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When workload predicts exposure to bullying behaviors in nurses: The protective role of social support and job recognition

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Abstract

Aims. This study examined the moderating role of two resources (social support and recognition) in the longitudinal relationship between workload and bullying behaviors in nurses. **Design.** A two-wave (12-month) longitudinal study was conducted. **Method.** French-Canadian nurses ($n =$ 279) completed an online survey (October 2014 and October 2015) assessing their perceptions of job characteristics within the work environment (workload, social support, job recognition) as well as exposure to negative behaviors at work. **Results.** Workload positively predicted exposure to bullying behaviors over time, but only when job recognition and social support were low. Workload was unrelated to bullying when social support was high and negatively related to bullying when job recognition was high. **Conclusion.** This study aligns with the *work environment hypothesis*, showing that poorly designed and stressful job environments provide fertile ground for bullying behaviors. **Impact.** Bullying is a growing concern in the nursing profession that not only undermines nurses' well-being but also compromises patient safety and care. It is thus important to identify work-related factors that can contribute to the presence of bullying behaviors in nurses in the hopes of reducing their occurrence and repercussions. This study contributes to this endeavor and identifies two key social coping resources that can help manage the stress associated with workload, resulting in less perceived bullying behavior among nurses.

Keywords: workplace bullying, nurses, work-related antecedents, workload, social support, job recognition

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social support and job recognition

Introduction

Workplace bullying is a serious organizational issue in the nursing profession. Indeed, research shows that almost 40% of nurses are confronted with bullying behavior (Spector, Zhou, & Che, 2014). This is very problematic given that exposure to bullying is associated with psychological distress, psychosomatic health problems, low-quality work motivation, burnout, turnover intention, and sleep disorders (Blackstock et al., 2015; Hansen et al., 2014; Trépanier, Fernet, & Austin, 2013, 2015). In the nursing profession, these manifestations of ill-being can have serious repercussions and contribute to the already salient nursing shortage (Toh, Ang, & Devi, 2012), as well as negatively affect the quality and safety of patient care (Hall et al., 2016). In addition, research has linked workplace bullying in the nursing profession to long-term sickness absence (Ortega et al., 2011), actual turnover (Hogh, Hoel, & Carneiro, 2011), and missed nursing care (i.e., omitted or delayed required patient care; Hogh, Baernholdt, & Clausen, 2018; Kalisch, Landstrom, & Hinshaw, 2009). According to the *work environment hypothesis*, poorly designed work environments and stressful job conditions provide fertile ground for bullying (Salin & Hoel, 2020). As such, it is important to understand the risk factors within the work environment that can contribute to the presence of bullying behaviors among nurses as well as the resources that can attenuate such effects over time. The present longitudinal study aims to contribute to this endeavor by investigating the longitudinal (12-month) relationship between workload and bullying behaviors in nurses as well as the moderating role of two job resources (social support and recognition) in this relationship.

Background

Workplace Bullying Among Nurses. Workplace bullying is considered a serious issue in the nursing profession (Hutchinson et al., 2010; Laschinger et al., 2010; Trépanier et al., 2016). It is defined as repeated and prolonged exposure to negative behaviors from others (e.g., colleagues, immediate supervisor, manager), where employees find it difficult to defend themselves against this systematic mistreatment (Einarsen, 2000; Nielsen & Einarsen, 2018). The negative behaviors can take on different forms. For example, employees can be confronted with behaviors that undermine their professional identity and functioning (e.g., undervaluing of one's professional competencies, excessive monitoring of one's work) or the quality of their social experiences at work (e.g., excessive teasing, offensive remarks, social exclusion). Bullying can also manifest itself through more aggressive behaviors (e.g., threats of violence, shouting and hostile comments), although such behaviors are less common (Einarsen, Hoel, & Notelaers, 2009).

Past research suggests that nurses are particularly at risk when it comes to workplace bullying. While Nielsen, Matthiesen, and Einarsen's (2010) meta-analysis suggests that about 15% of employees are exposed to bullying behaviors, research reveals that the prevalence rate of bullying among nurses could be close to 40% (Laschinger et al., 2010; Spector et al., 2014; Trépanier et al., 2013). For example, Spector et al. (2014) conducted a quantitative review of studies pertaining to exposure to different forms of aggression (e.g., physical violence, bullying, sexual harassment, etc.) in the nursing profession. The review, which included results from 10 studies on bullying, reported an average exposure rate of 37.1% for this form of mistreatment. These particularly high rates could notably be explained by the fact that workplace bullying is embedded in the organizational culture of the nursing profession (Blackwood et al., 2017; Lewis, 2006). For example, in a qualitative study conducted among 26 nurses who had personal

experience of bullying, Hutchinson et al. (2006) revealed that workplace bullying is often accepted and normalized within work teams as well as tolerated and minimized by nurse managers.

Such a state of affairs is worrisome, given the large array of personal and organizational consequences associated with workplace bullying. Research shows that nurses exposed to bullying behaviors experience diverse manifestations of ill-being, including symptoms of psychological distress and burnout, as well as disengagement, turnover intention, decreased life satisfaction, psychosomatic complaints, and post-traumatic stress disorder (Laschinger et al., 2010; Laschinger & Nosko, 2015; Trépanier et al., 2013, 2015, 2016). In addition, workplace bullying among nurses can have serious implications for healthcare organizations and patient care. Indeed, by contributing to turnover intention and long-term sickness absence (Hogh et al., 2011; Ortega et al., 2011), bullying fuels the current staffing shortage and retention challenges in the nursing profession, notwithstanding that by undermining nurses' well-being, bullying can seriously undermine patient safety and the quality of care received (Hall et al., 2016; Hogh et al., 2018; Purpora & Blegen, 2012). In light of these consequences, it is important to better understand the antecedents of workplace bullying in the hopes of reducing its occurrence among nurses.

Antecedents of Workplace Bullying. Research investigating the antecedents of workplace bullying has provided support for the *work environment hypothesis*, which proposes that deleterious work conditions enable bullying to flourish (see Salin & Hoel, 2020). More specifically, according to this predominating framework, the presence of taxing job characteristics (i.e., job demands such as overload, role conflicts) as well as the absence of positive job characteristics (i.e., job resources such as job control, social support) create stressful

work conditions that may foster bullying through different processes. In stressful situations, employees are likely to experience negative affect, psychological discomfort and frustration and may thus be more prone to conflicts as well as engaging in hostile and aggressive behaviors (Hauge, Skogstad, & Einarsen, 2007). Negative and stressful work conditions may also generate stress, which renders employees more likely to behave in ways that violate social norms and rules (e.g., withdrawal, uncivil behavior, reduced performance), making them more vulnerable to retaliation and coercive behaviors from others (Baillien et al., 2009; Notelaers, De Witte, & Einarsen, 2010). For example, Notelaers et al. (2010) found that work overload, role conflict, role ambiguity, and cognitive demands positively predicted self-reported bullying, whereas it was negatively predicted by task participation, feedback, and skill utilization. Furthermore, Li et al. (2019) found that employees in jobs objectively rated as demanding (i.e., irregular work schedules and high conflictual contact) reported higher exposure to workplace bullying, whereas employees in jobs objectively rated as having high control reported experiencing less bullying. In summary, past research suggests that unfavorable work environments facilitate bullying behaviors.

Nurses' work environment comprises a number of job stressors, and workload is a particularly important one (Garrosa et al., 2008; McVicar, 2003). Indeed, nurses regularly have to deal with high nurse/patient ratios and long work shifts without the necessary support and resources (Huntington et al., 2011; Louch et al., 2017; Schalk et al., 2010). This is unfortunate, given that research consistently shows that workload is a significant factor contributing to workplace bullying (e.g., Baillien, De Cuyper, & De Witte, 2011; Bowling & Beehr, 2006; Notelaers et al., 2010).

However, a fundamental postulate in the organizational stress literature is that stressors within the work environment have a differentiated impact depending on the contextual resources available to deal with them (Sonnentag & Frese, 2012). In line with this, research shows that job resources (i.e., positively valued job aspects that facilitate the achievement of work goals, and/or stimulate employee development; Bakker & Demerouti, 2017) can attenuate the negative impact of stressors (e.g., Lavoie-Tremblay et al., 2014; Wang, Lu, & Siu, 2015). Specifically regarding workplace bullying, some research outside the nursing profession has investigated the interplay between demands and resources in the prediction of bullying. For example, using latent-class analysis, Notelaers et al. (2013) found that high job demands and low job control were associated with a higher probability of being the target of severe bullying (i.e., exposure to weekly bullying behaviors). Results also show that low job control amplified the positive relationship between job demands and being exposed to severe bullying. Similarly, in a study conducted in the textile industry and the financial sector, Baillien et al. (2011) investigated the longitudinal interplay between work overload and job control in the prediction of workplace bullying (being a victim or a perpetrator). The results revealed that T1 job control moderated the association between T1 overload and T2 victimizing (perpetrator): T1 overload positively predicted T2 victimizing only when T1 control was low.

These results suggest that the absence of certain job resources (e.g., control) amplifies the stressful nature of job demands, resulting in more bullying behaviors. However, depending on their nature, the presence of job resources may actually alleviate the negative effect of job stressors, fostering more adaptive work environments where bullying behaviors are less likely to occur. Given that workplace bullying is an inherently social phenomenon, contextual resources of a social nature may be particularly effective in preventing this form of mistreatment in highly

demanding work environments (Balducci et al., 2020; Cohen & Wills, 1985; De Jonge &

Doorman, 2006), such as nursing.

Accordingly, social support, considered as a "social fund from which people may draw

when handling stressors" (Thoits, 1995, p. 64), could be a useful resource to cope with job

demands such as workload, consequently reducing experiences of bullying behaviors. Social

support can be of an emotional (i.e., provision of sympathy, care or understanding) or

instrumental (i.e., provision of concrete assistance, advice or information) nature (Fenlason &

Beehr, 1994). In the present study, social support is investigated in an undifferentiated manner,

as the two forms of support are strongly related, especially in occupations high in emotional

labor (Mathieu, Eschleman, & Cheng, 2019). In the context of high workload, having someone

to turn to in order to receive affective assistance or tangible help may significantly reduce the

taxing effect of workload. Indeed, employees who receive social support in the context of

workload are likely to feel understood and more capable of overcoming and managing the

situation (Cohen & McKay, 1984; Cohen & Wills, 1985; Fenlason & Beehr, 1994), which

attenuates the stress generally induced by this stressor. In such conditions, employees may

experience less strain and be less likely to behave in a manner that violates work-related

expectations and social norms (Baillien et al., 2009).

Job recognition is another useful social resource that could help reduce the stress

associated with workload, and, accordingly, lessen its effect on bullying. This job resource is

conceptualized as the extent to which an employee's expectations are fulfilled by the social

reward system (Boamah & Laschinger, 2016). According to the effort-reward imbalance model

(Siegrist, 1996, 2016), employees expect to obtain rewards in proportion to the effort they invest

in their work. Failed reciprocity (i.e., high effort, low reward) generates negative emotions and

frustration, which consequently leads to stress-related issues (Siegrist, 2016). While rewards can take various forms (e.g., financial, status-related), an important reward at work is recognition (i.e., socioemotional; Siegrist, 2016). As high workload and time pressure necessitate high involvement and the deployment of significant emotional, cognitive and physical resources, nurses who perceive that their efforts are adequately acknowledged may be less likely to experience negative affect (e.g., frustration, stress, anger, hostility), which is associated to bullying (Notelaers, Törnroos, & Salin, 2019).

The Study

Aims

This study aims to investigate the buffering role of social support and job recognition in the longitudinal relationship between workload and exposure to bullying behaviors in nurses (see Figure 1). In light of the theoretical and empirical evidence presented above, we propose the following hypotheses:

Hypothesis 1: Controlling for baseline exposure to bullying behaviors, T1 workload will positively predict T2 bullying behaviors.

Hypothesis 2: Controlling for baseline exposure to bullying behaviors, T2 social support (H2a) and T2 job recognition (H2b) will negatively predict T2 bullying behaviors.

Hypothesis 3: Controlling for baseline exposure to bullying behaviors, T2 social support will moderate the positive relationship between T1 workload and T2 bullying behaviors such that the relationship will be weaker when social support is high.

Hypothesis 4: Controlling for baseline exposure to bullying behaviors, T2 job recognition will moderate the positive relationship between T1 workload and T2 bullying behaviors such that the relationship will be weaker when job recognition is high.

Design

For this longitudinal quantitative study, two data collections (over a 12-month period) were conducted.

Sample/Participants

At the beginning of the study, 2 500 nurses working in the public healthcare sector in the province of Quebec (Canada) received an email describing the study and inviting them to complete an online questionnaire. Participants were members of the *Ordre des Infirmières et des Infirmiers du Québec* (OIIQ). Overall, 399 nurses participated at Time 1 (16.0% response rate), of whom 279 also participated at Time 2 (response rate of 70.0%). Table 1 presents a description of the sample, which is fairly representative of the overall demographic distribution of the members of the OIIQ, with the exception of job status. Nurses working full-time were slightly overrepresented in the present study (71.2% of respondents vs. 61.7% of members of the OIIQ).

Data collection

All variables were assessed in both data collections using the same instruments.

Workload. Workload (six items, T1 $\alpha = .80$/T2 $\alpha = .81$) was assessed using the Areas of Work Life Scale (AWLS; Leiter & Maslach, 2004). A sample item is "*I do not have time to do the work that must be done*". Participants were asked to rate the degree to which they agreed with the statements on a scale ranging from 1 (*totally disagree*) to 5 (*totally agree*).

Job resources. Job recognition (four items, T1 $\alpha = .86$/T2 $\alpha = .85$; sample item is "*I receive recognition from others for my work.*") was measured with the AWLS (Leiter & Maslach, 2004), whereas social support was assessed with a scale comprised of 6 items reflecting emotional (three items, T1 $\alpha = .79$/T2 $\alpha = .79$; e.g., "*At work there is no one with whom I feel comfortable talking about the negative feelings that I can have* [reversed]") and instrumental

support (three items, T1 α = .77/T2 α = .82; e.g., "A*t work I know someone to whom I can go for*

advice"). A composite score reflecting overall perceived support was created using the mean

scores of the two subscales. For both job resources (recognition and social support), participants

were asked to rate the degree to which they agreed with the statements on a scale ranging from 1

(*totally disagree*) to 5 (*totally agree*).

Workplace Bullying. Workplace bullying was assessed using the French version

(Trépanier, Fernet, & Austin, 2012) of the Negative Acts Questionnaire-Revised (NAQ-R;

Einarsen et al., 2009). Sample items are "*Spreading gossip and rumors about you*" (person-

related bullying; 12 items, T1 α = .90/T2 α = .91), "*Threats of violence or physical abuse or*

actual abuse" (physical intimidation; three items, T1 α = .68/T2 α = .64), and "*Someone*

withholding information which affects your performance" (work-related bullying; seven items,

T1 α = .80/T2 α = .75). Participants were asked to indicate how frequently they experienced the

negative behaviors at work during the past six months on a scale ranging from 1 (*never*) to 5

(*every day*).

Ethical considerations

Approval for this longitudinal study was obtained from the research ethics board of the

principal researcher's institution.

Data Analysis

Moderation analyses (Hayes, 2013) were performed using Mplus v.8 (Muthén & Muthén,

1998-2017; for a discussion on strengths and limitations of structural equation modeling, see

Tomarken & Waller, 2005) with robust maximum likelihood estimation (MLR). The analyses were

conducted only with participants who responded at both time points. The final sample size (*n* =

279) is sufficient to test the proposed models: As illustrated by a Monte Carlo simulation (Muthén

& Muthén 2002), a sample size of 100 participants suffices to detect a small to moderate (0.30)

effect size with a power of .82, using a Type I error rate of .05. The independent and moderating

variables were mean centered and the interaction was probed using the Johnson-Neyman technique

(JN technique; Johnson & Fay, 1950; Johnson & Neyman, 1936; see Hayes 2013). An advantage

of the JN technique is that it does not rely on an arbitrary choice of values for the moderator (e.g.,

+/- 1SD) to probe the interaction effect. Rather, it provides a region of significance that is

determined by the lower and upper bound of the confidence interval of the estimation of the

regression coefficient for the prediction of the dependent variable by the independent variable

given the moderator's values: the effect of the independent variable on the dependent variable is

not significant for a given moderator value when 0 lies within the range of the confidence interval.

A MANOVA was performed to determine the relationship between background variables

(sex, job status, job position, years of experience and education level) and exposure to bullying

behaviors. As no significant differences were found, background variables were excluded from

subsequent analyses.

Validity, reliability and rigour

All measures in this study were administered in French. Measures not previously validated

in French were adapted using a back-translation procedure (Vallerand, 1989). Table 2 presents the

properties of the measures. A four-factor measurement model (workload, job recognition, social

support, exposure to bullying behaviors) was tested for each time point. Results show that both

measurement models provided a satisfactory fit to the data: T1 $\chi^2(df)$ = 192.58 (*84*), CFI = .94,

TLI = .93, RMSEA = .07 [C.I. = .06 - .08]; SRMR = .06 and T2 $\chi^2(df)$ = 188.64 (*84*), CFI = .93,

TLI = .91, RMSEA = .07 [C.I. = .05 - .08]; SRMR = .05.

Results

Controlling for T1 exposure to bullying behaviors, results show that T1 workload does not significantly predict T2 bullying ($B = .03$, $p = .29$; $B = .02$, $p = .42$), whereas both T2 social support ($B = -.10$, $p = .002$) and T2 job recognition ($B = -.20$, $p < .001$) negatively predict T2 bullying (see Table 3). Results also reveal that, controlling for T1 exposure to bullying behaviors, both T2 job recognition ($B = -.13$, $p = .008$) and T2 social support ($B = -.10$, $p = .001$) significantly moderated the relationship between T1 workload and T2 exposure to workplace bullying (see Table 3). Figure 2 illustrates the relationship between T1 workload and T2 exposure to bullying behavior for specific values of T2 recognition: T1 workload positively predicted T2 exposure to bullying behaviors when T2 recognition was below the mean (indicated by the vertical line in the figure). More specifically, the positive relationship between T1 workload and T2 exposure to bullying behavior is stronger at low levels of recognition and weaker at high levels of job recognition. The relationship between T1 workload and T2 exposure to bullying behavior becomes negative when job recognition's value is above 4.3. Figure 3 depicts the relationship between T1 workload and T2 exposure to bullying behavior for specific values of T2 social support: T1 workload positively predicted T2 exposure to bullying behaviors, but only when T2 social support was low. The relationship was not significant when social support was high (values of more than 3.62)[1]. These results therefore provide support in favor of Hypotheses 2, 3 and 4, but not Hypothesis 1. The amount of variance explained in T2 exposure to bullying behaviors that is attributable to workload, job resources and their interaction was 39% (job recognition) and 30% (social support; see Table 3).

Discussion

The aim of this two-wave longitudinal study was to gain insight into the temporal interplay between workload and two social resources (recognition and social support) in relation to

exposure to bullying behaviors in nurses. Results suggest that workload is an important stressor that can be associated with the presence of harmful behaviors over time, but that social resources play a key role in buffering the damaging impact of workload. More specifically, results reveal that workload positively predicted exposure to bullying behaviors over time, but only when job recognition and social support were low. Workload was unrelated to bullying when social support was high and negatively related to bullying when job recognition was high.

Theoretical Implications. Poor-quality work environments, characterized by the presence of taxing and unfavourable job characteristics (e.g., workload, role conflict, low autonomy and support) have been identified as playing a key role in facilitating the presence of bullying behaviors. The present study is one of the few to investigate the relationship between work-related factors and bullying behaviors longitudinally. Of the 26 studies included in a recent systematic review on the topic (Van den Brande et al., 2016), only four used a longitudinal design and, with the exception of one study (i.e., Baillien et al., 2011), all focused on the main effects of job characteristics in the prediction of bullying over time and none were conducted among nurses. As such, this study offers valuable insight into how both negative (i.e., workload) and positive (i.e., social support, recognition) job characteristics interact to foster work environments that are more or less conducive to bullying exposure over time among nurses. Investigating the antecedents of exposure to bullying behaviors using a longitudinal design is particularly important given that workplace bullying often develops and evolves over time (Einarsen, 2000; Nielsen & Einarsen, 2018). By showing that workload does not uniquely predict exposure to bullying behaviors over time (main effect), but does so only when combined with low social support or low recognition (interaction effect), our results offer insight into the boundary conditions in which this job stressor is particularly harmful. As such, this study sheds

light on the contextual factors that come into play in the bullying process, thereby providing evidence to guide organizational actions aimed at preventing bullying and efficiently intervening in the early stages of the bullying process.

By showing that social support and job recognition negatively predict exposure to bullying behaviors and significantly buffer the impact of workload on bullying behaviors, the present study identifies two important social coping resources that can help manage the stress associated with workload, thereby reducing its potentially harmful effect on the quality of interpersonal relationships. Nurses often have to work under pressure, conducting work that is emotionally, cognitively and physically demanding (McVicar, 2003; Winwood & Lushington, 2006). Furthermore, nurses have to work long hours, regularly more than 10 hours during shifts, which are often extended due to overtime (Dall'Ora et al., 2015). The physical and psychological resources required to meet these demanding job conditions are likely to deplete nurses' energy reservoir (Demerouti et al., 2001), rendering them more at risk of experiencing stress, fatigue, and negative emotions (Balducci, Schaufeli, & Fraccaroli, 2011; Demerouti et al., 2001). Such an impoverished psychological state among nurses can significantly undermine the quality of relationships within work units (Leiter & Maslach, 2004) and create fertile conditions for hostile and abusive behavior (Balducci et al., 2011).

However, our study found that workload was only associated with bullying behaviors when social resources are low. Indeed, nurses are more likely to report being on the receiving end of bullying behaviors when they do not receive support (e.g., being able to vent emotions and talk about concerns, receiving task-related assistance and advise) to cope with the challenges stemming from their workload, and when they perceive that their efforts in this demanding context are not adequately recognized. Aligning with the social interactionist perspective (see

Salin & Hoel, 2020), these results suggest that in such an impoverished environment, nurses become more vulnerable to bullying behaviors (e.g., being on the receiving end of negative behaviors because they behave in a manner that violates social norms and rules; Nielsen & Einarsen, 2018). Another possible explanation is that the taxing effect of work environments characterized by a high workload and low resources leads to poor psychological health over time (Bakker & Demerouti, 2017), which influences nurses' perception of their work experiences, such that they may be prone to negatively interpreting certain behaviors encountered at work (Balducci et al., 2020; Nielsen & Einarsen, 2018). Both explanations align with the notion of loss spiral, as proposed by Conservation of Resources Theory (COR; Hobfoll, 1989, 2002). The loss spiral reflects a process in which, without adequate (contextual) resources, employees become less able to deal effectively with, and are more strongly impacted by, chronic demands, as these demands deplete their pool of personal resources over time (Ten Brummelhuis & Bakker, 2002). In line with this, past longitudinal research has shown that workplace bullying leads to impaired health (reduced physical or psychological resources) over time, but has also found reversed as well as reciprocal relationships between these variables (Nielsen & Einarsen, 2018). Future research is thus encouraged to further investigate the temporal sequence between job characteristics (workload and social resources), bullying behaviors and impaired health to assess whether poor job conditions directly predict bullying (which consequently leads to poor health) or whether such job conditions impair employee health, which consequently renders them more vulnerable to bullying.

The *Work Environment Hypothesis.* Our results align with those obtained by past research (e.g., Baillien et al., 2011; Notelaers et al., 2013; Notelaers et al., 2019) based on the *work environment hypothesis*, which found that the absence of job resources, combined with the

presence of job stressors, generates poor-quality work environments in which bullying behaviors

are more susceptible to occur. However, the results of the present study also nuance this

proposition, at least with regard to job recognition. Indeed, although workload positively predicts

bullying behaviors over time when recognition and social support are low (aligning with the

work environment hypothesis), results show that when job recognition is high, workload

negatively predicts exposure to bullying behaviors. It therefore appears that job recognition may

play a key role in promoting a positive social climate, despite the demanding workload nurses

are confronted with. Such results may be explained by the fact that perceiving that one's efforts

and personal investment in one's work are reciprocated through adequate acknowledgement

results in the experience of positive emotions (Siegrist, 2012). Such emotions are crucial to the

development and maintenance of positive interpersonal relationships, as they increase closeness,

understanding of others, and relationship satisfaction (Waugh & Fredrickson, 2006).

Limitations

By showing that a combination of workload and low social resources (recognition as well

as social support) is associated with exposure to bullying behaviors over time, this study aligns

with the proposition that workplace bullying is a strain reaction to adverse work conditions

(Baillien et al., 2009; Leymann, 1996). However, as this study only investigated the perspective

of the target (i.e., exposure to bullying behaviors), the mechanisms underlying the relationship

between job characteristics and workplace bullying require further investigation. Indeed, it has

also been proposed that stressful work-related factors create tension and frustration in

employees, rendering them more likely to commit aggressive and harmful acts as a way to

eliminate such negative emotions (perspective of the perpetrator). As such, future research is

encouraged to investigate the temporal interplay between workload and social resources in the

prediction of workplace bullying from both the perpetrators' and targets' perspectives (i.e.,

enactment of, and exposure to, bullying behaviors) as well as the psychological (e.g., frustration,

stress, exhaustion) and behavioral (e.g., withdrawal) mechanisms involved.

Furthermore, both pioneering and current research on workplace bullying suggest that,

compared to individual factors, work environment factors play a more salient role in explaining

bullying (Balducci, Fraccaroli, & Schaufeli, 2011; Bowling & Beehr, 2006; Leymann, 1996).

Nevertheless, aligning with the person–environment perspective (Kristof-Brown & Guay, 2010),

certain individual characteristics may also contribute to workplace bullying, especially when

combined with poor job conditions. Indeed, certain individual characteristics (e.g., psychological

vulnerability, assertiveness, coping strategies) may alter how employees interpret and react to job

stressors (Balducci et al., 2020; Trépanier et al., 2016; Van den Brande et al., 2016). As such,

future research is encouraged to assess the temporal dynamics between both contextual and

personal factors to gain insight into the development and persistence of bullying behaviors in

nurses. Finally, as this study was based on a sample of nurses in the province of Quebec

(Canada), future research is needed to replicate our findings among samples from other

provinces and countries to support the generalizability of the proposed relations.

Conclusion

The results of the present study highlight that integrating the importance of social support

and recognition of staff efforts within the organizational culture is crucial to reduce bullying

behaviors among nurses. Given that emotional (i.e., socioemotional assistance, such as listening

and allowing venting of emotions) and instrumental (i.e., task-related assistance such as helping

with work-related problems) support are highly related (Mathieu et al., 2019) and exhibited

similar buffering effects in the present study, promoting both types of supportive behaviors

within work units is encouraged. This is all the more important given that both types of support also buffer the negative effect of emotional labor, an integral part of nursing, on positive manifestations of professional functioning, such as extra-role performance (Mathieu et al., 2019). As such, increasing both emotional and instrumental supportive behaviors from colleagues and supervisors in the nursing profession is doubly beneficial and encouraged as a way of not only reducing exposure to negative behaviors but also facilitating proactive actions from nurses aimed at helping colleagues as well as their healthcare organization (extra-role performance). Furthermore, fostering work environments in which nurses' efforts and achievements are acknowledged both formally (e.g., institutional recognition programs) and informally (e.g., receiving positive feedback from colleagues and supervisors when performing well) is another key avenue, as our findings show that job recognition is a central resource negatively associated with exposure to bullying behaviors among nurses over time. Increasing the perception of recognition in nurses is particularly important given that reward frustration (including in regard to the recognition received) is also a significant predictor of intention to leave the nursing profession (Li et al., 2011).

Bullying not only undermines nurses' well-being and health but also compromises patient safety and quality of care. The present study aimed to provide insight into the work-related antecedents of bullying in nurses. By revealing that social support and job recognition significantly buffer the negative effect of workload, this study contributes to the *work environment hypothesis* by identifying two social coping resources that can help nurses manage the stress associated with workload, subsequently reducing bullying behaviors over time among nurses.

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Footnote

[1] Subsequent analyses were conducted in order to assess each type of social support (emotional and instrumental) individually. Results reveal an undifferentiated pattern of results: both T2 emotional support and T2 instrumental support significantly buffered the effect of T1 workload on T2 bullying over time. More specifically, T1 workload positively predicted T2 exposure to bullying behaviors, but only when T2 emotional/instrumental support was low. The relation between T1 workload and T2 exposure to bullying behaviors was not significant when emotional/instrumental support was high.

Table 1

Sociodemographic characteristics of the final sample

Variable	Total Sample
	n(%)/mean(SD)
	(*n*= 279)
Sex	
Female	248 (88.9%)
Male	31 (11.1%)
Job position	
Nurse	103 (36.4%)
Clinician nurse	111 (39.2%)
Other	65 (24.4%)
Job status	
Full-time	198 (71.0%)
Part-time	80 (28.7%)
Working shift	
Day	206 (73.8%)
Evening/night	55 (19.7%)
Varying	18 (6.5%)
Regular hours per week	32.6(10.9)
Overtime (hr/week)	3.9 (4.8)
Education level	
College degree	104 (37.1%)
Bachelor's degree	122 (43.6%)
Other	53 (19.3%)
Age	43.7 (11.2)
Experience (years)	20.2 (11.3)

Table 2

Means, standard deviations, and correlations between variables.

	Scale	Mean	*SD*	1	2	3	4	5	6	7
1- T1 Workload	1-5	3.09	.79	--						
2- T1 Job recognition	1-5	3.69	.80	-.30**	--					
3- T1 Social support	1-5	4.01	.75	-.23**	.44**	--				
4- T1 Workplace bullying	1-5	1.45	.48	.45**	-.49**	-.35**	--			
5- T2 Workload	1-5	2.92	.76	.66**	-.13*	-.07	.22**	--		
6- T2 Job recognition	1-5	3.73	.76	-.20**	.61**	.27**	-.33**	-.23**	--	
7- T2 Social support	1-5	4.02	.79	-.16*	.30**	.56**	-.18**	-.18**	.44**	--
8- T2 Workplace bullying	1-5	1.41	.43	.25**	-.39**	-.21**	.50**	.34**	-.51**	-.33**

*Note. * $p < .05$, ** $p < .01$*

Table 3

Moderating role of T2 resources in the relationship between T1 workload and T2 exposure to bullying behaviors

	T2 Exposure to bullying behaviors	
	B (SE)	*95% C.I.*
Recognition		
T1 Exposure to bullying behaviors	.28* (.08)	[.13, .44]
T1 Workload	.02 (.03)	[-.03, .07]
T2 Job recognition	-.20* (.04)	[-.27, -.13]
Interaction	-.13* (.04)	[-.20, -.05]
Proportion of variance explained	.39* (.07)	
Social Support		
T1 Exposure to bullying behaviors	.38* (.09)	[.21, .56]
T1 Workload	.03 (.03)	[-.03, .09]
T2 Social support	-.10* (.03)	[-.16, -.04]
Interaction	-.10* (.04)	[-.18, -.03]
Proportion of variance explained	.30* (.07)	

Note: B = Unstandardized coefficient. *SE* = standard error. *df* = degree of freedom. C.I. = Confidence Interval.
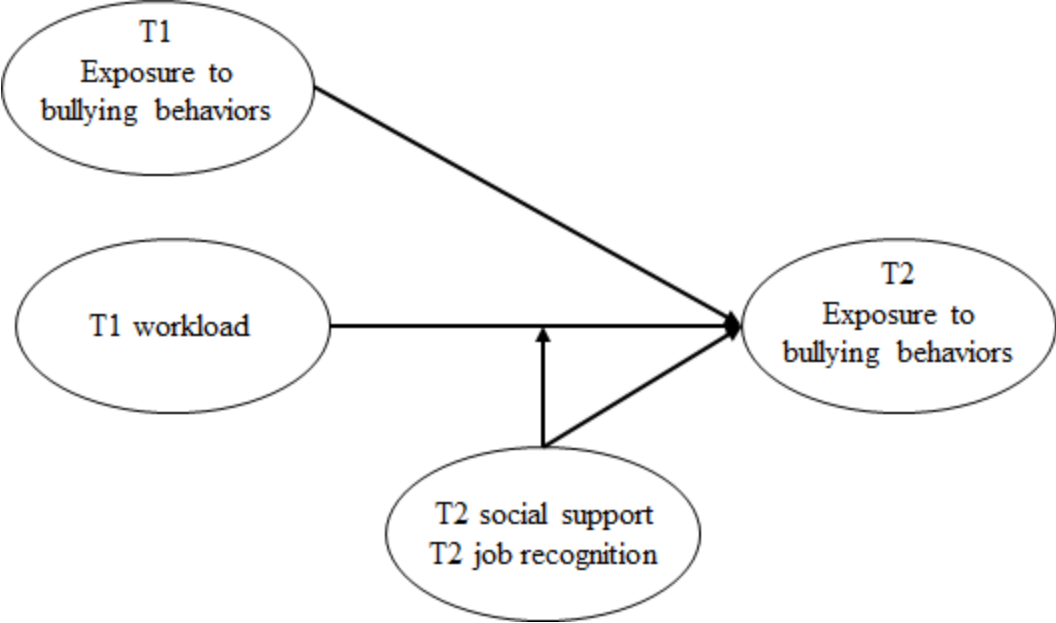
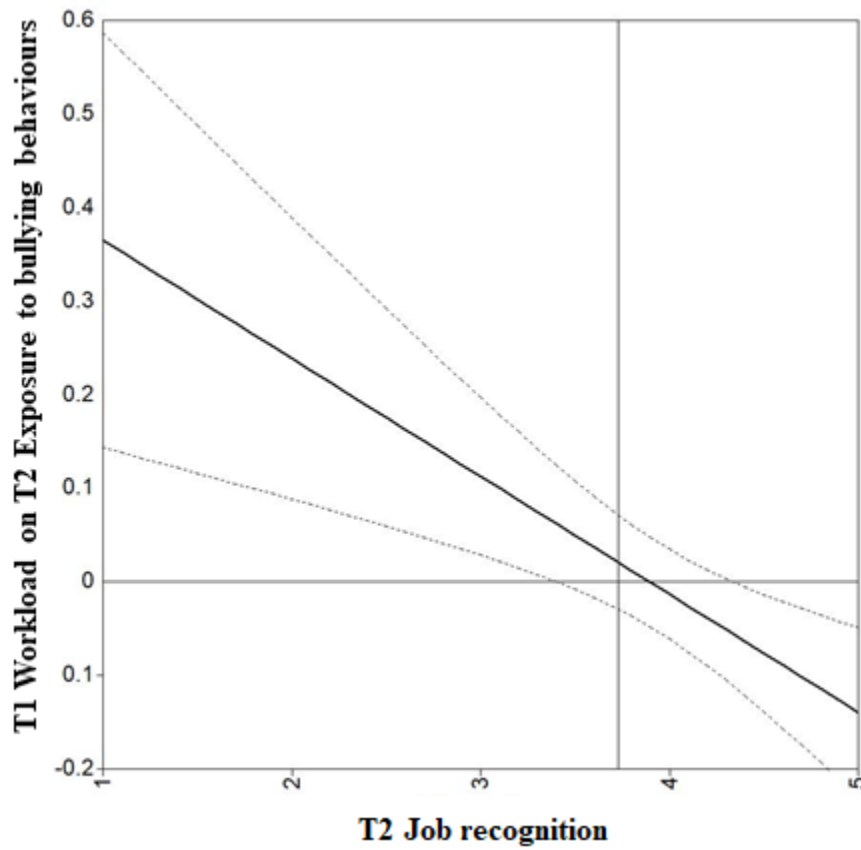** p < .05.*

Figure 1. The proposed model

Figure 2. The moderating role of T2 recognition in the relationship between T1 workload and T2 exposure to bullying behaviors
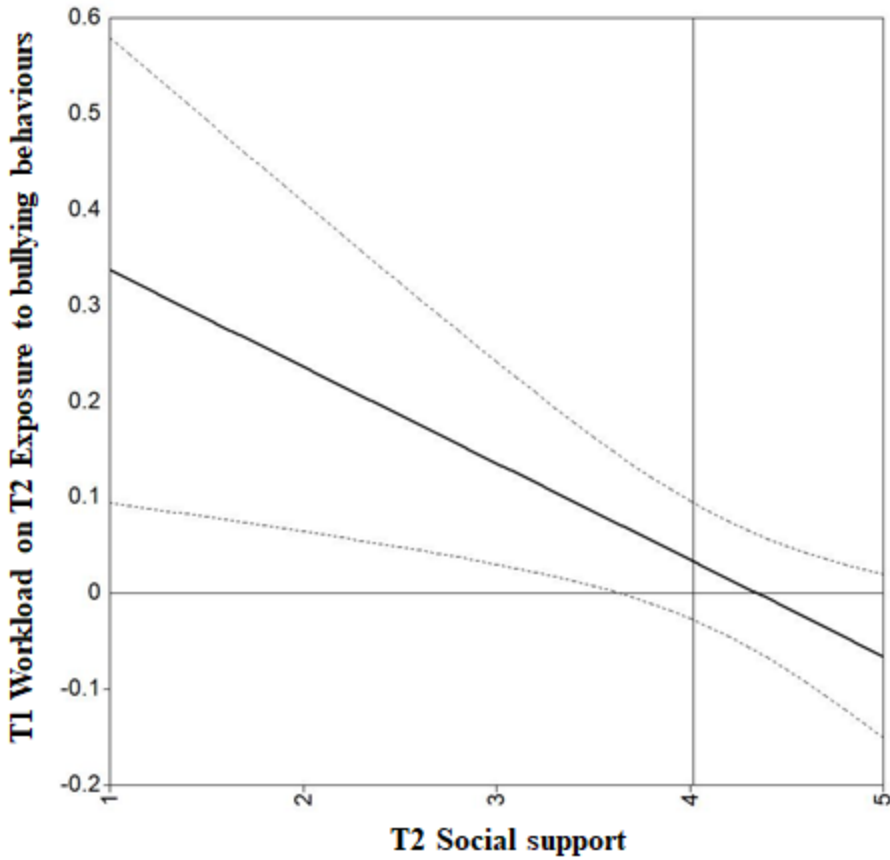
Figure 3. The moderating role of T2 social support in the relationship between T1 workload and T2 exposure to bullying behaviors