Original Article

The Effects of Trivialization of Workplace Violence on Its Victims: Profession and Sex Differences in a Cross-Sectional Study among Healthcare and Law Enforcement Workers

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Abstract

Background: Workers from the law enforcement and healthcare sectors tend to normalize or mute their victimization from workplace violence (WPV).

Objectives: This study aims to assess the impact of the trivialization of WPV on psychological consequences for workers who have been affected by a WPV incident. The second aim is to assess the moderating effect of sex on the trivialization of WPV. The third and overarching aim is to assess the moderating effect of professional identity on the relations between individual and organizational factors and psychological consequences following a WPV incident.

Methods: The findings are based on a convenience sample of 377 (204 female and 173 male) workers from the law enforcement and healthcare sectors. Individual factors (sex, age, professional identity, prior victimization, witnessing WPV, injuries, and trivialization of violence) and perceived support factors (colleagues' support and employer's support) were used as predictor variables of psychological consequences in hierarchical linear regression models. Sex was used as a moderator of trivialization while professional identity was used as a moderator of all predictors.

Findings: When individual and social support factors were controlled for, normalizing violence was negatively associated with psychological consequences while perceiving a taboo associated with complaining about WPV was positively associated for all participants. When these relations were

moderated by the sex of the participants and then by their professional identity, normalization was found to decrease psychological consequences only for male healthcare workers.

Implications: To help employees cope with WPV, organizations should promote strategies adapted to profession and sex differences. For male healthcare workers, normalization as a cognitive coping strategy should be formally recognized. For both professions and sexes, organizational strategies that counter the perceived taboo of complaining about violence should be reinforced.

Keywords: healthcare workers; law enforcers; profession differences; professional identity; psychological consequences; sex differences; trivialization; workplace violence

Introduction

Workers in the healthcare and law enforcement sectors are among those most prone to experiencing workplace violence (WPV; [Piquero et al., 2013](#)), which refers to any aggressive behavior that threatens the safety and well-being of the worker ([Nijman et al., 1997](#)). WPV have been associated with negative outcomes such as burnout, post-traumatic stress disorder (PTSD), anxiety, depression, poor service delivery, absenteeism, and turnover ([He et al., 2002](#); [Jackson et al., 2002](#); [Aquino and Thau, 2009](#); [Chapman et al., 2009](#); [Pich et al., 2011](#); [Wilson et al., 2011](#)). Nevertheless, healthcare and law enforcement workers tend to trivialize their exposure to all types of WPV ([Erickson and Williams-Evans, 2000](#); [Macdonald and Sirotich, 2001](#); [Åkerström, 2002](#); [Dyrkacz et al., 2012](#)). Trivializing WPV consists of perceiving violence as normal or perceiving a taboo associated with complaining about it ([Geoffrion et al., 2015](#)). Normalization refers to the belief that aggression from the clientele is ‘part of the job’ while perceiving a taboo associated with complaining about WPV implies that workers mute their discomfort with WPV because they think that such behavior would lead to negative peer judgment (i.e. being stigmatized as ‘incompetent’ or ‘unfit’ for the job; [Dick, 2000](#); [Macdonald and Sirotich, 2001](#); [Åkerström, 2002](#); [Geoffrion et al., 2015](#)).

Many individual and organizational factors have been associated with psychological consequences following victimization ([Chappell and Di Martino, 2006](#)). However, the influence of the trivialization of WPV on the psychological well-being of workers remains unexamined. The focus of the current study was to assess the relation between the trivialization of WPV and psychological consequences related to PTSD experienced by healthcare and law enforcement workers who were victims and affected by a WPV incident. The current study also assessed the relation between individual and social support factors and psychological consequences related to PTSD. A review of the individual and social support factors under study and their impact on psychological consequences following victimization is presented in

order to frame the role of the trivialization of WPV in this explicative model.

Factors Associated with Psychological Consequences Resulting from WPV Among Healthcare Workers and Law Enforcers

Sex of the worker

[Tolin and Foa’s \(2006\)](#) meta-analysis revealed that women were more likely than men to meet diagnostic criteria for PTSD after experiencing a potentially traumatic situation such as a violent act. Some studies specific to law officials demonstrated the same patterns of results ([Ménard and Arter, 2014](#); [Cone et al., 2015](#)), while others reported no sex differences in rates of PTSD ([Santos et al., 2009](#); [Ballenger et al., 2010](#)). Research with healthcare workers reported no sex differences in PTSD symptomatology following a WPV incident ([Fitzpatrick and Wilson, 1999](#)).

Profession

There is general consensus that healthcare workers and law officials are highly stressful occupations particularly due to the threat of physical or psychological injuries ([Lancôt and Guay, 2014](#); [Dang et al., 2016](#)). WPV can trigger numerous and diverse emotional and cognitive consequences. Responses such as anger, cognitive distraction, burnout, anxiety, depression, stress, and symptoms of posttraumatic stress disorder are commonly found in the literature among healthcare workers ([Gates et al., 2011](#); [Wilson et al., 2011](#); [Lancôt and Guay, 2014](#)) and law officials ([Cone et al., 2015](#); [Green, 2016](#)).

History of victimization

Studies have shown that exposure to WPV varies considerably across the two aforementioned sectors. For instance, [Piquero et al. \(2013\)](#) demonstrated that between 7 and 83% of healthcare workers were victims of violent acts, while [Fleischmann et al. \(2016\)](#) reported that 74.5% of police officers experienced traumatic events such as WPV. Past exposure to WPV, as a direct

victim or witness, also has an impact on psychological consequences following a WPV incident. Several studies have revealed an association between past exposure to WPV and psychological consequences, namely PTSD symptoms (Arnetz and Arnetz, 2001; Whittington, 2002; AbuAlRub and Al-Asmar, 2011; Gates *et al.*, 2011; Demir and Rodwell, 2012). In a nursing study, Lam (2002) found that high exposure to physical and verbal WPV more than doubles the odds of psychological distress, as compared to nurses who were less exposed. Martin *et al.* (2009) conducted interviews using the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I; First *et al.*, 1996) among a sample of 132 Canadian police officers who experienced work-related traumatic events, which include WPV. Their results indicated that, following these events, 7.6% of the participants developed full PTSD, whereas 6.8% had partial PTSD.

Physical injury

WPV resulting in injury may lead to the development of PTSD (Gabert-Quillen *et al.*, 2011). A study conducted among a representative sample of 2931 injured trauma survivors who were hospitalized after their injury showed that 23% of injury survivors had symptoms consistent with PTSD 12 months after their hospitalization (Zatzick *et al.*, 2007). However, results concerning the impact of injury severity on PTSD are more conflicted (Gabert-Quillen *et al.*, 2011): some studies conclude that no relationship exists between injury severity and PTSD (Zatzick *et al.*, 2002), while others support a positive relationship (Jeavons, 2000) or a negative relationship (Delahanty *et al.*, 2003). The number of injuries was found to be one of the strongest predictors of PTSD among responders (i.e. police, firefighters) after the 9/11 (Liu *et al.*, 2014), while the site of injury on the body was associated with greater PTSD symptoms scores for healthcare workers (Walsht and Clarke, 2003).

Social support

At an interpersonal level, peer support has proven its efficacy in helping workers cope with the psychological impact associated with WPV. He *et al.* (2002) found that camaraderie dampens the impact of work-related stressors, including WPV, on male police officers. More broadly, Brown *et al.* (1999) showed that social support (including from colleagues and supervisors) decreased the likelihood of psychological distress for both male and female law enforcers. Utilizing a sample of 176 police officers, De Terte *et al.* (2014) revealed that greater social support from colleagues was related to fewer PTSD symptoms, less psychological distress, and

better physical health. In a review on risk factors and protective strategies in healthcare settings, Gillespie *et al.* (2013) identified social support as a factor that 'reduces the negative physical and psychological symptoms and negative attitude toward work following violent events' (p. 179).

Trivialization of WPV and Psychological Consequences

Trivialization of WPV can be understood through the theoretical framework of professional identity, which refers to a system of meanings and values associated with the worker's roles (Skorikov and Vondracek, 2011). Professional identity influences the perceptions and attitudes of workers toward WPV (Geoffrion *et al.*, 2015). Dick (2000) and Åkerström (2002) argued that the nature of the job and its professional culture construct the worker's identity and influence his perceptions of himself, his work environment, and the work-related situations he encounters.

Nurses often consider WPV as an unavoidable aspect of the profession (Erickson and Williams-Evans, 2000; Rippon, 2000; Åkerström, 2002; Menzel *et al.*, 2004; Nachreiner *et al.*, 2007). Therefore, healthcare workers tend to downplay violence from the patients in order to preserve their identity as caregivers, which allows them to maintain a caring relationship (Åkerström, 2002). Complaining about violence is also depicted as contrary to the nature of healthcare professions (Jones and Lynham, 2001). For example, based on the nature of their role, nurses are expected to deal with conflict (Trossman, 2006). Thus, complaining about violent conflicts goes against expected roles and attitudes. WPV has been so trivialized in the healthcare sector that it has been integrated in its culture (Rippon, 2000; Åkerström, 2002; Menzel *et al.*, 2004).

For law enforcers, policing identity operates at a collective level to 'normalize' some emotional responses and 'pathologize' others that are contrary to the police organizational culture (Dick, 2000). WPV is considered to be part of the routine and curriculum of the job (Brown *et al.*, 1999; Dick, 2000). Geoffrion *et al.* (2015) found within a sample of 1141 workers that law enforcers were more likely than healthcare workers to perceive a taboo associated with complaining about WPV. Graef (1990) also argued that police culture promotes so-called masculine values, such as being able to manage potentially violent situations. Consequently, studies have demonstrated that law enforcers tend to inhibit their emotional reactions to violence (Brown *et al.*, 1999; Dick, 2000). According to a study of New Zealand police officers,

this inhibition of emotional expression is associated with psychological distress (Stephens *et al.*, 1997). However, Brown *et al.* (1999) tested the same association within their sample of British police officers but did not find any significant relationship between this coping strategy and psychological distress. Nevertheless, these findings highlight the close relationship between perceptions of WPV and psychological well-being as well as the moderating effect of professional identity on these relations. Still, more studies are needed to understand these associations and, more precisely, to assess the effect of trivialization of WPV on psychological consequences following victimization.

Sex-differentiated perceptions

Studies on stress and sex have also shown that men and women differently perceive, experience, report, and cope with WPV (Barnett *et al.*, 1987; He *et al.*, 2002; Wells *et al.*, 2006; Johnson *et al.*, 2007). Johnson *et al.* (2007) argued that sex can directly affect behaviors and perceptions, as men and women are ascribed different roles, responsibilities, and activities. Differing perceptions of potentially stressful situations such as WPV may thus alter the level of stress experienced by the worker (Thoits, 1999; Åkerström, 2002). A previous study (Geoffrion *et al.*, 2015) found that sex was a significant individual predictor of normalization. Men from the present sample were more likely than women to think that WPV is 'part of the job'. These analyses also revealed important distinctions between male and female workers regarding the taboo of complaining about WPV among healthcare workers and law enforcers. Female law enforcers were twice as likely to perceive a taboo associated with complaining about WPV compared to women working in healthcare. Thus, the effects of the trivialization of WPV on psychological consequences related to PTSD experienced by healthcare and law enforcement workers who were victims of a WPV incident could also be moderated by the sex of the worker. This emphasizes the need to differentiate the effects of trivialization according to profession and sex since support provided to workers should be adapted to the professional identity, needs, and coping strategies of individuals.

Aims of the study

Knowledge about the effects of the trivialization of WPV on the psychological consequences of its victims is very scarce. Thus, studies are needed to better understand the impact of the trivialization of WPV on psychological well-being in order to help workers better cope with this phenomenon. The first objective of the present study

is to assess the effect of the trivialization of WPV on the psychological consequences of healthcare and law enforcement workers who were victims and affected by a WPV incident. More specifically, the impact of normalizing and perceiving a taboo associated with complaining about WPV on psychological well-being is evaluated in a multivariate model including individual and social support factors. A second aim is to assess the moderating effect of sex in the relation between the trivialization of WPV and psychological consequences. A third and overarching aim is to assess the moderating effect of professional identity on the relations between individual and organizational factors and psychological consequences following a WPV incident. This study will simultaneously contribute to the advancement of scientific knowledge on WPV while informing organizations on appropriate and tailored interventions to minimize psychological consequences associated with WPV.

Method

Participants

The current cross-sectional study relied on a convenience sample in the province of Quebec, Canada. A total of 2889 workers from seven categories of employment responded to the survey: law officials, healthcare professionals, nursing staff, managers, administrative workers, skilled and service industry workers, and public transportation workers. We only selected law enforcement and healthcare workers who reported to be affected by a WPV incident in the past 12 months. As a result, we obtained a sample of 377 workers of which 54.1% were women and 70.6% were healthcare workers. Security agents (29.7%), park rangers (14.4%), and police officers (55.9%) constitute the law enforcers group. Orderlies (12.5%), nurses (61.9%), and healthcare professionals (25.6%) represent the healthcare providers group.

Sampling procedure

The study was conducted among French-speaking workers who were recruited by three organizations linked to the Agency for Health and Safety at Work. All workers supported by these agencies were eligible to participate. Between January 2011 and October 2012, workers were reached by email or on-site to complete a survey online or on paper. Advertisement and questionnaires were distributed by the Agency. The total number of solicited workers was not available (i.e. number of emails sent not calculated). All the workers were informed of the purpose of the study as well as the anonymous nature of

their answers. A majority of the participants completed the survey online (74.2%) versus on paper (25.8%). All questionnaires were answered anonymously and on a voluntary basis. This study was approved by the Ethics committee of the Institut Universitaire en Santé Mentale de Montréal.

Measures

Questions within the survey were related to episodes of WPV that the respondents might have experienced during the past 12 months and their repercussions. The survey also examined workers' perceptions with regard to WPV, social support received at work to cope with this reality, and the psychological consequences engendered by their WPV victimization.

Predictors: individual factors

Exposure to WPV

A distinction was made between two types of exposure to WPV: being a direct victim or being a witness. Respondents were asked to report on a scale from '0 to 10 and more' how many times they have been a direct victim of or a witness to nine different types of WPV: verbal aggression, destructive behaviors, threats, death threats, assaults, robbery with violence, armed robbery, sexual contact, and sexual aggression. These categories were not mutually exclusive; respondents may have been both victims and witnesses.

Two variables were created in order to measure the level of exposure to violence. First, frequency of direct victim sums up direct victimization events of each type of violent act including the 'other' category experienced in the 12 past months in the workplace. Second, frequency of violent act witnessed sums up the number of times a worker has been a witness of each type of violent act during the 12-month reference period.

Physical injuries resulting from WPV victimization

Respondents selected one of three options: (i) no injury, (ii) injury that required medical examination but no hospitalization, and (iii) injury that led to hospitalization. For analyses, two binary variables were created: injury without hospitalization and injury with hospitalization. No injury was used as the reference category for both variables.

Sociodemographics

Three sociodemographic characteristics were included in the present study. Participants had to indicate their sex (women = 0, men = 1), their age (five categories were created: 1 = 15–25, 2 = 26–35, 3 = 36–45, 4 = 46–55, 5 = 56 to +), as well as their profession. The inclusion of this last variable in our multivariate model allows for

the examination of differences based on professional identity.

Predictors: social support in the workplace

Two different items from the questionnaire explored workers' perceptions toward social support available in the workplace. On a 4-point Likert-scale ranging from 'not at all (0)' to 'completely (3)', respondents had to declare the extent to which the following features were 'present' in their work environment: (i) 'to what extent do you benefit from colleagues' support in your workplace' (i.e. colleagues' support) and (ii) 'to what extent do you benefit from employer's support in your workplace' (i.e. employer's support). For both variables, social support was general, not specific to WPV.

Predictors: trivialization of WPV

Three items from the survey were selected to represent two aspects of trivialization: normalization and taboo related to complaining about WPV. First, respondents were asked if they believed that 'severe violence is normal in (their) workplace, it is part of the job'. On a 4-point Likert-scale, workers could answer 'not at all, slightly, highly or completely'. Since our research question focused on whether participants trivialized WPV and not on the extent to which they trivialized it, we dichotomized this variable to measure normalization (0 = no, 1 = yes) of WPV; 'not at all' was coded 'no' while all other responses were coded 'yes'. Second, respondents were asked on the same 4-point Likert-scale if they thought (i) '(they) would be judged by their colleagues if they complained about severe violence in (their) workplace' and (ii) '(they) would be judged by their employer if they complained about severe violence in (their) workplace'. These two items were computed, generating a scale with good internal consistency ($\alpha = 0.81$) according to [George and Mallery \(2003\)](#) ($\alpha > 0.80$ is good internal consistency). Following the same rationale as the normalization variable, we dichotomized this variable (0 = no, 1 = yes).

Outcome variable: psychological consequences

Participants were asked if they experienced any psychological consequences following the WPV incident that has affected them in the past 12 months. A scale of post-traumatic stress reactions was created based on the DSM-IV-TR ([American Psychiatric Association, 2000](#)) PTSD symptoms. Respondents had to report the presence (yes/no) of 10 symptoms: flashbacks, nightmares related to the event, avoiding elements that arouse recollection of the event, guilt, irritability, loss of interest in pleasurable or important activities, sleep problems,

hypervigilance, concentration problems, or other psychological symptoms. The total number of experienced symptoms was calculated. The psychological consequences variable represents the sum of these 10 categories. This item, ranging from 0 to 10, was positively skewed. The scale was found to have good internal consistency ($\alpha = 0.88$).

Analyses

First, chi-square (χ^2) and *t*-tests were used to make profession comparisons on predictors and outcome variables. χ^2 tests and *t*-tests were also run to compare trivialization and psychological consequences variables between men and women among healthcare workers and law enforcers (separate models). Subsequently, a hierarchical linear regression analysis model was used to answer the first objective. Individual factors were entered in a first model. Social support factors were introduced in a second model. Normalization and taboo related to complaining about WPV were entered in a third model. Consequently, it made it possible to consider the impact of adding social support and the trivialization variables on the explained variance of psychological consequences. To answer the second objective, interactions between sex and normalization as well as sex and perceiving a taboo related to complaining about WPV were added in a fourth model. It made it possible to examine whether the impact of the trivialization variables on psychological consequences was moderated by sex. Finally, to answer the third objective, all models were tested separately for healthcare workers and law enforcers. *Post hoc* comparison of regression estimates were performed to examine professional identity differences as suggested by Paternoster *et al.* (1998). IBM SPSS statistics 22 was utilized, and missing data were left as is in the analyses.

Results

Descriptive and bivariate results

Of the 377 workers who were victims and affected by a WPV incident in the past 12 months, 54.3% thought that violence was normal in their work environment while 57.8% believed that their colleagues or employer would judge them if they complained about WPV. These participants reported an average of 2.87 (SD = 2.75) types of psychological consequences after their exposure to a WPV incident that has affected them.

Table 1 depicts the descriptive results among healthcare workers and law enforcers separately. It also provides results of bivariate analyses performed to assess differences between these two types of workers. The

majority of healthcare workers in the sample were women (65.8%), while the majority of law enforcers were men (73.9%; $\chi^2 = 49.62$, *df* = 1, $P < 0.000$, $\phi = 0.363$). In addition, a greater proportion of law enforcers (68.5%) than healthcare workers (48.5%) defined violence as normal ($\chi^2 = 12.93$, *df* = 1, $P < 0.000$, $\phi = 0.183$). Healthcare workers also tended to be older than law enforcers (3.2 versus 2.6 respectively; $t = 5.09$, *df* = 244,65, $P < 0.000$). Law enforcers were victims of more incidents of WPV in the previous 12 months than healthcare workers (15.6 versus 10.8; $t = -3.78$, *df* = 375, $P < 0.000$). Law enforcers also witnessed more incidents of WPV in the previous 12 months (24.6 versus 15.7; $t = -4.38$, *df* = 147, $P < 0.000$).

Objective 1: trivialization of WPV on psychological consequences

Table 2 reports the results of the multiple hierarchical linear regression model conducted to assess the associations between predictors (related to individual factors, social support, and trivialization) and psychological consequences following a WPV incident. Models in this table were conducted among the total sample of the present study. In Model 1, being a man was negatively associated with the outcome variable. Age, prior victimization, and injury without hospitalization were positively related to the outcome variable. As shown in Model 2, the inclusion of social support variables increased the capacity to explain psychological consequences. While sex was no longer associated with the outcome variable, support from colleagues and the employer were negatively related to psychological consequences. In Model 3, the inclusion of normalization and perceived taboo associated with complaining about WPV also increased the capacity to explain psychological consequences. In this model, female participants experienced more psychological consequences than men. Workers who normalized WPV experienced fewer types of psychological consequences while those who perceived a taboo related to complaining about WPV experienced more psychological consequences.

Objective 2: moderating effects of sex on the relation between trivialization of WPV and psychological consequences

The fourth model of Table 2 introduced the interaction between sex and the normalization of violence as well as sex and perceiving a taboo associated with complaining about WPV. The difference in explained variance with Model 3 was not statistically significant. However, of the two interactions, sex was found to only

Table 1. Sample descriptive results and professional identity differences.

Parameter	Healthcare workers (<i>n</i> = 266)		Law enforcers (<i>n</i> = 111)	
	<i>n</i>	%	<i>n</i>	%
Sex of the worker***				
Woman (0)	175	65.8	29	26.1
Man (1)	91	34.2	82	73.9
Injury without hospitalization				
No (0)	216	83.7	89	80.9
Yes (1)	42	16.3	21	19.1
Injury with hospitalization				
No (0)	224	86.8	93	84.5
Yes (1)	34	13.2	17	15.5
Normalization***				
No (0)	137	51.5	35	31.5
Yes (1)	129	48.5	76	68.5
Perceived taboo of complaining about WPV				
No (0)	116	44.1	41	37.3
Yes (1)	147	55.9	69	62.7
	Mean	SD	Mean	SD
Age***	3.2	1.2	2.6	1.0
15 to 25 (1)				
26 to 35 (2)				
36 to 45 (3)				
46 to 55 (4)				
56 to + (5)				
Frequency of past victimization of WPV***	10.8	11.0	15.6	12.0
Frequency of past witnessing of WPV***	15.7	12.4	24.6	19.8
Colleagues' support (0–3)	1.9	0.8	1.9	0.8
Employer's support (0–3)	1.3	0.9	1.3	0.9
Psychological consequences (0–10)	2.9	2.6	2.8	3.1

* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$, resulting from χ^2 tests (sex, injury without hospitalization, injury with hospitalization, normalization, perceived taboo of complaining about WPV) or *t*-tests (age, frequency of past victimization of WPV, frequency of past witnessing WPV, colleague's support, employer's support, psychological consequences).

moderate the relation between normalization and psychological consequences. In this case, men who normalized violence had fewer types of psychological consequences after their WPV victimization. This reveals that the effect of normalizing violence that appeared in the Model 3 is only significant for male participants.

Objective 3: moderating effects of profession on the relation between individual, social support, and trivialization factors on psychological consequences

Table 3 depicts the results of multiple hierarchical regression model performed only with healthcare workers, while Table 4 shows the results for law enforcers. *Post hoc* comparisons of the regression estimates of the

fourth model for both job-specific models were completed to determine whether differences in main effects between healthcare workers and law enforcers were statistically significant. Only age was found to statistically differ according to professional identity (beta = 0.17, SE = 0.13 for healthcare workers; beta = 0.86, SE = 0.26 for law enforcers; corrected $z = 2.35$, $P = 0.009$). Specifically, age appeared as a significant predictor of psychological consequences for law enforcers, but not for healthcare workers. However, other factors marginally differed between healthcare workers and law enforcers. Prior victimization was only significant for healthcare workers (beta = 0.08, SE = 0.02 for healthcare workers; beta = 0.02, SE = 0.03 for law enforcers; corrected $z = 1.96$, $P = 0.050$). Injury with hospitalization had a

Table 2. Summary of hierarchical regression analysis for variables predicting psychological consequences following a WPV incident.

Variable	Model 1			Model 2			Model 3			Model 4		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Sex	-0.68	0.29	-0.12*	-0.55	0.28	-0.10	-0.55	0.28	-0.10*	0.11	0.50	0.02
Age	0.44	0.12	0.19***	0.36	0.12	0.15**	0.34	0.12	0.14**	0.31	0.12	0.13**
Profession	0.12	0.33	0.02	0.03	0.32	0.01	0.08	0.32	0.01	0.07	0.32	0.02
Victim.	0.08	0.02	0.34***	0.07	0.02	0.29***	0.07	0.02	0.28***	0.07	0.02	0.28***
Witness	-0.02	0.01	-0.11	-0.02	0.01	-0.09	-0.01	0.01	-0.08	-0.01	0.01	-0.07
Inj. without	0.33	0.36	0.05	0.25	0.35	0.04	0.14	0.35	0.02	0.11	0.35	0.02
Inj. with	2.31	0.40	0.29***	2.14	0.38	0.27***	2.00	0.38	0.25***	2.01	0.38	0.25***
Coll. sup.				-0.41	0.18	-0.12*	-0.35	0.18	-0.11*	-0.35	0.18	-0.11*
Emp. sup.				-0.48	0.17	-0.15**	-0.36	0.18	-0.12*	-0.36	0.17	-0.12*
Normalization							-0.53	0.26	-0.10*	-0.01	0.35	-0.00
Taboo of complaining							0.80	0.28	0.14**	0.83	0.36	0.15*
Sex $\times$ normalization										-1.17	0.51	-0.19*
Sex $\times$ taboo										-0.01	0.52	-0.03
Adjusted R^2	0.18			0.23			0.25			0.25		
<i>F</i> for change in R^2	12.02***			12.69***			5.70***			2.62		

N = 359 for all models. 'Victim.' refers to 'past victimization'; 'inj. without' refers to 'Injury without hospitalization'; 'inj. with' refers to 'injury with hospitalization'; 'coll. sup.' refers to 'colleagues support'; 'emp. sup' refers to 'employer support'; 'sex $\times$ taboo' refers to the interaction between sex and taboo of complaining.

* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$.

Table 3. Summary of hierarchical regression analysis for variables predicting psychological consequences following a WPV incident among healthcare workers.

Variable	Model 1			Model 2			Model 3			Model 4		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Sex	-0.52	0.32	-0.09	-0.46	0.31	-0.08	-0.50	0.31	-0.09	0.55	0.56	0.10
Age	0.27	0.13	0.12*	0.21	0.13	0.10	0.21	0.13	0.10	0.17	0.13	0.08
Victim.	0.10	0.02	0.42***	0.09	0.02	0.39***	0.09	0.02	0.37***	0.08	0.02	0.35***
Witness	-0.01	0.02	-0.05	-0.01	0.02	-0.05	-0.01	0.02	-0.03	-0.00	0.02	-0.01
Inj. without	0.15	0.40	0.02	0.11	0.40	0.02	0.00	0.40	0.00	-0.03	0.39	-0.00
Inj. with	2.01	0.45	0.26***	1.85	0.45	0.24***	1.64	0.45	0.21***	1.77	0.44	0.22***
Coll. sup.				-0.37	0.20	-0.12	-0.31	0.20	-0.10	-0.29	0.20	-0.09
Emp. sup.				-0.24	0.19	-0.08	-0.12	0.20	-0.04	-0.12	0.19	-0.04
Normalization							-0.43	0.29	-0.08	0.18	0.35	0.04
Taboo of complaining							0.78	0.32	0.15*	0.89	0.37	0.17*
Sex $\times$ normalization										-1.81	0.61	-0.27**
Sex $\times$ taboo										-0.21	0.62	-0.03
Adjusted R^2	0.21			0.23			0.24			0.27		
<i>F</i> for change in R^2	11.59***			4.41*			3.86*			4.61*		

N = 250 for all models. 'Victim.' refers to 'past victimization'; 'inj. without' refers to 'Injury without hospitalization'; 'inj. with' refers to 'injury with hospitalization'; 'coll. sup.' refers to 'colleagues support'; 'emp. sup' refers to 'employer support'; 'sex $\times$ taboo' refers to the interaction between sex and taboo of complaining.

* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$.

Table 4. Summary of hierarchical regression analysis for variables predicting psychological consequences following a WPV incident among law enforcers.

Variable	Model 1			Model 2			Model 3			Model 4		
	<i>B</i>	SE <i>B</i>	β	<i>B</i>	SE <i>B</i>	β	<i>B</i>	SE <i>B</i>	β	<i>B</i>	SE <i>B</i>	β
Sex	-0.88	0.61	-0.13	-0.33	0.58	-0.05	-0.21	0.58	-0.03	0.27	1.55	0.04
Age	1.04	0.27	0.33***	0.93	0.26	0.30***	0.83	0.26	0.26**	0.86	0.26	0.27**
Victim.	0.03	0.03	0.12	0.02	0.03	0.07	0.02	0.03	0.06	0.02	0.03	0.06
Witness	-0.02	0.02	-0.14	-0.02	0.02	-0.10	-0.01	0.02	-0.08	-0.02	0.02	-0.10
Inj. without	1.07	0.72	0.14	0.92	0.67	0.12	0.78	0.67	0.10	0.81	0.67	0.10
Inj. with	3.18	0.76	0.38***	3.08	0.71	0.37***	3.13	0.70	0.37***	3.30	0.73	0.39***
Coll. sup.				-0.46	0.36	-0.12	-0.47	0.36	-0.13	-0.47	0.36	-0.13
Emp. sup.				-0.95	0.35	-0.26**	-0.80	0.36	-0.22*	-0.78	0.36	-0.22*
Normalization							-0.65	0.56	-0.10	-1.30	1.19	-1.19
Taboo of complaining							0.89	0.54	0.14	2.16	1.90	0.34
Sex $\times$ normalization										0.99	1.32	0.16
Sex $\times$ taboo										-1.63	1.34	-0.26
Adjusted R^2	0.23			0.38			0.41			0.42		
F for change in R^2	6.39***			9.00***			1.81			1.10		

$N = 109$ for all models. 'Victim.' refers to 'past victimization'; 'inj. without' refers to 'injury without hospitalization'; 'inj. with' refers to 'injury with hospitalization'; 'coll. sup.' refers to 'colleagues support'; 'emp. sup' refers to 'employer support'; 'sex $\times$ taboo' refers to the interaction between sex and taboo of complaining.

* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$.

greater impact for law enforcers ($\beta = -0.03$, $SE = 0.39$ for healthcare workers; $\beta = 0.81$, $SE = 0.67$ for law enforcers; corrected $z = 1.08$, $P = 0.072$). The moderation of sex on normalization was only significant for healthcare workers ($\beta = -1.81$, $SE = 0.61$ for healthcare workers; $\beta = 0.99$, $SE = 1.32$ for law enforcers; corrected $z = 1.92$, $P = 0.055$). In sum, these analyses reveal that the effect of age, prior victimization, and the moderating effect of sex on normalization that appeared in Table 2 were job-specific while injury with hospitalization was more salient for law enforcers.

Discussion

Using a victimization survey regarding the perceptions of 377 healthcare and law enforcement workers, the global objective of the present study was to evaluate the effects of the trivialization of WPV on psychological consequences following a WPV incident according to the profession and the sex of the participants. When individual and social support factors were controlled for, normalizing violence was negatively associated with psychological consequences while perceiving a taboo associated with complaining about WPV was positively associated for all participants. When these

relations were moderated by the sex of the participants and then by their professional identity, normalization was found to decrease psychological consequences only for male healthcare workers. This cross-sectional study also revealed individual and social support factors associated with psychological consequences following a WPV incident. These results are discussed further in regards to differences among healthcare workers and law enforcers within a professional identity theoretical framework.

Impact of individual factors on psychological consequences

Contrasting with some studies within law enforcement and healthcare settings that reported no sex differences in PTSD symptomatology after WPV (Fitzpatrick and Wilson, 1999; Armstrong and Griffin, 2004; Lilly *et al.*, 2009; Santos *et al.*, 2009), female participants experienced more PTSD symptoms following a WPV incident than their male counterparts, regardless of their profession. These results are however consistent with the literature on PTSD that has shown that women are more likely than men to develop psychological consequences after being a victim of a WPV incident (Van Voorhis *et al.*, 1991; Wright and Saylor, 1991; Findorff *et al.*, 2005;

Tolin and Foa, 2006; Wells *et al.*, 2006). In their review of the literature on sex differences in PTSD, Olff *et al.* (2007) found that women may be more vulnerable in terms of the cognitive appraisal of potentially traumatic violent events. Compared to men, women tend to appraise events as being more stressful and as inducing higher loss of personal control, which may impact upon the use of efficient coping strategies when they face stressful situations (Olff *et al.*, 2007). This higher sensitivity among women could lead to a higher risk of developing psychological consequences following a WPV incident (Bryant and Harvey, 2003; Green and Diaz, 2008).

The absence of a moderating effect of professional identity on the relation between sex and psychological consequences may also contribute to research on highly sex-segregated professions such as law enforcement (more men) and healthcare (more women). For example, McCarty *et al.* (2007) demonstrated that the sex of the officer is important with regards to the impact of work-related stress since female officers often feel additional pressure from their male colleagues to prove themselves on the job. The current study suggests that this pressure may not be moderated by professional identity. In other words, being a man in a female-dominated occupation or a woman in a male-dominated occupation does not seem to amplify or dampen the consequences of WPV victimization. Future research should thus examine this added pressure on the opposite sex in highly sex-segregated professions in terms of either an acute or chronic stressor.

Age was found to be a predictor of psychological consequences for law enforcers only while 12-month past victimization was a predictor for healthcare workers only. Age could be interpreted as a proxy of years of service and thus, as a proxy of past victimization over several years. As shown by our results, law enforcers were more exposed to incidents of WPV per year, and thus, over their career. Consequently, 12-month victimization for healthcare workers and career victimization (as measured through age) for law enforcers was related to psychological consequences. This finding is consistent with studies that have positively associated exposure to WPV in healthcare and law enforcement settings to psychological consequences, especially PTSD (Brown *et al.*, 1999; Lam, 2002). Moreover, it could be explained through a repetitive exposure hypothesis, which refers to criterion A4 of the PTSD diagnostic (American Psychiatric Association, 2013).

However, to understand the importance of age for law enforcers and of prior victimization for healthcare workers, professional identity may provide a useful hypothesis. Given that dealing with violence is more salient in

the professional identity of law enforcement—they are trained to manage violence in our societies—than that of healthcare, it is hypothesized that the professional identity of law enforcers provides more cognitive schemata (Serpe and Stryker, 2011) that help them to cope more easily with WPV victimization. As such, bivariate results of the present study showed that a higher proportion of law enforcers thought that WPV was part of their job than healthcare workers. On the other hand, even though healthcare workers have some training in dealing with patient aggression, dealing with violence is not their first mandate. Their professional identity provides less meanings or values that may help them to cope with their exposure. Thus, it may take more repetitive and long-lasting exposure in order for WPV to psychologically affect law enforcers, whereas a 12-month accumulation may be enough to affect healthcare workers. Longitudinal studies would allow for the verification of such a hypothesis.

Injury with hospitalization was positively associated with psychological consequences only for law enforcers. It is hypothesized that hospitalization may be an indicator of the severity of the injury and as such, law enforcers are likely to experience more severe injuries than healthcare workers. Severity of the injury has been positively associated with psychological consequences following the incident (Jeavons, 2000; Aquino and Thau, 2009; Liu *et al.*, 2014).

Impact of social support factors on psychological consequences

Support from colleagues and the employer was negatively associated with psychological consequences for both healthcare workers and law enforcers. These findings contradict Lavoie *et al.* (2016) who found no association between social support and the expression of PTSD symptoms among nurses. However, they are consistent with Martin *et al.*'s (2009) study among police officers that showed that social support from colleagues is a significant protective factor of PTSD. They are also consistent with Stephens and Long (1999) who found, among 527 New Zealand Police officers, that greater support from the supervisor was significantly and negatively related to PTSD symptoms regardless of the level of trauma. Talking about trauma is particularly effective when shared with those who have experienced similar events (Williams, 1993). The importance of social support may be linked to the fact that adequate support is associated with feelings of being understood, appraisal of potentially stressful events as being less threatening, enhanced sense of control or mastery, increased self-esteem, and use of active coping strategies

(Southwick *et al.*, 2016). In contrast, low post-trauma social support is a consistent risk factor for PTSD (Ozer *et al.*, 2008). In sum, social support provided by employers or colleagues may represent a protective factor for healthcare workers as well as for law enforcers.

Impact of trivialization of WPV on psychological consequences

The results revealed that perceiving a taboo associated with complaining about WPV was associated with psychological consequences. For both male and female participants regardless of their profession, perceiving a taboo associated with complaining about WPV may inhibit coping strategies such as support-seeking and increase the psychological consequences of WPV. The results also suggested that for male healthcare workers, normalization reduced psychological consequences, and thus appeared to be an adequate coping strategy.

At first hand, these sex-differentiated findings are consistent with studies on stress and sex, which suggest significant differences in the perceptions and coping skills of male and female workers (Barnett *et al.*, 1987; Brown and Campbell, 1990; He *et al.*, 2002). According to Matud (2004), men tend to use more instrumental coping while women are more likely to use emotion-focused coping strategies such as emotional discharge. Moreover, this reflects the socialization hypothesis that suggests that men are socialized to use more active and instrumental strategies while women are socialized to use passive and emotion-focused strategies such as relying on social support (Ptacek *et al.*, 1992). Thus, using learned and reinforced coping strategies may protect from psychological consequences. On the other hand, inhibiting them may contribute to the development of psychological distress.

However, our findings indicate that sex differences only apply to healthcare workers. A possible explanation for this result may lie in the John-Wayne syndrome, which implies that men are expected to maintain a high level of toughness and play things close to the chest when it comes to violence (Wells *et al.*, 2006). It is possible that male healthcare workers feel that they have to protect their female colleagues and thus develop adaptive cognitions toward WPV, which they integrate in their professional identity. This adaptation also helps them cope with WPV. Future research is needed to test this hypothesis.

Policy and clinical implications

The findings of this study suggest that professional identity, sex, and perceptions regarding WPV have a significant impact on the psychological consequences of WPV

for healthcare and law enforcement workers, which leads to multiple policy and clinical implications. First, the findings imply that men working in healthcare may benefit from the normalization of WPV. For these men, accepting that violence is part of their job may prevent a number of psychological consequences related to exposure to WPV as it reinforces socially learned coping strategies. Thus, training and supervision may be adapted for male healthcare workers in order to help them frame violence in the boundaries of their work. Like Åkerström (2002) concluded for nurses, as long as men define their experiences according to the boundaries of their profession, they can maintain a psychological state that allows them to do their job.

Second, our results suggest that an organization seeking to help their employees cope with WPV may need to reduce the taboo associated with complaining about WPV since it may hinder the use of adequate coping strategies such as support-seeking, regardless of the profession. As shown in a previous study, organizational factors such as employer and colleague support as well as zero-tolerance policies may reduce this taboo thus giving organizations levers to intervene (Geoffrion *et al.*, 2015).

Third, the findings bolster the role of support from colleagues and employer in reducing the psychological consequences of WPV. 'Peer-support' interventions in which workers are encouraged to talk about their traumatic experience with trained colleagues who are sympathetic and supportive could thus represent an adequate organizational strategy to counter the consequences of WPV (Stephens *et al.*, 1997).

Fourth, the results point to investigating prior WPV victimization differentially according to the profession. The impact of the accumulation of exposure to WPV tends to manifest itself later for law enforcement than healthcare workers. For healthcare workers, organizations should assess recent repetitive exposure. For law enforcers, organizations should consider repetitive exposure over the career.

Study limitations

As the sampling method was not probability based, the results refer to the province of Quebec and the specific sectors under study. Future research should consider larger and more representative samples in order to generalize the accuracy of these findings. Furthermore, data may have been collected only from people who were willing to discuss or complain about WPV. It is also possible that the distribution of the questionnaire by a member of a joint association for health and safety at work and the nature of the survey may have influenced the

prevalence of respondents who think that violence is ‘part of the job’; workers who wanted to complete the questionnaire were the ones who wanted to denounce WPV, not the ones who accept it as a reality of their work. There is also a potential limitation stemming from the fact that healthcare and law enforcement workers self-reported their experience of WPV; social desirability may have influenced their responses (Moorman and Podsakoff, 1992). In order to minimize recall bias, the questionnaire only focused on victimization that occurred during the past year. As mentioned by Nachreiner *et al.* (2007), this method has successfully been used in previous studies.

Conclusion

More research is needed in order to assess the consequences of trivialization of WPV on psychological consequences and its mediating effect. In this vein, further research should rely on prospective and longitudinal design using random sampling while controlling for other important individual and organizational characteristics, such as personal history of abuse, years of experience, and organizational strategies that aim to prevent psychological distress. These studies should also use valid instruments to assess PTSD according to the DSM-5 (American Psychiatric Association, 2013) criteria, such as the PCL-5 (Weathers *et al.*, 2013), and other psychological distress manifestations. Moreover, the findings of the current study demonstrate the importance of simultaneously assessing individual and organizational factors. Thus, future research should include other variables related to the individual and to the organization and test the interactions between these variables. Future studies should also integrate measures of gender (i.e. masculinity–femininity) as results show that the law enforcement and healthcare professions are highly sex segregated. As such, women working in law enforcement may identify as more masculine than females in healthcare and vice versa for males. This could provide important information regarding the psychological consequences of WPV. Nevertheless, the current study demonstrated that workers and their organizations should encourage employees to freely discuss WPV since it may contribute to well-being at work.

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Conflicts of Interest

The authors declare no conflicts of interest relating to the material presented in this article. Its contents, including any opinions and/or conclusions expressed, are solely those of the authors.

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