The Potentially Traumatic Event and the Psychological Health at Work of the Police; A Perception of a Unique Impact?

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Abstract It is recognized that the nature of the police profession makes him more likely to experience a traumatic event that can have significant repercussions both personally and professionally [1]. Several studies define and evaluate the nature of the event with potentially traumatic content or are interested in the intervention methods to be recommended when post-traumatic symptoms are present. However, to our knowledge, no study indicates the impact of a potentially traumatic event experienced by a police officer on his psychological health at work. The study wants to evaluate the link between these two variables. The theoretical model of Gilbert et al. [2] was used to define the dependent variable composed of psychological well-being (serenity, commitment and social harmony) and psychological distress (anxiety, disengagement and irritability). Josse's definition [3] is used to understand the potentially traumatic event. The participants are made up of 240 women and 681 men aged between 35 and 44 years old. The scale of Gilbert et al. [2] measures psychological well-being ($\alpha =, 91$) and DET ($\alpha =, 94$). In addition, participants had to tick if they had experienced a potentially traumatic event in their professional lives. An ex-post facto quote was used. A first group of police (n = 492) identified having experienced a potentially traumatic event while the second group of police officers (n = 490) identified that they had not experienced a potentially traumatic event as part of their job. The results support a significant difference between the two groups on the dimensions of well-being (commitment, $t(980) = -2.04$, $p < 0.05$, serenity, $t(980) = -2.39$, $p < 0.05$) and distress (irritability $t(980) = 3.45$, $p < 0.001$, anxiety $t(980) = 5.05$, $p < 0.001$ and disengagement $t(980) = 5.31$, $p < 0.001$).

Keywords: potentially traumatic event, psychological health at work, well-being at work, distress at work, police officer

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1. Introduction

Earlier studies suggest that some workers are more likely to suffer mental health issues such as psychological distress and post-traumatic stress disorder [4,5,6], in particular in occupations relating to emergency situations (firefighters, police officers, paramedics, and so on). In fact, police forces represent the first line of action and public intervention in addressing the need to keep under control crime, emergency situations, offenses against public order, and the need to respond to a large variety of citizen demands for services. Evidently, this complicates their work considering the large number of unexpected, sudden, uncontrollable, and unforeseeable factors that they are required to deal with. In addition to these operational factors, police officers must deal with organizational specificities such as a paramilitary-type hierarchy, irregular work hours, and the negative attitude of the public and the media toward them [7]. In light of these observations, it can be said that police work is carried out in a specific context, where exposure to potentially traumatic events continues to be frequent. According to a study conducted by Leclercq [1], 32% of police officers experience events with potentially traumatic consequences while performing their duties. It is therefore surprising that the understanding of this phenomenon affecting police officers hasn't been given more attention in the literature.

Studies focusing on first responders agree that daily exposure to traumatic events can have major adverse effects on mental, emotional, and physical health [8,9,10,11,12]. According to the Institute of Medicine [11],

there are three distinct categories of responses to traumatic events, disasters, or terrorist acts. First, most affected individuals experience a change in their behavior or lifestyle, such as insomnia, worry, internal disturbance, alcohol use, and smoking [11]. In general, these individuals recover without having to undergo treatment, but intervention to provide support and information may promote healing. Second, the Institute of Medicine [11] notes that a smaller group of people experience more persistent symptoms such as recurring insomnia and anxiety, and therefore need a psychosocial intervention and medical treatment. Third, a small portion of people exposed to major trauma develop psychiatric conditions such as post-traumatic stress disorder and severe depression, and they necessarily require serious medical and psychological treatment [11].

Indeed, witnessing child homicide, for example, can dramatically affect a person's view of the world [8]. Such a tragedy can challenge our beliefs and values, thereby leading to alienation and other types of negative mental perceptions [8]. The findings reported in a study conducted by Lavillunière, Leifflen, and Arvers [13] indicate that traumatic situations experienced by firefighters at work can be related to psychological distress such as professional burnout. For all these reasons, the psychological health of first responders must be taken seriously, because they occupy a key role and the psychological distress they face has negative individual and public repercussions, and by the same token, affects services to victims and patients [14].

Although some studies focus on post-traumatic stress resulting from exposure to a potentially traumatic event, no study has yet shown the impact of such risk events occurring in police officers' work environment on their psychological health with a view to reducing the likelihood of officers developing post-traumatic stress disorder and the resulting adverse consequences.

1.1. Psychological Health in the Workplace

For the purpose of this article, the authors have chosen to define the dependent variable according to the theoretical model developed by Gilbert et al. [2] inasmuch as it constitutes a global construct composed of two distinct axes, psychological well-being and psychological distress. This model outlines the polarized components of mental health in the workplace, i.e. psychological well-being in the workplace (PWBW) and psychological distress in the workplace (PDW). The authors identify three factors for each dimension of psychological health at work. These factors describe the worker's relationship to self—at work, with his or her work itself, and with his or her co-workers. Depending on whether we are looking at the positive or negative dimensions of psychological health in the workplace, these three factors manifest differently. Gilbert et al. [2] affirm that psychological well-being is primarily defined by a state of serenity. When in this state, workers feel at peace with themselves. In addition, workers manifest commitment when they appreciate their work, their accomplishments, and when they have the desire and ambition to engage. In relation to co-workers, an employee experiencing a state of well-being in the workplace demonstrates an ability to

listen to others, feels appreciated and loved, and maintains good relationships. Conversely, individuals in a state of distress feel more anxious, sad, depressed, and they find it difficult to cope with challenges in the workplace. As regards their relationship to their job, they experience a decreased interest in their tasks, they feel less effective, and they lose desire to start new projects. Finally, workers suffering psychological distress at work show signs of impatience, aggressiveness, and irritability with their co-workers. In a nutshell, Gilbert et al. [2] argue that individuals experiencing greater psychological well-being and less distress at work feel more optimistic, they are more likely to perceive their work environment as being just and fair, and more likely to present is as being healthy.

1.2. Potentially Traumatic Event

For the purpose of this study, we used Josse's [3] definition of a potentially traumatic event. Josse [3] believes that it is not the nature of the event that is assessed but rather the perception that the individual who experienced the incident had of the event. An event is considered to be potentially traumatic if it provokes an emotional reaction in the worker that affects or is likely to alter his or her performance at work [3]. An event may be potentially traumatic for one person and not for another, the author adds. Furthermore, it may be traumatizing one day and not the next. For example, in the policing context, such events may be discovering a corpse, fatal road accidents, vehicle pursuits, the death of a colleague on duty, arresting an uncontrollable individual, deadly accidents involving children, shootings, assault or violence against police officers, and the death of a suspect during a police intervention [15].

2. Objective and Hypotheses

Considering the human and social costs that this research problem touches on, there is a need to better understand the effects of potentially traumatic events on police officers' psychological health in the workplace. This study is aimed at grasping the impact of exposure to potentially traumatic events on the various dimensions of psychological well-being and distress at work. Our initial hypothesis suggests that police officers stating that they have been exposed to a potentially traumatic event will manifest well-being in the workplace (serenity, engagement, and harmony) to a lesser degree than the group of police officers that have not been exposed to such an event. Hypothesis 2 posits that the group identifying as having been exposed to a potentially traumatic event will manifest greater psychological distress (anxiety/depression, disengagement, irritability/aggressiveness) than the group that has not had such an experience.

3. Methodology

3.1. Research Design

In this quantitative research, we chose to use the ex post facto method because the independent variable values are

difficult to control or predict. Ex post facto design (after-the-fact analysis) consists in demonstrating after the fact in what way the independent variable influences the dependent variable [15]. In other words, in this study, researchers have no control over the variables that can influence the dependent variable. In fact, they do not perform any tests, but draw information from existing behaviors instead, and base their reasoning on deductive logic [16].

3.2. Analysis Procedures

Initially, descriptive analyses of the variables studied are used. The Independent Samples t Test was the method preferred for analyzing our hypothesis. Student's t test is a parametric test used to determine the difference between two populations' means [17].

3.3. Participants and Process

After signing a confidentiality agreement with the participating police organizations, an email explaining the research objective and an invitation to fill out a questionnaire was sent out through police forces. Participants had to click on a link to access the online questionnaire. The research sample included 987 participants, 240 women and 681 men. Sixty-six participants did not specify their gender. In terms of age group, the participants were divided as follows: 18 to 24 years old (10 police officers), 25 to 34 years old (249 police officers), 35 to 44 years old (365 police officers), and 45 and over (363 police officers). As regards education level, 666 police officers have college education and 314 have a university degree. Seven police officers did not specify their education level. Concerning their level or seniority in the police organization, most respondents had between 16 and 20 years of experience in total. Finally, the sample included 83 officers and 904 other ranks.

3.4. Measuring Instruments

The instrument used to measure the dependent variable is the one developed and validated by Gilbert et al. [2] in relation to psychological health at work. Earlier studies indicate good psychometric qualities associated with these scales. This measure is divided into two parts, i.e. psychological well-being at work (PWBW) and psychological distress at work (PDW). The scale refers to a frequency ranging from (1) *Never* to (5) *All the time*. In this study, internal consistency is measured using Cronbach's alpha and values are in line with those presented in the literature.

Concerning PWBW, 22 items were suggested, 10 of which referring to serenity, five to work commitment, and seven to social harmony. Items relating to serenity ($\alpha=$, 86), which qualifies the relationship to self, are based on statements such as "I feel healthy and in great shape." Commitment to work has an alpha of 0.85 with statements such as "I find my work exciting." Finally, social harmony ($\alpha=$ 79), which refers to the relationship to others is expressed through statements such as "I am on good terms with my colleagues." The overall alpha for PWBW is 0.91.

The second part of this measure of psychological health at work evaluates the degree of psychological distress at work. This second instrument uses 23 items, nine measuring anxiety and depression, seven disengagement in relation to work, and seven irritability and aggressiveness. As regards study results, anxiety and depression ($\alpha=$, 88), which are defined with respect to the relationship to self, are presented through statements such as "I feel sad." Disengagement from work ($\alpha=$, 89) is presented through statements such as "I don't feel useful." Finally, irritability and aggressiveness ($\alpha=$ 82), which refer to the relationship to others, are measured through statements such as "I'm in conflict with my colleagues." Overall, the alpha value for PDW is 0.94.

Regarding the potentially traumatic event measurement, respondents were asked a closed-ended question, answered by a "yes" or "no," worded as follows: "In a professional context, have you experienced an event with traumatic consequences for your life?". Subsequently, respondents were asked to specify what element made them categorize the event as being potentially traumatic.

4. Results

This research is aimed at grasping the impact of exposure to a potentially traumatic event for police officers in relation to the various dimensions of psychological health at work. Two hypotheses are tested. Table 1 presents the results of descriptive analyses and comparisons between the two sample groups.

Table 1. Descriptive analyzes and comparison of means between groups

	Potentially traumatic event (n = 492)		Without potentially traumatic event (n = 490)		
	M	*ÉT*	*M*	*ÉT*	*t*
Total well-being	3,61	0,54	3,69	0,53	-2,27*
Serenity	3,61	0,59	3,70	0,58	-2,39*
Commitment	3,37	0,79	3,47	0,72	-2,04*
Social Harmony	3,84	0,57	3,88	0,57	-1,21
Total Distress	1,76	0,56	1,59	0,46	5,33**
Anxiety	1,82	0,62	1,64	0,53	5,05**
Disengagement	1,80	0,76	1,57	0,61	5,31**
Irritability	1,68	0,52	1,57	0,44	3,45**

*p < 0,05, **p < 0,001.

The first hypothesis assumes that the group identifying as having experienced a potentially traumatic event will have a lower average on the level of psychological well-being at work than the group identifying as not having experienced such an event. The event was categorized as being potentially traumatic in relation to the presence of the following elements: feeling of powerlessness (20.5%), threat to one's life or the life of a colleague (20%), being forced to be insensitive (19%), any encounter with death (17%), feeling of isolation (13%), and unpredictability (10.5%).

Table 1 shows that the group having been exposed to a potentially traumatic event has an average of 3.61 (0.54) out of a maximum score of 5 while the group not having been exposed to a potentially traumatic event has an average of 3.69 (0.53) as regards psychological well-being at work. This small difference is statistically significant and negative (t (980) = -2.27, p < 0.05). Table 1 indicates that the two groups also have a statistically different average in relation to serenity (t (980) = -2.39, p < 0.05) and commitment (t (980) = -2.04, p < 0.05). However, results show no significant difference between the two groups in relation to social harmony (t (980) = -1.21, p > 0.05). These results confirm research hypothesis 1 to the extent that the averages of the two groups as regards psychological well-being at work are significantly different, although by a small margin.

The second hypothesis assumes that the group identifying as having experienced a potentially traumatic event will manifest greater psychological distress (anxiety/depression, disengagement, irritability/aggressiveness) than the group identifying as not having experienced such an event. Table 1 indicates that as regards psychological distress at work, the group having experienced a potentially traumatic event has an average of 1.76 (0.56) out of a maximum score of 5, while the group not having been exposed to a potentially traumatic event has a score of 1.59 (0.46). This difference is statistically significant and positive (t (980) = 5.33, p < 0.001). It can also be seen from Table 1 that the two groups have a statistically different average in relation to anxiety (t (980) = 5.05, p < 0.001), disengagement (t (980) = 5.31, p < 0.001), and irritability (t (980) = 3.45, p > 0.001). These results confirm research hypothesis 2 to the extent that the averages of the two groups as regards psychological distress at work across the various dimensions of distress are significantly different.

5. Discussion

This research is focused on understanding the impact of exposure to a potentially traumatic event for police officers across the various dimensions of psychological health at work. Results were produced through a comparison of averages using ex post facto design.

Results partially support hypothesis 1, which assumes a significant difference of averages between police officers identifying as having been exposed to a potentially traumatic event and police officers not having had such exposure on the level of psychological well-being at work (serenity, commitment, and social harmony). Results reveal a difference between the two groups on the level of serenity and commitment. It should be highlighted that the average for the group having been exposed to a potentially traumatic event is significantly slightly below the other group's average as regards psychological well-being. More specifically, results indicate that only serenity and commitment levels significantly decrease following exposure to a potentially traumatic event. Importantly, exposure to such an event does not seem to clearly impact harmony between colleagues. In other words, it is possible that police officers having been exposed to a potentially traumatic event experience less serenity and feel less at peace with themselves; they are a little less appreciative of their work or their desire to engage slightly decreases. However, results suggest that police officers will be no less attentive to others, that they will feel just as appreciated and loved, and that the quality of their relationships with colleagues at work (social harmony) will not decline.

The second hypothesis assumes that the group having been exposed to a potentially traumatic event will manifest greater psychological distress (anxiety/depression, disengagement, and irritability/aggressiveness) than the group not having had such exposure. The results confirm this hypothesis. They reveal a substantial difference between the two groups. Contrary to psychological well-being at work, all dimensions of psychological distress seem to be affected following exposure to a potentially traumatic event. More specifically, results suggest that police officers having been exposed to a trauma-inducing event feel more anxious, sad, depression-prone, stressed out, and have greater difficulty coping with work-related issues. Furthermore, their interest in their work is likely to decline and they are less likely to feel useful. Finally, these police officers may be more irritable and impatient with others.

On the theoretical level, this research certainly contributes to better understanding how police officers' psychological health is impacted. To our knowledge, this is the first study to use Josse's theory [3] for the purpose of verifying the impact of a potentially trauma-inducing event and the entire set of work-related psychological health dimensions, in addition to focusing specifically on police officers. Earlier research had identified links between events of this type and manifestations of psychological distress, such as burnout, but these studies focused on the class of first respondents as a whole [9,10,12,13]. Analysis of the impacts of a potentially traumatic event in the specific case of police officers offers a deeper and more nuanced understanding of the dimensions of psychological well-being and psychological distress at work. Furthermore, this study contributes new knowledge.

In practical terms, this study outlines new avenues as regards prevention and police officers' psychological health at work. On the one hand, the literature has mainly focused on police officers having developed post-traumatic stress disorder and less so on the impact of potentially trauma-inducing events on other aspects of police officers' work-related psychological health. In fact, few researchers seem to study the impacts on police

officers that have not been diagnosed with post-traumatic stress disorder. It is pertinent to also study active police officers who have not necessarily asked for medical help. On the other hand, this study provides interesting insights that can be used to refine and review current prevention methods. One frequently used method, psychological debriefing, is mainly centered around possible symptoms and reactions related to the development of post-traumatic stress disorder triggered by an event. This study demonstrates that aside from the risk of developing a health issue, the potentially traumatic event also impacts psychological health in the workplace, such as serenity and commitment. Therefore, these two elements deserve to be considered as targets for prevention efforts.

In addition to these observations, this study provides an update of the statistics reported by Leclercq in 2008. At the time, 32% of police officers stated having been exposed to a potentially traumatic event. Our research shows a substantial rise in such exposures. Out of 987 participating police officers, 50% stated having been exposed to trauma in the context of their duties, i.e. one out of every two police officers.

Despite yielding results that are of interest, our study has a number of limitations. Ex post facto design limits at the outset study conclusions to the extent that researchers are assumed to have no control over the independent variable. In addition, because the study focused on psychological health in the workplace, few elements that are specifically related to post-traumatic stress disorder were measured (hypervigilance, flashbacks, depersonalization, and so on). As a result, the study does not enable us to determine the scope of the potentially traumatic event's impact. One may wonder how many police officers suffer from post-traumatic stress disorder symptoms but have not been diagnosed and/or are not receiving the appropriate medical care. In addition, our study sample is limited to Quebec French-speaking police officers. In view of the observable cultural differences between Quebec and other Canadian provinces, one can question the transferability of our results to other police forces. Finally, our study has demonstrated a link between exposure to a potentially traumatic event and the level of serenity and commitment in police officers. However, these results do not explain in what way such exposure influences these two variables. Future research can analyze the fact that exposure to a potentially traumatic event does not impact police officers' relationship with their colleagues (harmony). In light of earlier literature [18,19] focusing on the importance of social support in the workplace, it would be pertinent to delve deeper into this aspect in upcoming studies in order to improve prevention efforts and support for police officers.

6. Conclusion

This study has provided an understanding of how potentially traumatic events impact police officers' psychological health at work. In addition to putting forward new theoretical knowledge, results highlight the importance of considering the impact of such events on the psychological well-being and on the psychological distress in the workplace for this under-researched population. Future research will certainly have to take into consideration these results in order to further knowledge and practice development related to police officers' psychological health at work.

Declarations of Interest

The authors have no conflict of interest to declare in relation to this article.

References

[1] Leclercq. C. (2008). Les modalités de la prise en charge et de la gestion des événements traumatiques vécus par les policiers au cours de leurs fonctions au Québec. Thèse de doctorat en criminologie, Université de Montréal, Québec.

[2] Gilbert, M-H., Dagenais-Desmarais, V., & Savoie, A. (2011). Validation d'une mesure de santé psychologique au travail. Revue européenne de psychologie appliquée, 61, 195-203.

[3] Josse, É. (2014). Le traumatisme psychique chez l'adulte. Bruxelles : De Boeck.

[4] Carlier, I. & Gersons, B. (1994). Trauma at Work: Posttraumatic Stress Disorder as Occupational Hazard. Journal of occupational Health Safety Australia and New Zealand, 19, 264-266.

[5] Gersons, B. & Carlier, I. (1992). Post-traumatic Stress Disorder: The History of a Recent Concept. British Journal of Psychiatry, 161, 742-748.

[6] Gersons, B. & Carlier, I. (1994). Treatment of work-related trauma in police officers: Posttraumatic stress disorder and post-traumatic decline. In MB Williams, JF Sommer, Handbook of Post-traumatic Therapy: A Practical Guide to Intervention, Treatment and Research, p.325-333. Wesport CT: Greenwood Press.

[7] De soir, E., Daubechies, F., Van den steene, P. (2012). Stress et trauma dans les services de police et de secours. Anvers-Apeldoorn. Édition Maklu, 284 p.

[8] Brondolo, E., Eftekharzadeh, P., Clifton, C., Schwartz, J. E., & Delahanty, D. (2017). Work-Related Trauma, Alienation, and Posttraumatic and Depressive Symptoms in Medical Examiner Employees. Psychological Trauma : Theory, Research, Practic, and Policy. Advance online publication.

[9] Carleton, R.N., Afifi, T.O., Turner, S., Taillieu, T., Duranceau, S., LeBouthillier, D.M.,.... Asmundson, G.J.G. (2018). Mental Disorder Symptoms Among Public Safety Personnel in Canada. The Canadian Journal of Psychiatry, 63(1), 54-64.

[10] Fay, J., Kamena, D., Benner, A., & Buscho, A. (2006). A Residential Milieu Treatment Approach for First-Responder Trauma. Traumatology, 12(3), 255-262.

[11] Institute of Medicine. 2003. Preparing for the Psychological Consequences of Terrorism: A Public Health Strategy. Washington, DC: The National Academies Press.

[12] Lavillunière N, Leifflen D, Arvers P. Stress et santé au travail chez les sapeurs-pompiers de Paris. Reanoxyo. 2009; 25 (3) : 90-93

[13] Kleim, B., & Westphal, M., (2011). Mental Health in First Responders: A Review and Recommendation for Prevention and Intervention Strategies. Traumatology, 17(4), 17–24.

[14] Latreille, J. & Trépanier, L. (1992). La méthode expérimentale en sciences humaines, Collection Notes de cours, InfoTag, Montréal, 277 p.

[15] Ndjambou, P. (2009). Politique de développement du contenu. Mouvement des Associations Générales Étudiantes de l'Université du Québec à Chicoutimi. 68 p.

[16] Fortin, M-F. (2006). Fondements et étapes du processus de recherche. Les Éditions de la Chenelière. Montréal. 485 p.

[17] Garner, N., Baker, J., & Hagelgans, D. (2016). The Private Traumas of First Responders. The journal of Individual Psychology, 72(3), 169-185.

[18] Coyne, J. C., & Downey, G. (1991). Social factors and psychopathology: Stress, social support, and coping processes. Annual Review of Psychology, 42, 401-425.

[19] Patterson, G. T. (2003). Examining the effects of coping and social support on work and life stress among police officers. Journal of Criminal Justice, 31, 215-236.