



Organizational Levers Supporting Police Officers' Psychological Health in the Workplace After Exposure to a Potentially Psychologically Traumatic Event

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ABSTRACT

One in two police officers report having experienced a potentially psychologically traumatic event (PPTE) in the course of their career that has had an impact on their professional or personal life. In addition, daily exposure to PPTEs results in major adverse effects that affect all aspects of health: psychological, emotional, and physical. However, it is not necessarily PPTEs as such that cause psychological distress at work; rather, the determining factor seems to be the organization's response to police officers' exposure to PPTEs. The purpose of this study is therefore to identify the organizational factors that explain psychological health at work for police officers who have experienced a PPTE in the line of duty. The results show that the quality of relationships with the superior and colleagues, the availability of support such as advice, job demand, and job decision latitude are factors that partially explain the psychological distress that police officers experience at work after a PPTE [$R^2 = .38$, $p < .05$; $F(1,451) = 55.99$, $p < .001$]. Conversely, quality relationships with co-workers, job demand, and job decision latitude partially account for the workplace psychological well-being experienced by officers after a PPTE [$R^2 = .42$, $p < .05$; $F(1,457) = 109.55$, $p < .001$]. This study highlights the importance for police organizations to promote good relationships between police officers and, above all, to encourage managers to invest in their relational skills and counseling-type social support. The study limitations and new avenues for research are also discussed.

Keywords: Psychological health in the workplace, potentially psychologically traumatic event, police service, interpersonal relationships, support.

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PROBLEM

Depression, generalized anxiety, burnout, and post-traumatic stress are just a few examples of the growing presence of unsettling realities faced in the popular and scientific worlds. According to Wang and Karpinski (2016), one in five Canadians will experience psychological health problems or mental illness in the course of a year. Psychological health issues cost the Canadian economy approximately \$51 billion per year (Mental Health Commission of Canada, 2016). Of this amount, \$20 billion is associated with psychological problems in the workplace (Wang & Karpinski, 2016).

A number of studies show that because of the nature of the tasks involved, certain occupations carry a higher risk of psychological problems such as psychological distress, stress, and post-traumatic stress disorder, namely emergency services jobs (Carlier & Gersons 1994; Gersons & Carlier, 1992, 1994; De Soir et al., 2012; Lilly & Allen, 2015). Moreover, a study conducted by Carleton et al. (2018) indicates that 44.5% of public safety workers in Canada report having experienced symptoms that may be associated with a psychological health problem. Kleim and Westphal (2011) also explain that first responders' psychological distress results in significant personal and public costs, including negative repercussions on the services offered to the population. Among the various positions within police organizations, patrol officers represent approximately 45% of police officers affected by a psychological health problem at work and the average length of absence for this type of disorder is 389 days. In Quebec, between 2011 and 2015, psychological injury claims filed by police officers and accepted by CNESST² were fewer in number, but more costly than physical injuries (annual average of approximately \$36,000 per injury), because the duration of leave is longer (+36 days) (Bastien and Lebeau, 2019).

A study conducted specifically among serving police officers in Quebec reveals that one police officer in two reports having experienced a potentially psychologically traumatic event (PPTe) during his or her career and that this event had an impact on his or her professional or personal life (Deschênes et al., 2019b). Furthermore, studies of first responders, including police officers, concur that daily exposure to PPTes causes major damaging effects in multiple areas of the person's life, affecting psychological and emotional health, as well as physical health (Brondolo et al., 2018; Carleton et al., 2018; Garner et al., 2016; Fay et al., 2006). In sum, considering the importance of police officers' role in society and the beneficial effects of psychological health in the workplace, it is important to devote efforts to better prevent the impacts of exposure to PPTes in the policing environment.

REFERENCE FRAMEWORK

Studies focusing on the policing environment (Hart et al., 1995; Kop & Euwema, 2001; McCreary & Thompson, 2006; Shane, 2010), suggest that the nature of police work does not necessarily lead to distress. Brown (1996) believes that organizational structure is the greatest source of stress in police work. Burke (1998) adds that positive relationships with the police organization appear to reduce symptoms of distress. It can be argued that organizational experiences are

² Statistics Canada (2012). North American Industry Classification System (NAICS) Canada. Ottawa: Minister of Industry: Provincial Government (NAICS 912001) and Local, Municipal and Regional Government Services (NAICS 913910) sectors.

more decisive in determining police officers' psychological distress and psychological well-being at work. Furthermore, the study conducted by Burke and Mikkelsen (2006), in line with an earlier study by Patterson (2003), mentions that social resources and the adaptation of emotion-focused strategies are linked to reduced distress in police officers. Brown's (1996) findings also support the existence of a relationship between reduced stress in police officers and strong employer recognition, as well as a more participative style of supervision. Deschênes et al. (2019b) show that police exposure to PPTEs can lead to psychological distress at work. According to Samra and colleagues (2012), psychological support, workload and task autonomy, clarity of leadership, and courtesy and respect in interpersonal relationships are also predictive factors to be considered. All things considered, it is possible to believe that it is not PPTEs as such that generate psychological distress at work; rather it is the organization's management following exposure to a PPTE that is decisive. In light of this observation, certain organizational variables must be studied to explain the occupational psychological health of police officers who have experienced a PPTE in the context of their duties.

Organizational factors

For the purpose of this research, the perception of social support has been considered. *Social support* refers to the provision or exchange of emotional, instrumental, or information resources in the context of responding to other people's perceived need thereof (Caron & Guay, 2005). It is actualized during interactions with members of the social network or participation in a social group (Cohen et al., 2000). More specifically, advice-giving support refers to information and normative support (providing information, advice, instructions for learning a task or acquiring a skill) (Cutrona & Russell, 1990). According to Devault and Fréchette (2002), emotional support takes the form of reassurance offered by one person to another (listening, affection, understanding, comfort). St-Hilaire (2005) stresses the importance of communication in any interpersonal relationship and explains that workers don't only engage in relationships to provide information. Human nature leads workers to interact in order to defend an image or a territory, establish a relationship, and even build their identity (St-Hilaire, 2005). This study also takes into account the perception of the quality of interpersonal relationships at the workplace between colleagues and superiors. *Interpersonal relationships* at work are defined as a structure that is co-constructed by several actors, for a variety of purposes, and requiring exchange and reciprocity (Sénécal et al., 1992). Moreover, the quality of these relationships is influenced by the way they are perceived, which makes it subjective. According to Sénécal et al. (1992), each of the relationships described can be more or less harmonious, rewarding, satisfying, and trusting.

At the same time, one of the most studied organizational factors related to psychological health in the workplace is the (JD-C) Job Demand-Control model (Karasek, 1979, 1998; Karasek & Theorell, 1990). According to this model, job control (decision latitude) protects the individual from the harmful effects of the work environment (demand). It is recognized that the physical, psychological, social, and organizational demand in police work is high (Basinska et al., 2014). Psychological demand in the workplace is characterized by cognitive, emotional, and physical workloads that are too heavy in relation to the time allocated to perform the required task (Bakker & Demerouti, 2007). *Decision latitude*, on the other hand, has two sub-dimensions, i.e., skill level and decision authority. The former is defined as the possibility to use and develop

one's skills and qualifications and the latter as the leeway to choose how to do one's job and the ability to take part in related decision-making (Niedhammer et al., 2006).

For the purpose of this study, we've used Bass's theory of leadership (1985), which is one of the few leadership theories whose validity has been confirmed by numerous studies (Antonakis et al., 2003; Avolio et al., 1999; Judge & Piccolo, 2004). According to Bass (1985), transformative leadership is based on the leader's ability to transform the energies deployed by his or her collaborators so that they are more motivated to achieve results and objectives, both individually and collectively. This theory explains transformative leadership based on three distinct factors: transformational leadership, transactional leadership, and laissez-faire. Transformational leadership, consisting of charisma, intellectual stimulation, and individualized consideration is symbolic leadership (Bass, 1985). Transactional leadership, which combines contingent rewards and active management by exception, refers to leadership proximity. Finally, the model also considers laissez-faire leadership to the degree that it integrates, as do the studies by Avolio et al. (1999) and Dussault et al. (2007), passive management by exception and constitutes non-leadership.

Psychological health at work

For a long time, researchers considered health to be a one-dimensional concept (Bruchon-Schweitzer, 2002); that is, they believed that health was simply the opposite of illness (Gilbert, 2009). In recent years, some authors have adopted a two-dimensional perspective by conceiving health not only as the absence of symptoms of illness, but also as the presence of positive aspects (Achille, 2003a, 2003b; Gilbert, 2009; Keyes, 2003).

In this article, we use the theoretical model developed by Gilbert et al. (2011) to define our dependent variable because it constitutes a global construct composed of two distinct axes, namely psychological well-being and psychological distress. This model presents the bipolarized components of mental health at work, namely psychological well-being at work (PWBW) and psychological distress at work (PDW). The authors define three factors for each of the dimensions of psychological health at work. They describe the worker's relationship with himself or herself - at work, with his or her work, and with co-workers. These three factors are expressed in different ways for the positive and negative dimensions of psychological health in the workplace. According to Gilbert et al. (2011), psychological well-being is primarily defined by serenity. In this case, the worker feels at peace with himself or herself. Second, when workers appreciate their work and accomplishments they are committed to their job and have the desire and ambition to get involved. With respect to co-workers, employees in a state of well-being at work are willing to lend an ear, they feel appreciated and loved, and sustain good relationships in the workplace. On the other hand, individuals in a state of psychological distress feel more anxious, sad, depressed, stressed, and have difficulty dealing with their professional problems. With regards to their relationship to their work, they lose interest in their tasks, are less efficient, and lack motivation to start new projects. Finally, workers in a state of psychological distress at work show signs of impatience, aggressiveness, and irritability toward co-workers. In short, Gilbert et al. (2011) specify that individuals experiencing greater psychological well-being and less psychological distress at work are more likely to feel optimistic, and perceive their work environment as being just, fair, and healthy.

Potentially psychologically traumatic event

For the purpose of this research, we use the term PPTE as defined by Josse (2014). Josse (2014) specifies that it is not the nature of the event that is examined, but the perception that the person has of the incident. An event is considered potentially traumatic if it provokes an emotional reaction in the worker that affects or that is likely to alter his or her functioning at work (Josse, 2014). The author adds that a PPTE can be traumatic for one person and not for another. Moreover, the event can be considered traumatic at one point in time and no longer be viewed as such at a different time. The glossary of terms of the Canadian Institute for Public Safety Research and Treatment proposes to specify the nature of the potential trauma (Canadian Institute for Public Safety Research and Treatment [CIPSRT], 2019). Accordingly, the term potentially psychologically traumatic event is used in the context of this research (CIPSRT, 2019). For example, in the context of police work, such events include the discovery of corpses, fatal road accidents, car chases, the death of a colleague on duty, the arrest of an unruly individual, fatal accidents involving children, shootings, assaults or violence against police officers, and the death of a suspect during an intervention (Leclercq, 2008).

OBJECTIVE AND HYPOTHESES

In light of the results of earlier studies, this research seeks to identify the organizational factors that explain psychological health in the workplace for police officers who have experienced a PPTE in the context of their duties. The study puts forward the following hypotheses:

- 1- Transformational and transactional leadership from superiors, reasonable job demands, high decision latitude, receiving advice and emotional types of social support, as well as good interpersonal relationships with colleagues and superiors following exposure to a PPTE support the manifestation of psychological well-being at work.
- 2- Laissez-faire leadership from superiors, high job demands, low decision latitude, little advice and emotional types of social support, and poorer interpersonal relationships with colleagues and superiors following exposure to a PPTE support the manifestation of psychological distress at work.

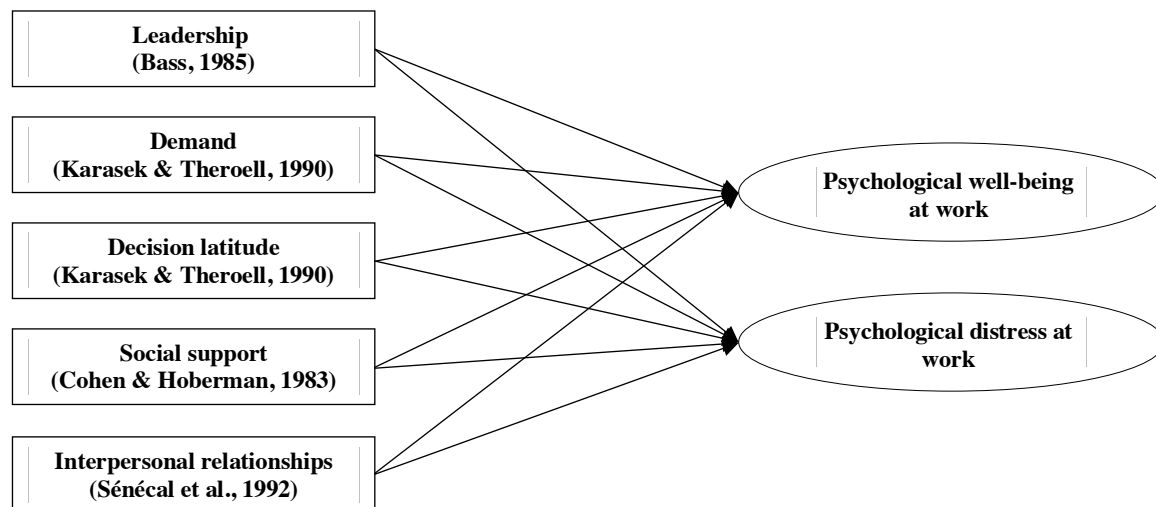


Figure 1. Hypothetical model for workplace psychological health of police officers having experienced a PPTE

METHODS

Research design

This study, aimed at investigating the impact of various organizational factors on the psychological health of police officers who have reported having experienced a PPTE, uses a quantitative correlational research design. More specifically, it seeks to determine whether the workplace psychological health of police officers who have been exposed to a PPTE in the context of their professional life varies according to the presence of different organizational factors in their workplace. In order to verify the influence of the relationships between dependent variables (psychological well-being at work and psychological distress at work) and independent variables (leadership, job demand, decision latitude, support, and interpersonal relationships), the results of the study were analyzed using a backward stepwise multiple regression method. Multiple linear regression makes it possible to predict the value of a dependent variable based on the value of several independent variables (Fortin and Gagnon, 2016). With this approach, it is possible to ensure that all independent variables will be considered despite the presence of another predictor variable. This type of analysis in the context of an explanatory cross-sectional correlational design allows the relationships among a set of variables to be explored in order to determine which ones are associated with the dependent variables.

Process and population under study

Following the signing of a partnership agreement with a police organization and the obtaining of the research ethics certificate, an invitation to respond to the questionnaire was sent out through our partner. The online questionnaire was forwarded by email. The sample ($n = 492$) for this research consisted of 111 female and 349 male police officers across Canada. Thirty-two officers chose not to answer the gender question. Two officers were between 18 and 24 years of age, 102 were between 25 and 34 years of age, 183 were between 35 and 44 years of age, and 203 were 45 years of age or older. Concerning education, 64% had college-level education and 36% had a university degree. Participants had an average of 16 to 20 years of experience within their organization and 91% did not have the rank of officer. All participants identified having experienced a PPTEs as part of their duties since the beginning of their career.

Measurement instrument

The instrument we used to measure the dependent variable is the one developed and validated by Gilbert et al. (2011) regarding psychological health in the workplace. Earlier studies have shown good psychometric properties (internal consistency and factor structure) associated with these scales. This measurement instrument is divided into two axes, namely psychological well-being at work and psychological distress at work. The values are presented on a frequency scale ranging from (1) Never to (5) Always. With respect to psychological well-being at work (PWBW), 22 items are proposed. Ten of them refer to serenity, five to work commitment, and seven to social harmony. The order of presentation of the items is mixed. The items corresponding to serenity, which qualifies the relationship with oneself, have a Cronbach's alpha of 0.85 and are based on statements such as "I feel healthy, in great shape." Commitment to work has a Cronbach's alpha of 0.85 with items such as "I find my work exciting and I want to enjoy it." Finally, social harmony, which refers to the relationship with others, has an alpha of 0.78 and is expressed through statements such as "I am on good terms with my colleagues." The overall PWBW alpha is 0.90, which shows the good internal consistency of this measure.

The other axis of psychological health at work evaluates the degree of psychological distress at work (PDW). This second tool uses 23 items. Nine measure anxiety and depression, seven measure disengagement from work, and the other seven measure irritability and aggressiveness. The order of presentation of these items is mixed. With regards to the results obtained by the study, anxiety and depression (relationship to oneself) are presented through statements such as "I feel sad" or "I have difficulty concentrating"; the alpha is 0.89. The results are presented in a mixed order. For disengagement from work (relationship to work), the alpha is 0.90, and this dimension is presented under items such as "I feel useless." Finally, irritability and aggressiveness (relationship to others) are measured by items such as "I have conflicts with my colleagues" or "I lack patience"; the alpha for this measure is 0.83. Overall, the PDW alpha is 0.94, indicating that this measure has good internal consistency.

To measure the independent variable, i.e., the perceived quality of interpersonal relationships in the workplace, we've used the instrument developed by Sénécal and colleagues (1992) whose good psychometric properties (internal consistency and factor structure) have been demonstrated in earlier studies. This Likert-type scale qualifies relationships with colleagues and superiors with responses ranging from (0) Not at all to (4) Extremely. The quality of relationships is measured using the following terms: harmonious, rewarding, satisfying, and trusting relationships. For example, "Are my relationships with other employees harmonious?" and "Are my relationships with my immediate superior rewarding?" The overall alpha for this scale is 0.91. Harmonious and rewarding relationships are different from being on "good terms" with colleagues to the extent that they describe more specifically the nature and the quality of the relationship.

Demand and decision latitude were assessed by the French version of the *Karasek Job Content Questionnaire* scale (Brisson et al., 1998). The 18 items are answered on a Likert-type scale ranging from (1) Strongly disagree to (4) Strongly agree. This version of the KJCQ has satisfactory psychometric properties. Nine items assess decision latitude ($\alpha = .83$), which is the use of skills and decision-making autonomy (e.g., "I have a fair amount of influence on how things are done at work"). In addition, nine items measure psychological strain ($\alpha = .76$) based on indicators such as excessive workload, enough time to complete tasks, and required concentration (e.g., "My job requires intense concentration for long periods of time").

Perceived social support was measured through six items adapted from Cohen and Hoberman's (1983) *Interpersonal Support Evaluation List*. This tool measures the perception of social support in the workplace using a five-point Likert scale with responses ranging from (1) Strongly disagree to (5) Strongly agree. A total of six items are used for social support: three relating to receiving advice (e.g., "I know an employee here whom I can ask for advice") and three regarding emotional support (e.g., "There is an employee here to whom I can disclose my feelings without fear of being judged, belittled, or rejected"). This study shows good evidence of internal consistency for social support ($\alpha = .85$), social support through receiving advice ($\alpha = .71$), and emotional support ($\alpha = .71$).

The supervisor's leadership was assessed by employees using the Dussault and colleagues' scale (2007). The tool consists of 46 items on a four-point Likert scale with responses ranging from (1) Strongly disagree to (4) Strongly agree. Transactional leadership is evaluated through

13 items: eight measuring contingent rewards (i.e., The superior congratulates everyone on their achievements) and five measuring management by exception (i.e., The superior calls to order employees who step out of line). Twenty-five items deal with transformational leadership. Charisma is measured through eight items (i.e., The superior expresses himself or herself enthusiastically). Seven items focus on intellectual stimulation (i.e., The superior encourages staff to innovate) and ten items relate to personal recognition (i.e., The superior takes staff needs into account in his or her decisions). Finally, six items measure laissez-faire leadership (i.e., The superior puts off decisions). In the present study, the scale has good internal consistency (transactional leadership, $\alpha = 0.90$; transformational leadership, $\alpha = 0.96$ and laissez-faire leadership, $\alpha = 0.81$).

With respect to the measurement of the potentially psychologically traumatic event, respondents were asked the following closed ended “yes or no” question: “Have you in the context of your work experienced an event with traumatic repercussions for your life?” Respondents were then asked to specify what led them to categorize the event cited as potentially traumatic.

RESULTS

Table 1 presents the correlations between the study variables and the descriptive data. Regarding the correlations, it is important to note that the dimensions of interpersonal relationships with colleagues and the superior, as well as job decision latitude, are positively correlated with psychological well-being at work and the most negatively correlated with psychological distress at work. Conversely, the job demand variable remains the least significantly related to the components of psychological health at work.

Insofar as the study seeks to determine whether psychological health at work varies according to the perceived quality of interpersonal relationships (with colleagues and the superior), of social support received, of job demand and job latitude, and of officer leadership, we conducted linear regression analyses. Following Yergeau and Poirier (2013), the requirements for conducting regression analyses were verified.

Table 2 presents the multiple linear regression for psychological distress at work. The results show that the quality of relationships with the supervisor and colleagues, support in the form of advice, job demand, and job decision latitude partially explain the psychological distress at work of police officers who have experienced a PPTE. The value of $R^2 = .38$, $p < .05$ and $F(1,451) = 55.99$, $p < .001$.

Table 1: Correlations between all variables (N = 492)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	R C	1	,49 **	,25 **	,34 **	,02	,47 **	,36 **	,33 **	- ,24 **	,46 **	,36 **	,55 **	- ,50 **	- ,43 **	- ,43 **	,55 **	- ,51 **
2.	R S		1	,09 *	,14 **	- ,12 **	,44 **	,71 **	,60 **	- ,46 **	,35 **	,26 **	,37 **	- ,42 **	- ,32 **	- ,33 **	,40 **	- ,41 **
3.	S O E			1	,80 **	,02	,15 **	,10 *	,08	- ,11 *	,11 *	,14 **	,18 **	- ,20 **	- ,16 **	- ,16 **	,17 **	- ,20 **
4.	S O C				1	,00	,24 **	,14 *	,10 *	- ,15 **	,16 **	,18 **	,24 **	- ,29 **	- ,24 **	- ,21 **	,23 **	- ,28 **
5.	D E M					1	,03	- ,11 *	- ,09 *	,11 *	,06	- ,19 **	- ,01	,04	,14 **	,13 **	- ,04	,11 *
6.	A U T						1	,41 **	,28 **	- ,29 **	,61 **	,34 **	,44 **	- ,55 **	- ,37 **	- ,37 **	,57 **	- ,50 **
7.	T R A N S F O							1	,85 **	- ,59 **	,29 **	,24 **	,33 **	- ,34 **	- ,26 **	- ,28 **	,34 **	- ,33 **
8.	T R A N S A C								1	- ,50 **	,17 **	,21 **	,27 **	- ,26 **	- ,23 **	- ,25 **	,25 **	- ,28 **
9.	L F									1	- ,20 **	- ,12 *	- ,19 **	,29 **	,20 **	,23 **	- ,21 **	,27 **
10.	E N G										1	,46 *	,53 **	- ,61 **	- ,40 **	- ,33 **	,84 **	- ,52 **
11.	S E R											1	,61 **	- ,40 **	- ,61 **	- ,52 **	,81 **	- ,56 **
12.	H A R												1	- ,44 **	- ,43 **	- ,51 **	,83 **	- ,51 **
13.	D E S													1	,70 **	,64 **	- ,60 **	,91 **
14.	A N X														1	,69 **	- ,57 **	,90 **
15.	I R R															1	- ,53 **	,85 **
16.	B E P																1	- ,64 **
17.	D E P																	1

<i>M</i>	2.8	2.5	3.9	4.1	2.6	2.9	2.7	2.5	1.8	3.3	3.6	3.8	1.8	1.8	1.6	3.6	1.7
<i>(E.T)</i>	8	2	1	8	9	9	2	7	8	7	1	5	0	2	7	1	7
	(0.78)	(1.11)	(1.09)	(0.91)	(0.49)	(0.51)	(0.63)	(0.58)	(0.60)	(0.79)	(0.59)	(0.57)	(0.76)	(0.62)	(0.52)	(0.54)	(0.56)

**** p < ,01; * p < ,05.**

RC = Relationships with colleagues; 2. RS = Relationships with superiors; 3. SOE = Emotional support; 4. SOC = Support in the form of advice; 5. DEM = Demand; 6. AUT = Job autonomy; 7. TRANSFO = Transformational leadership; 8. TRANSAC = Transactional leadership; 9. LF = Laissez-faire leadership; 10. ENG = Employee commitment; 11. SER = Serenity; 12. HAR = Social harmony; 13. DES = Disengagement/depression; 14. ANX = Anxiety/Depression; 15. IRR = Irritability/Aggressiveness; 16. BEP = Psychological well-being; 17. DEP = Psychological distress.

Table 2: Multiple Linear Regression Analysis for Psychological Distress at Work

Predicted values	Variables removed	β
Relationships with colleagues		-,28**
Relationship with the superior		-,10
Emotional support		,01
Support in the form of advice		-,11
1 Demand		,11*
Autonomy		-,30**
Transformational leadership		,07
Transactional leadership		-,06
Laissez-faire		,06
	Emotional support	
Relationships with colleagues		-,28**
Relationship with the superior		-,10
Support in the form of advice		-,11*
2 Demand		,11*
Autonomy		-,30**
Transformational leadership		,07
Transactional leadership		-,06
Laissez-faire		,05
	Transformational leadership	
Relationships with colleagues		-,29**
Relationship with the superior		-,08
Support in the form of advice		-,11*
3 Demand		,11*
Autonomy		-,29**
Transactional leadership		-,02
Laissez-faire		,05
	Transactional leadership	
Relationships with colleagues		-,29**
Relationship with the superior		-,09*
Support in the form of advice		-,11*
4 Demand		-,11*
Autonomy		-,29**
Laissez-faire		,05
	Laissez-faire	

	Relationships with colleagues	-,28**
	Relationship with the superior	-,11*
5	Support in the form of advice	-,11*
	Demand	,11*
	Autonomy	-,29**

** p = < 0,01, * p = <0.05

Table 3 presents the multiple linear regression for the psychological well-being at work variable. The results argue that the quality of relationships with colleagues, as well as job demand and job decision latitude, partially explain the psychological well-being at work of police officers who have experienced a PPTE. The value of $R^2=.42$, $p<.05$ and the $F(1, 457) = 109.55, p<.001$.

Table 3: Multiple linear regression analysis for psychological well-being in the workplace

	Predicted values	Variables removed	β
	Relationships with colleagues		,33**
	Relationship with the superior		,04
	Emotional support		,03
	Support in the form of advice		-,01
1	Demand		-,05
	Autonomy		,37**
	Transformational leadership		,11
	Transactional leadership		-,06
	Laissez-faire		,04
		Support in the form of advice	
	Relationships with colleagues		,33**
	Relationship with the superior		,04
	Emotional support		,02
2	Demand		-,05
	Autonomy		,37**
	Transformational leadership		,11
	Transactional leadership		-,06
	Laissez-faire		,04
		Support in the form of advice	
	Relationships with colleagues		,34**
	Relationship with the superior		,04
	Demand		-,05
3	Autonomy		,38**
	Transformational leadership		,12
	Transactional leadership		-,07
	Laissez-faire		,04
		Relationship with the superior	
	Relationships with colleagues		,35**
	Demand		-,06
4	Autonomy		,38**
	Transformational leadership		,13
	Transactional leadership		-,07
	Laissez-faire		,04

		Laissez-faire	
	Relationships with colleagues		,35**
	Demand		-,05
5	Autonomy		,38**
	Transformational leadership		,11
	Transactional leadership		-,07
		Transactional leadership	
	Relationships with colleagues		,34**
6	Demand		-,05
	Autonomy		,38**
	Transformational leadership		,06
		Transformational leadership	
	Relationships with colleagues		,35**
7	Demand		-,06
	Autonomy		,40**

** p = < 0.01, * p = <0.05

DISCUSSION

The objective of the study was to identify the organizational factors that influence psychological well-being at work and psychological distress at work of police officers who have experienced a PPTE in the line of duty. These factors included leadership, demand, decision latitude, social support, and interpersonal relationships.

The first research hypothesis suggested that following exposure to a PPTE, transformational and transactional leadership on the part of superiors, reasonable job demand, a high degree of decision latitude, the presence of emotional and advice types of social support, as well as good interpersonal relationships with colleagues and superiors, promote the achievement of psychological well-being in the workplace. The results of the research only partially confirm this hypothesis. Regression analyses indicate that only good relationships with colleagues, reasonable job demand, and high decision latitude can to some degree explain the psychological well-being at work of police officers who have experienced a PPTE in the line of duty. Autonomy was shown to be a protective factor that also in part explains their psychological well-being at work. In the same vein, earlier studies have demonstrated that police officers who report having extended job control are better able to moderate the effects of trauma and work-related stress (Clark et al., 2015; Brough et al., 2018). In addition, quality interpersonal relationships with co-workers emerged as a factor supporting psychological health in the workplace with one of the strongest and most significant correlations. These results are consistent with findings reported in the literature. In fact, peer support is often highlighted as a protective factor for police officers with respect to their psychological health and post-traumatic stress (Marchand et al., 2015; Violanti et al., 2018; Hoyt et al., 2010). It is identified as such either because it has a direct preventive effect on the symptoms of post-traumatic stress disorder or because of its indirect positive effect on resilience (McCanlies et al., 2017). Social support also emerges as the positive coping strategy most frequently used by police officers (Brodie & Eppler, 2012; Can et al., 2015; Ellison, & Genz, 1983; Lord, 2005; Marquez, 2009). Many police officers prefer to talk to a colleague than to seek professional help or talk to a therapist (Wester et al., 2010).

Our second assumption was that following exposure to a PPTE, laissez-faire leadership on the part of superiors, high job demand, low decision latitude, little advice and emotional social support, and poorer interpersonal relationships with colleagues and superiors are conducive to the manifestation of psychological distress at work. This hypothesis is also partially confirmed by the results of the study. Regression analyses show that the quality of relationships with colleagues and the superior, support in the form of advice, higher job demand, and low decision latitude partially explain the psychological distress at work of police officers who have been exposed to a PPTE in the line of duty. Other studies corroborate these findings. It has been demonstrated that poor social support increases the risk of developing symptoms of post-traumatic stress disorder (Skogstad et al., 2013). As an example, the literature emphasizes the importance of training in both operational capabilities, and stress or emotion management skills. Indeed, it is recognized that police officers lacking specialized training are at greater risk of developing symptoms of psychological distress than trained officers (Skogstad & al., 2013). Police recruits in particular rely on their training and skills during stressful events regardless of how they manage their emotional response (LeBlanc et al., 2008). Anxiety management skills and training to strengthen emotion management can promote resilience to traumatic events (Maia et al., 2011). Implementing practical exercises to develop these skills as part of critical incident training is one way to address this issue (Lees et al., 2019).

Although according to our findings the leadership style of the superior does not have a significant direct impact, superiors nonetheless play a role in preventing distress and maintaining the well-being of police officers. A lack of managerial support is also cited as a risk factor in the literature (Marchand & al., 2015; Deschênes et al., 2019a). In addition to social support from colleagues after experiencing trauma, protective factors for work-related post-traumatic stress disorder include a healthy work environment and support from managers (Skogstad & al., 2013). Having good supervisors, but more importantly having supervisors who understand the impact that policing operations have on well-being also helps to reduce the risk (Burns et al., 2008). On the contrary, when police officers feel that their efforts are not appreciated by their organization, they suffer higher stress levels (Clark & al., 2015).

Research implications

On the theoretical level, this study contributes to knowledge of prevention of psychological impacts in police work. More specifically, it provides evidence on the effect of different risk and protective factors in the police population who report having been affected by a PPTE. On a practical level, although job demand and decision latitude had already been identified as predictive factors to be considered, our findings clarify the importance of the quality of interpersonal relationships with colleagues and superiors. More specifically, it is possible to believe that the quality of the relationship with the superior remains a factor to be considered in explaining police officers' psychological distress at work following exposure to a PPTE. At the same time, the quality of relationships with colleagues is a better predictor of psychological well-being in the workplace following such exposure. Police organizations should remember that social support in the workplace should be mobilized and otherwise (strongly?) encouraged at all times (Lees & al., 2019). The study highlights the importance for organizations to cultivate support in the form of giving advice (twinning, coaching, operational debriefing, etc.). In short, these results demonstrate that police organizations must not only value good relationships

between police officers, but also encourage their managers to invest in developing relational skills and social support such as giving advice.

Study limitations

This research has some limitations. First, the study measured mainly well-being and psychological distress at work. No instrument was used to measure symptoms of post-traumatic stress or exposure to potentially psychologically traumatic events. Moreover, the results on the impact experienced are based on the participants' perceptions. It is possible that some participants did not have the necessary hindsight to appreciate the impact that this type of event has had on their personal and professional life. Self-report questionnaires may induce certain biases, including a lack of representativeness. It is possible that only those who are most interested in or affected by the subject of the survey, in this case psychological health in the workplace, participate (Ferguson, 2000). In addition, respondents do not necessarily provide sincere answers, and some studies argue that online surveys would lead to increased mistrust in relation to data confidentiality and technology, which could result in an increase of socially desirable responses (Wang & al., 2013, Lindhjem & Navrud, 2011). Other authors, however, suggest that social acceptability bias may be less important in online questionnaires because of their anonymity (Dillman et al., 2009, Bigot et al., 2010) and more specifically when investigating sensitive subjects (Wang et al., 2013; Lindhjem & Navrud 2011; Ganassali, 2008) such as psychological health.

Future research

The results of this study inspire further research on the prevention of psychological impacts in police work. It would be interesting to see the effect of these same protective factors not only on the well-being or psychological distress in police work, but more specifically on the development of post-traumatic stress symptoms. Research can also look at the distinctive effect of each of the risk or protective factors on the different types of symptoms. Finally, given the importance and recognized influence of social support and interpersonal relationships as protective factors for police officers who have experienced a PPTE in the line of duty, it is worth developing a better understanding of their workings and components.

CONCLUSION

In conclusion, this study provides key findings on the organizational factors that partly explain the occupational psychological health of police officers who report having experienced a PPTE in the context of their duties. The quality of relationships between colleagues, job demand, and autonomy appears to be significantly related to the psychological well-being of these police officers. At the same time, the quality of the relationship with the superior and whether police officers are provided with support in the form of advice contribute to explaining their psychological distress in the workplace. In light of these findings, this study contributes to this field of science and practitioners' understanding of this problem.

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