition and sectoral gender patterns may have been protective factors for bullying in our samples that reduced the risk of bullying for women. Beyond this, the different interaction effects for men and women across the two studies are puzzling. As mentioned, the demographic profiles of the two samples aligned closely, the demographic composition of the samples was representative of the association's membership at both time points, and bullying rates were stable. Yet the samples very likely included different people as the association's membership grew from time 1 to time 2, and some time 1 respondents likely left in customary turnover. The cross-sectional surveys precluded testing changes in bullying experiences of particular individuals and gender-based comparisons. Systematic longitudinal analysis of gendered social relations, including bullying experiences, and qualitative inquiry would allow more in-depth, precise examination of social and situational factors that might contribute to one gender or another becoming targets of bullying at different points in time.

Another possibility for the lack of significant gender main effects and some interaction effects relates to the method used to measure bullying. As mentioned, Salin (2021) research review compared results of gender prevalence according to measurement methods, finding that slightly more women than men self-label as bullied. Similarly, Rosander et al. (2020) found that women reported higher bullying rates by the self-labeling method while men reported higher bullying rates by the behavioral experience method in which respondents were asked about frequency of exposure to various negative acts. Our studies used the behavioral experience method, generally considered more objective. Thus, it is possible that use of a self-labeling method might have yielded different results for both main effects and some of the two-way interaction effects in which we expected to (but did not) see higher bullying levels for women in conjunction with role ambiguity and role overload. Therefore, it would be interesting in future research to compare patterns observed in role stressor–gender interactions by methods used to measure bullying.

The literature has paid little attention to whether and how gender relates to role stressors with a few exceptions (e.g., Di Salvo et al., 1988). A recent study by Duxbury et al. (2018) found no gender differences involving work-role overload and no support for the moderating role of gender in the relationship between work-role overload and perceived stress. Given the paucity of research on gender and role stressors and on the moderating role of gender in role stressor–bullying relationships, it is clear that additional research needs to be conducted in this area. One avenue for future study is suggested by past research proposing that the type of work role demands that employees experience may be influenced more

by the type of job the employee holds rather than their gender (Roxburgh, 1996; Duxbury et al., 2018). Extending this proposition, it would be of interest to examine the relationship between role stressors and bullying exposure more closely by taking into account the nature of positions—in our research context, this would mean considering classroom teachers, clinicians, principals, and so on. It seems likely that work role demands will vary depending on contact with and oversight of students, leadership responsibilities, and other features of work roles. The intersecting impact of gender, role stressors differentiated by the nature of positions, and bullying risk thus is a research avenue worth pursuing.

Importantly, the two-way (in both studies) and three-way interaction (in one study) of role conflict and gender on workplace bullying show higher bullying for both genders under high role conflict. The inconsistencies in who was at greater risk for bullying under this condition suggests that high role conflict is a risk factor regardless of gender. Thus, the pressure of dealing with competing, contradictory work demands may supersede gender role socialization influences and a potential differential vulnerability effect, by which women experience the same role stress more intensely than men (Day and Livingstone, 2003), does not appear salient. Future research using an inductive design and qualitative methods that can probe interpretations and more subjective aspects of high role conflict may reveal insights into how it is experienced, and effects it may have, on different genders. Past research also suggests that women typically have social support mechanisms outside of the workplace to help cope and buffer workplace bullying (Attell et al., 2017). We might expect they have a lower need than men for POS to cope with bullying and that, under conditions of low POS and high role conflict, men might be expected to experience higher bullying than women because men's access to support is thus constrained.

The central POS findings—consistent across the two studies—of its negative relationship to bullying as a main effect and its important protective effect in moderating exposure to bullying amid high role ambiguity, high role conflict, and role overload (the latter shown in one study) affirm the value of encouraging positive social environments and discouraging negative ones to reduce bullying risk. The idea that perceptions of POS and workplace bullying can co-exist as separate aspects of targets' subjective interpretations of their work environments and experiences (Parzefall and Salin, 2010) is also supported here. Indeed, high POS may help preserve targets' sense that the organization can be relied on in stressful situations, whether stress relates to poorly organized work roles or bullying behavior. An important caveat observed in prior research, however, is that high POS and justice perceptions hold only when organizational responses to requests for help with bullying are seen as timely and effective (Harlos, 2001; Keashly, 2001; Parzefall and Salin, 2010). In this research setting, all school divisions in the province are mandated to have policies on harassment and on violence prevention. The presence of these policies may have reinforced POS by conveying assurance that dedicated help is available, although this would be so only to the extent that respondents were aware of and trained on the policies. It would be interesting in future work to examine whether POS varies by policy awareness and training and, by extension, whether policy awareness and training influences relationships among role stressors and bullying. In addition, further research on role overload is warranted both to address its relative neglect in the bullying literature and to explore the inconsistent findings reported here on the two-way interaction of role overload and POS.

Practical implications

Our findings on role stressors and POS have several practical implications for preventing and responding to workplace bullying. Workplace bullying is less likely to happen when employees experience appreciation for the value of their contributions and receive help, support, and caring from the organization. An organization-wide approach to build and promote an organizational culture with truly collaborative and inclusive interpersonal and work practices is required, in our view. Organizational leadership, for example, needs to make decisions at all levels of the organization that put the wellbeing of employees on par with the successful completion and outcomes of their work. Our results suggest that leaders and HR professionals should also directly lower role stress where possible. One means of reducing role ambiguity and role conflict, for example, is to ensure that job descriptions with clear roles (including expectations and requirements) are communicated (Ghorpade et al., 2011; Bongga and Susanty, 2018). This practice recommendation is supported by recent evidence that the clarity of job descriptions is negatively related to role ambiguity (Bowling et al., 2017). Because communication is at the heart of actual messages employees send, receive, and believe, many of these implications relate to communication practice throughout all levels of the organization. Therefore, the implications we consider below have been informed by guidance for HR professionals (and consultants) based on research from a communication perspective (Lutgen-Sandvik and Tracy, 2012), by evidence-based recommendations from organizational support theory (Shanock et al., 2019), and by a recent multi-disciplinary panel of experts on workplace bullying (Tye-Williams et al., 2020).

To create organizational cultures in which employees perceive themselves as being valued and cared for, and have clarity, congruence, and a manageable workload in their roles (rather than ambiguity, conflict, and overload), organizational roles could be designed and resourced with attention to how they may intersect with other roles. To reduce role ambiguity, organizations could ensure that employees have clarity on how to engage in these interdependent roles in ways that promote their individual wellbeing as well as the organization's collective goals. Resources could be distributed in ways that can truly support the work and minimize competition for resources among employees, thereby reducing role overload and role conflict. Organizational leadership would also need to put effective policies and voice systems in place to offer support to employees who encounter or witness role stress, workplace bullying, or other triggers of negative work experiences. The opportunity for witnesses (who may be distressed, co-opted, and terrorized without being directly bullied) to be heard and acknowledged as having a role in responding to workplace bullying may be critical to the success of workplace bullying prevention

programs, according to Lutgen-Sandvik and Tracy (2012). They recommend introducing a variety of confidential mechanisms for staff input such as multi-rater 360-degree evaluations and ombudspersons. Because of the fear and trauma often associated with workplace bullying, access to an impartial advisor or coach may also be useful for staff who have concerns about workplace bullying. From a POS perspective, organizations would benefit generally from introducing more ways to provide voice to employees so that organizational decision makers and problem solvers better understand employees' experiences, values, needs, and satisfaction with the support the organization is providing for them. Increasing employee voice may be critical for members of the organization who are especially likely to be targeted and especially likely to lack voice in the organization due to marginalization because of race, gender or other factors. The influence of gender was specifically examined in this study and suggests that employee gender-related role stress may exist for any gender. Providing greater voice will allow organizations to gain a greater understanding of that, and of differences in the preferred support practices associated with gender-related, cultural, or other aspects of employee backgrounds and social identities.

Lutgen-Sandvik and Tracy (2012) have pointed out that HR professionals may especially need support to reduce their role stress if they are to fulfill their key role in the transformation of organizational culture. Role stress may be high for them because they are administering ambiguous policies that render them confused and ineffective, and that are highly incongruent with the provision of organizational support to employees (e.g., adversarial personnel practices, competition within the organization, evaluation systems that reward success even at the cost of interpersonal or moral harm). Identifying and removing these ambiguities and incongruences (i.e., reducing role ambiguity and role conflict for them) and ensuring that HR departments have the human and other resources to administer new programs and handle new mechanisms for voice in the organization (i.e., reducing their role overload), is likely to be an important part of making the organization's culture more supportive and less stressful. Supervisors can also be key to a supportive organizational culture, providing a "cascade of POS" (Shanock et al., 2019, p. 176) in organizations. Organizations can recruit and hire individuals into supervisory roles who have demonstrated the personal characteristics (e.g., positivity, respectfulness, honesty) and communication skills (e.g., empathy, listening, situational awareness, conflict resolution) that would predispose them to support their staff who are experiencing conflicts or other negative interactions. Support for supervisors themselves would include leadership training on best practices for responding to and addressing bullying and role stress, and professional development in communication skills (e.g., showing empathy, effective listening, positive framing in stressed, or divergent contexts).

While the roles of HR professionals and supervisors may have a multiplying effect in reducing role stress and building a culture of organizational support, organizations can ensure that employees are directly informed of organizational values, policies, and supports through means such as general orientations and professional development training. The capacity of the organization to provide support to its employees will be increased if it provides training for all staff in conflict resolution, particularly related to addressing issues of role ambiguity, role conflict and mismatched expectations between parties. Having these competencies at all levels of the organization will increase the likelihood that employees will choose to engage in constructive and collaborative processes of role clarification, resolution of role conflict, and dealing with role overload. Evidence-based recommendations for policy and practice to inhibit the occurrence of bullying are ever more essential in today's complex, stressful work environments as organizational leaders and managers worldwide face growing legal and societal imperatives to provide environments free of harm to employee health from workplace bullying (Lippel, 2010; Yamada, 2011).

Methodological considerations

The use of two large samples collected over a 3-year period is a strength of the current study. The samples were demographically and geographically diverse, and workforce differences from ongoing turnover and recruitment across the 3-year time lag, together, support the generalizability of findings. Yet data came from a single education association (albeit representing all provincial pre-K−12 educators) in one Canadian province and thus further studies in other organizations, sectors, and regions will strengthen external validity.

This research shares limitations common to studies using cross-sectional survey data and regression analysis. Although we investigated a causal model, we cannot make inferences about causality. This research, however, may inform emerging longitudinal studies of multidirectional influences between role stressors and workplace bullying (see review by Harlos and Holmvall, 2021), including boundary conditions, that are well-positioned to identify and explain causal processes underlying the patterns we found. Also, the reliance on self-report measures raises the possibility that common method bias inflated results. Yet it is unlikely that methods other than self-report could elicit the sensitive data sought here. Employee perceptions are central to understanding bullying and work environment experiences. As Salin and Notelaers (2020) have argued, research on bullying faces methodological and ethical obstacles to using other means that could reduce common source bias; for example, data on target experiences from managers and peers are often not feasible or desirable. To offset this potential bias, we used several procedural controls recommended by Podsakoff et al. (2003) over Harman's single-factor test, a statistical control widely used in behavioral research. These procedures included using predictors of varied conceptual nature (attitude, personal characteristic, perception-based), carefully positioning survey variables to minimize priming effects, using positively- and negatively-worded items (where possible) in larger-item, psychometrically-sound scales, and controlling for negative affectivity (along with other variables for conservative testing of hypotheses) in line with Podsakoff et al. (2003). Lastly, we note that the levels of bullying reported here appear relatively low. This is not surprising given that dysfunctional interpersonal behaviors at work (e.g., bullying, aggression, incivility) have characteristically low base rates (Greco et al., 2015). The 6-month retrospective timeframe used in the NAQ measure of bullying limits the low base base rate issue, to some degree, by capturing a greater number of behaviors than bullying measures with shorter time periods. Nevertheless, our

reported rates are consistent with (and sometimes exceed) mean rates reported in recent European and Australian studies using the NAQ to measure bullying (Djurkovic et al., 2008; Reknes et al., 2019; Salin and Notelaers, 2020; Nielsen et al., 2022). Furthermore, the study means (Study 1, $M = 1.39$; Study 2, $M = 1.42$) are slightly below the mean prevalence rate of bullying ($M = 1.50$) based on the NAQ in national samples across 44 countries (Van de Vliert et al., 2013). Given the paucity of Canadian evidence on prevalence rates from large-scale studies, the current findings represent a needed baseline for comparison in future workplace bullying research in Canada. It would be useful to replicate this research in countries with higher prevalence rates (e.g., Spain, Tunisia, Croatia, Bosnia-Herzegovina; Van de Vliert et al., 2013) to assess the validity of these findings. It is important to note that, although workplace bullying is characterized by low base rates, its effects can be highly damaging to individuals and organizations nonetheless.

Conclusion

Given the growing concern about workplace bullying and its disruptive, harmful effects on individuals and organizations, it is crucial to understand the conditions under which bullying risk is heightened (or reduced). These studies affirm the importance of searching for moderators to identify who may be at more risk than others and what situations may pose more risk than others for tailored prevention strategies and interventions. Specifically, it signals both the value of POS in buffering exposure to bullying when role stressors are high and the need for closer scrutiny of a possible gendered bullying risk in such work environments. We hope that this research spurs further studies on boundary conditions of bullying antecedents from an interactionist perspective. Insights into when and for whom role stressors influence bullying risk, along with better understanding of how and why moderation effects occur, hold promise of more nuanced knowledge to advance theory and enhance practice.

Data availability statement

The datasets presented in this article are not readily available because these data are of a highly sensitive nature to the research organization and, under the terms of the research agreement, are not to be made available outside the organization. Requests to access the datasets should be directed to ka.harlos@uwinnipeg.ca.

Ethics statement

The studies involving human participants were reviewed and approved by University of Winnipeg Institutional Review Board. The patients/participants provided their written informed consent to participate in this study.

Author contributions

KH, GO'F, and WJ were involved in the initial planning of the studies and collected the data. KH led the data analysis for the manuscript with support from AH and initiated and wrote the manuscript. DG, GO'F, WJ, and LA contributed to the writing of the manuscript. All authors read, commented on, and approved final manuscript.

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Conflict of interest

LA is employed by The Neutral Zone Coaching and Consulting Services.

The remaining authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

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