

The influence of operational and organizational stressors on the well-being of municipal police officers

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KEY WORDS

Police officers; operational stressors; organizational stressors; burnout; psychosomatic symptoms

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Operatori di polizia; stressor operativi; stressor organizzativi; burnout; sintomi psico-somatici

SUMMARY

Background: *Helping professions are at a high risk of developing occupational stress that can cause negative effects at individual and organizational levels.* **Objectives:** *This article attempts to examine the presence of operational and organizational stressors as potential predictors of burnout and psychosomatic symptoms among municipal police officers.* **Methods:** *A cross-sectional study of municipal police officers working in a town in Northern Italy was conducted. A self-report questionnaire was administered to all the officers serving the population of this town (N = 88).* **Results:** *Regression analyses revealed that organizational stressors affected emotional exhaustion and cynicism, whereas operational stressors were associated with psychosomatic symptoms.* **Conclusions:** *These findings suggest that operational and organizational stressors can affect the level of psychosomatic well-being of municipal police officers, but at the same time reveal the existence of their specific effects on the outcome variables. In this perspective, individual psychological support and group interventions should be carried out not only to deal with traumatic events but also to manage chronic stressors. This is one of the first studies in Italy investigating municipal police officers' well-being as potentially related to specific job stressors. Nevertheless, our results are based on police officers employed by the municipality of a single town; it would be therefore useful to extend the research to larger samples.*

RIASSUNTO

«L'influenza degli stressor operativi e organizzativi sul benessere degli operatori di polizia locale. Introduzione: *Coloro che svolgono professioni d'aiuto sono esposti ad un elevato rischio di sviluppare stress occupazionale che, a propria volta, può produrre effetti negativi a livello sia individuale sia organizzativo.* **Obiettivi:** *Questo articolo intende esaminare la presenza di stressor operativi e organizzativi, quali potenziali predittori di burnout e di sintomi psico-somatici fra gli operatori di polizia locale.* **Metodi:** *È stato condotto uno studio trasversale sugli operatori di polizia locale di una città del Nord Italia. A tutti gli operatori del corpo di polizia locale impiegati presso questo comune è stato somministrato un questionario self-report (N=88).* **Risultati:** *Le analisi di regressione hanno posto in evidenza come gli stressor organizzativi siano in grado di predire l'esaurimento emotivo e il cinismo, mentre gli stressor organizzativi influenzino i sintomi psico-somatici.* **Conclusioni:** *I risultati ottenuti suggeriscono come gli stressor operativi e organizzativi possano determinare i livelli di benessere psico-somatici degli operatori di*

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polizia locale, ma contemporaneamente mostrano l'esistenza di effetti specifici che essi esercitano sulle variabili dipendenti. In questa prospettiva, il supporto psicologico individuale e gli interventi di carattere collettivo dovrebbero essere condotti per far fronte non solo ad eventi di natura traumatica, ma anche alle fonti di stress cronico. Questo studio rappresenta una delle prime ricerche condotte in Italia finalizzate ad analizzare il benessere degli operatori di polizia locale, come potenzialmente determinato da specifici stressor lavorativi. Tuttavia, i risultati sono stati ottenuti tramite operatori di polizia impiegati presso il comune di un'unica città, pertanto sarebbe auspicabile poter estendere la ricerca a campioni appartenenti a città diverse e di dimensioni maggiori.

INTRODUCTION

Occupational stress has been widely studied because of the negative effects that it may cause especially among "high-risk" professionals (e.g., firefighters, social workers and nurses) in terms of physiological and psychological stress (26, 50). Indeed, the relationship between work-related stressors and strains (i.e., outcomes associated with stress) is well documented in the literature (68). As suggested by McCreary and Thompson (39), stress may produce negative effects on individuals, worsening their state of well-being. This may, in turn, produce negative organizational consequences, such as lower levels of job satisfaction and professional efficiency, higher absenteeism and turnover, and lower service quality (2, 19, 26, 50, 68). Even though not many studies have investigated policing-specific strains, one can expect police officers to show symptoms strictly associated with their job. Some of the work conditions that may result in negative effects are typical of this profession - e.g. actual or potentially dangerous encounters - and others are more generally social and organizational aspects of the work context.

This study takes further McCreary and Thompson's (39) suggestion to examine the association between policing-specific stressors - operational and organizational stressors - and officers' self-reported strains - burnout and psychosomatic malaise. Our research was carried out on officers in service in the municipal department of a small town whereas most of the previous studies were conducted on the police of large urban and suburban forces (53). Other studies have been carried out on more general samples of Public Administration employees

(20). The present topic is of interest because some researchers have argued that stressors typical of small-town contexts are different from those found in large urban areas (14). In this regard, research has shown the existence of specific stressors for police officers belonging to small departments, for instance lack of funds, little training, old equipment, lack of resources and fewer colleagues (11, 41, 44, 53, 56, 67). Moreover, officers serving a small town are also highly visible to its citizens, and the need to enforce the law on friends and acquaintances could be very stressful (42).

Police Stressors

Police stress has been defined as an imbalance between what is required of an officer and what the officer is able to give, under conditions where failure may have dire consequences (45).

Police stress can produce significant effects on job performance, family life, and quality of service provided, as well as health complaints, both physical and mental (25). There is much scientific evidence of the high rates of psychophysical disorders for police officers, when they are compared to the general population, such as elevated heart rate and blood pressure, anxiety and depression (63, 64). One of the main sources of acute stress for police is the direct and/or indirect exposure to violent events, such as killing or injury of colleagues (25). Ordinary tasks of patrol work - such as responding to service calls - are more frequent for municipal police officers, if compared to critical and traumatic events (60), and they can produce chronic stress. Daily stressful situations can indeed give rise to negative effects on officers' lives (49) such as physi-

cal and psychological disorders, substance abuse, burnout, and social dysfunctions.

The sources of pressure, i.e. stressors, for police may be classified into two main categories: operational and organizational (39). Operational stressors are factors inherent to police (65) associated with performing the job, and refer to events commonly occurring during police-related tasks (for instance, exposure to crisis incidents, danger, violence, and possible death; 16, 25); organizational stressors are concerned with the organization and culture within which police officers are performing their job (39), such as policies and practices of the police department (e.g. excessive paperwork, bureaucracy, insufficient training and inadequate equipment; 16). Operational stressors can be acute or chronic. Examples of acute stressors are the risk of being injured or witnessing traumatic events, while chronic stressors include for instance overload and shift work. Each type of stressor may influence specific outcomes: organizational stressors may produce hostile reactions and alienation, whereas operational stressors may worsen health conditions (16). In general, both organizational and operational stressors often result in negative physiological and psychological effects. The former include various psychosomatic disorders, such as sleeping problems and feelings of tension; psychological effects are mainly represented by burnout, but also by some other behavioural manifestations, such as isolation, aggression, excessive smoking and drinking.

Most of the existing police stress literature research is qualitative in nature, having used focus groups or individual interviews with officers (39), and also when a quantitative approach was adopted, the main objective was to examine the stressors common among many types of occupations, for example by means of wide-spanning questionnaires, such as the Occupational Stress Indicator (OSI; 13). These studies have indeed assessed only generic stressors and have failed to isolate factors that are unique to police forces. On the contrary, as suggested by McCreary and Thompson (39) it would be important to focus on stressors peculiar to highly stressful occupations. For this reason, the tools used for the present study include the Operational Police Stress Questionnaire (PSQ-Op; 39) and the

Organizational Police Stress Questionnaire (PSQ-Org; 39), used in order to evaluate specific police stressors. These tools allow assessment of the characteristics of the job itself (PSQ-Op) but also the organizational dimensions (PSQ-Org) that are recognized as playing an important role in the onset of police stress (7).

Burnout

Burnout represents a particular form of occupational stress that has been studied in relation to helping professions: in particular, police officers often experience higher rates of burnout than other professions (16). Because of its dysfunctional effects both on individuals and the community, it is usually investigated in the practical framework of finding effective solutions (28, 34).

Burnout could be defined as a psychological syndrome consisting of a prolonged individual response to chronic occupational stressors (35, 36). It cannot be ascribed to acute and traumatic events, but to chronic stressful work conditions. This syndrome is characterized by three dimensions: emotional exhaustion, depersonalization and professional inefficacy (46). Daily interactions with the public may produce a feeling of emotional exhaustion (31); maintaining a distance from people and decreasing investment in human relationships is a behavioural strategy often adopted to deal with the emotional overload (24, 37). As a result of this cynical attitude, helping professionals might be unable to achieve satisfying performance, which in turn may cause a low sense of personal accomplishment or a feeling of reduced professional efficacy (4, 30). Throughout the literature, many studies have demonstrated the presence of police burnout and its negative consequences in different countries (8, 28).

Operational and organizational stressors may cause various negative effects among police officers, such as reduced efficiency, absenteeism, excessive aggressiveness, alcoholism, marital or family problems and, more specifically, job burnout (59). Carrying out their duties, officers are often engaged in situations characterized by highly emotional demands, such as confrontations with citizens, use of force and various dangerous circum-

stances (21). These job characteristics can produce emotional dissonance, consisting of a structural discrepancy between actual feelings and emotional displays that are appropriate for the working context (24, 68). The more frequently officers are required to express emotions not aligned to their inner feelings, the greater the probability of developing burnout.

The Maslach Burnout Inventory-General Survey (MBI-GS; 42) is the most frequently used instrument to assess burnout among various occupational populations, and it could be used also among helping professions (51).

Psychosomatic Reactions

As an effect of trauma exposure, police officers may develop various symptoms, such as loss of sleep, emotional distancing from friends and family, hypervigilance and numbing. Fortunately, in most cases, these reactions are transitory and can be resolved through social support and conversation with family, friends and colleagues (10). However, as previously explained, also administrative and bureaucratic duties may be sources of stress (62) sometimes with more severe effects on police officers, if compared to traumatic but low-frequency events. Their constant presence in the work context can erode morale and resilience abilities (62). Therefore, routine police duties can significantly increase officers' vulnerability to stress, with negative effects on their psychosomatic well-being.

In this view, psychosomatic disorders could be considered as the effects deriving from exposure to operational and organizational stressors. Studying predictors of psychosomatic symptoms, organizational and management characteristics should be considered because they have been found to affect well-being, more than operational stressors (65). These findings suggest that police mental health programmes should not be focused exclusively on acute stressors (i.e. event-related interventions) but also on chronic stressors (i.e. organizational characteristics; 63).

In the present study the General Health Questionnaire-12 (GHQ-12; 22) was applied in order to assess psychosomatic malaise, in terms of symp-

toms that are typical of minor psychiatric disorders. This questionnaire is widely used in international literature research, and more so in studies on highly stressed populations such as healthcare workers (54).

AIMS

Many researchers have found consistent associations between stress and psychosomatic disorders (61). It has been demonstrated that the more stress people experience, the poorer their physical and psychological well-being, especially among helping professions (48, 50). In particular, the influence of occupational stress on psychosomatic complaints (such as burnout, post-traumatic stress disorder, short- and long-term illness) has been demonstrated among police officers (1, 8, 33, 38, 59). Concerning this topic, McCreary and Thompson (39) suggested further in-depth studies on the relationship that they found between police stressors and psychosomatic well-being.

The aim of the present study was to investigate the presence of relationships among occupational stressors, burnout and rates of psychosomatic well-being, using quantitative tools specifically developed for investigating municipal police officers. In particular, our aim was to test two hypotheses:

Hypothesis 1: operational and organizational stressors are related to burnout (exhaustion, depersonalization and professional inefficacy);

Hypothesis 2: operational and organizational stressors are related to psychosomatic complaints (general dysphoria, social dysfunction and loss of confidence).

METHODS

Participants and procedure

The data used in the current analysis are derived from a study that involved all the municipal police officers of a town in Northern Italy, of about 80.000 inhabitants. Italian municipal police officers are employed as administrative staff, but in practice

they carry out tasks very similar to those typical of the State police. Indeed, while having some bureaucratic and administrative duties in offices, most of their activities are carried out outside, in the town itself. More specifically, they are involved in directing traffic, providing assistance during road accidents, enforcing the law and maintaining public order. Italian municipal police officers also support State police and, more in general, law enforcement during difficult operations.

Study participants (table 1) were 88 police officers (return rate = 87.1%) working at the headquarters of the Local Police of the town. The return rate was high because the study was well known to the organization and had received a certain visibility. All employees were asked to fill in a paper-and-pencil questionnaire and demographic information was obtained.

The questionnaire was filled in during work time, in a separate and quiet place. A newsletter, prepared by mutual consent between university

researchers and organizational management, explained the goal of the study to the police officers.

The participants' group included 51 males (58%) and 37 women (42%). The participants' age ranged from 24 to 56 years with an average of 44 years ($SD = 6.6$). Mean work seniority was 14 years ($SD = 7.3$). Most of the participants (72.2%) were working as patrol officers, 68.2% of them followed work shifts and 94.3% were employed on a full-time permanent contract.

Measures

Two questionnaires were used in order to assess policing-specific stressors: the Police Stress Questionnaire-Operational (PSQ-Op; 39, Italian version by 55) and the Police Stress Questionnaire-Organizational (PSQ-Org; 39, Italian version by 55). They are self-report tools used to evaluate the occupational stressors specifically associated with police duties and work context. Organizational and operational stressors are assessed separately in order that the researchers have more flexibility when studying different aspects of police work, since it is possible to analyze operational or organizational stressors both separately and jointly (39). The PSQ-Op comprises 20 items (e.g. "Shift work", $\alpha=.95$) that assess duty-related stressors; the PSQ-Org also includes 20 items (e.g. "Dealing with supervisors", $\alpha=.96$) focused on aspects related to the work context and culture. The respondents are asked to indicate how much stress had been produced by each of the stressors presented in the past six months. For both the PSQ-Op and the PSQ-Org, the response scale is a seven-point Likert scale that indicates the rate of stress experienced (from 1 = no stress at all, to 7 = a lot of stress). High scores in PSQ-Op and PSQ-Org point to a higher risk of developing stress.

The Maslach Burnout Inventory-General Survey (MBI-GS, 48; Italian version by 6) is a self-report questionnaire used to determine the presence of job burnout; the 16 items are grouped into three subscales that assess the following dimensions: emotional exhaustion (5 items, e.g. "I feel emotionally drained from my work", $\alpha=.88$), depersonaliza-

Table 1 - Sample demographics (N=88)

Demographic	N.	(%)
Gender		
Males	51	58.0
Females	37	42.0
Age		
Up to 40	31	35.2
41-47	29	33.0
Over 47	28	31.8
Work seniority		
Up to 10	31	36.5
11-17	29	34.1
Over 17	25	29.4
Educational level		
Secondary school	75	85.2
University degree	13	14.8
Work position		
Officer	8	9.1
Patrol officer	64	72.7
Office-worker	16	18.2
Working time		
Shifts (07-13 h; 13-19h ; 19-01 h; 01-07 h)	60	68.2
Office hours	28	31.8
Employment contract		
Permanent full time contract	83	94.3
Permanent part time contract	5	5.7

tion (5 items, e.g. "I have become less interested in my work since I started this job", $\alpha=.77$), and professional efficacy (6 items, e.g. "In my opinion, I am good at my job", $\alpha=.72$). The responses are based on a seven-point Likert scale that indicates the frequency of experiencing each burnout manifestation (from 0 = never, to 6 = daily). People at risk of developing burnout usually obtain high scores on exhaustion and depersonalization scales, and a low score on the efficacy scale.

The General Health Questionnaire-12 (GHQ-12, 22; Italian version by 12) was used to collect psychosomatic symptoms as self-reported by the officers. It is available in several versions, but the 12-item version is the most popular form because of its good statistical properties (22). Some previous studies adopted the two- or three-factor solutions for the GHQ-12, but in the present research the three-factor solution was chosen because it seemed to be the best fit across sex, age and different socio-cultural contexts (12, 57). The subscale of social dysfunction evaluates difficulties in social performing and in facing problems (6 items, e.g., "Have you recently felt you couldn't overcome your difficulties?", $\alpha=.85$), the general dysphoria subscale includes items related to the presence of psychosomatic symptoms (4 items, e.g. "Have you recently lost much sleep through worry?", $\alpha=.82$) and the subscale loss of confidence refers to low self-esteem (2 items, e.g. "Have you recently being losing confidence in yourself?", $\alpha=.89$). Responses are rated on a four-point Likert scale that assesses how much the individual's present mental state differs from his/her usual state. The scale is differently formulated for positive worded items (from 0 = better than usual/more so than usual, to 3 = much less than usual) and for negative worded items (from 0 = not at all, to 3 = much more than usual): the higher the scores in social dysfunction, general dysphoria and loss of confidence, the greater the psychosomatic malaise.

As potential confounders we included gender (dichotomous variable), age and work seniority (continuous variables), that were collected via a demographic questionnaire filled in by the participants.

Statistical analyses

The SPSS 19.0 software package for Windows was used to conduct all analyses. Before proceeding with the statistical analyses, preliminary computation of skewness and kurtosis indexes for the items of all scales were calculated. They showed normality distributions because values are set in the range $-1/+1$ (as suggested by 5, 17).

Descriptive statistics for continuous variables were calculated using mean and SD. Pearson's correlation analyses were conducted to examine the bivariate correlation among stressors (operational and organizational) and measures of well-being (burnout and psychosomatic complaints). Stepwise multiple linear regression analyses were then carried out to verify the influence exerted by stressors on well-being dimensions. A p -value < 0.05 was considered as statistically significant.

RESULTS

The means, standard deviations and intercorrelations, for the measures used in this study are shown in table 2. Cronbach's alphas for each scale were in the acceptable range, from a minimum of 0.72 to a maximum of 0.96, indicating high scale reliability.

Operational and organizational stressors were significantly and positively related to the burnout dimensions of emotional exhaustion and depersonalization; moreover, both stressors were significantly and positively related to all psychosomatic symptoms (for more details, see table 2). As may be seen in the correlation matrix displayed in table 2, the coefficients ranged from a low of 0.42 to a high of 0.70, indicating correlations from moderate to strong among the considered scales, except for professional inefficacy that was not related to any other variable.

Stepwise multiple regression analyses were conducted to determine the amount of variance that operational and organizational stressors explain in each of the burnout dimensions (table 3) and in psychosomatic symptoms (table 4), controlling for gender, age and work seniority. At first, regressions have been carried out including only potential con-

Table 2 - Means, Standard Deviations, Internal Reliabilities and Intercorrelations of the considered variables

Variable	Mean (SD)	1	2	3	4	5	6	7
1. Operational stress	3.67 (1.32)	-	-	-	-	-	-	-
2. Organizational stress	3.60 (1.39)	.77**	-	-	-	-	-	-
3. Emotional exhaustion	2.70 (1.38)	.64**	.53**	-	-	-	-	-
4. Depersonalization	2.61 (1.41)	.50**	.58**	.68**	-	-	-	-
5. Professional inefficacy ^a	1.59 (.89)	.01	-.04	-.13	.03	-	-	-
6. General dysphoria	1.34 (.76)	.70**	.42**	.44**	.33**	.17	-	-
7. Social dysfunction	1.24 (.50)	.57**	.45**	.47**	.54**	.15	.69**	-
8. Loss of confidence	.86 (.92)	.70**	.54**	.57**	.55**	.17	.72**	.80**

a. Scores of professional efficacy scale are reversed.

** $p < .01$.

Table 3. Stepwise linear regressions to test the association between operational and organizational stressors and dimensions of burnout

Stressors	Emotional exhaustion		Depersonalization		Professional inefficacy ^a	
	b (SE)	Beta	b (SE)	Beta	b (SE)	Beta
Gender						
model 1	-.19 (.32)	-.07	-.47 (.31)	-.17	.48 (.20)	.27*
model 2	.05 (.24)	.02	-.26 (.25)	-.10	.47 (.20)	.26*
Age						
model 1	.10 (.21)	.06	-.10 (.20)	-.06	.04 (.13)	.03
model 2	.38 (.16)	.22*	.07 (.17)	.04	.08 (.13)	.07
Work seniority						
model 1	-.10 (.21)	-.06	.06 (.20)	.04	-.06 (.13)	-.05
model 2	-.22 (.16)	-.13	-.04 (.16)	-.03	-.06 (.13)	-.05
Operational stress						
model 2	.56 (.16)	.49**	.13 (.17)	.12	.25 (.13)	.34
Organizational stress						
model 2	.25 (.14)	.25	.49 (.15)	.50**	-.206 (.118)	-.31
R^2						
model 1		.01		.03		.07
model 2		.48**		.37**		.11
Adjusted R^2						
model 1		-.03		-.01		.03
model 2		.45		.33		.05

a. Scores of professional efficacy scale are reversed.

* $p < .05$; ** $p < .01$.

Table 4. Stepwise linear regressions to test the association between operational and organizational stressors and psychosomatic symptoms

Stressors	Social dysfunction		General dysphoria		Less of confidence	
	b (SE)	Beta	b (SE)	Beta	b (SE)	Beta
Gender						
model 1	.05 (.11)	.051	.25 (.17)	.17	-.04 (.21)	.02 -
model 2	.12 (.10)	.122	.36 (.13)	.24**	.11 (.16)	.06
Age						
model 1	.02 (.07)	.035	-.10 (.11)	-.11	-.21 (.14)	-.19
model 2	.10 (.06)	.162	.06 (.09)	.06	-.04 (.11)	-.03
Work seniority						
model 1	-.07 (.07)	-.110	.02 (.11)	.02	.01 (.14)	.01
model 2	-.10 (.06)	-.168	-.04 (.09)	-.04	-.06 (.11)	-.05
Operational stress						
model 2	.14 (.06)	.340*	.40 (.09)	.65**	.35 (.11)	.47**
Organizational stress						
model 2	.09 (.06)	.252	.01 (.08)	.02	.14 (.10)	.21
R^2						
model 1		.01		.05		.03
model 2		.31**		.47**		.43**
Adjusted R^2						
model 1		-.03		.009		-.01
model 2		.27		.433		.39

* $p < .05$; ** $p < .01$.

founders (model 1), then psychological variables, i.e. operational and organizational stress (model 2), have been included in order to verify their real influence on dependent variables. For each dimension of burnout (table 3), an independent regression model was carried out. Operational stressors were positively associated with emotional exhaustion, and organizational stressors with depersonalization. A similar regression model was carried out for psychosomatic symptoms (table 4), controlling for gender, age and work seniority. Psychosomatic symptoms were related only to operational stressors: there were significant associations with general dysphoria, loss of confidence and, to a lesser extent, social dysfunction.

DISCUSSION

The central aim of the present study among municipal police officers was to examine the relationship between operational and organizational stressors and burnout and psychosomatic symptoms. Even if partially, both our hypotheses were supported by the study findings.

Generally speaking, officers reported relatively low burnout manifestations. The mean scores on emotional exhaustion, depersonalization and professional inefficiency subscales were lower than the central point of the response scale used in the MBI-GS (42). That is, police officers who took part in the present research seem not to be at risk of devel-

oping burnout. Also with regard to psychosomatic symptoms, all the scores obtained in the GHQ-12 subscales (22) were lower than the central point of the response scale used, suggesting a general state of well-being. Self-awareness of doing a job that is socially important and of giving a significant contribution to the community might protect officers from the risk of developing health complaints (29). People who believe that their lives are meaningful and that their professional work is useful usually display higher levels of health status (43).

On the contrary, operational and organizational stressors scores were slightly higher than the central point of the response scale. This result may suggest that police officers involved in the present study are potentially exposed to the risk of developing occupational stress. More in detail, the PSQ-Op score was slightly higher than the PSQ-Org score, a finding opposite to that found in other studies (see for example 62). Moreover, previous research (53) has found that factors relating to work duties and interpersonal relationships within the department could be more problematic for officers, if compared to organizational aspects. This was also confirmed by our regression results: in fact, operational stressors were significantly associated with well-being dimensions (see table 4). Therefore, even if participants do not show worrying malaise symptoms, it is recommended to take job stressors under control, in order to further protect police officers from the risk of developing burnout and health complaints in the future.

The regression analyses pointed to the existence of a relationship between operational, organizational stressors and burnout and psychosomatic symptoms. More specifically, with regard to burnout dimensions, operational stressors were associated with emotional exhaustion, whereas organizational stressors were related to depersonalization. As demonstrated by previous research (see 3, 15) the feeling of being depleted of one's emotional and physical resources seems to be mainly determined by operational aspects that are related to job tasks and duties and referred to specific aspects such as workload and problematic contacts with users; whereas, the feeling of being detached from people should be mainly ascribed to organizational aspects, especially

when organizational culture do not promote positive and clear human relationship. All the psychosomatic symptoms were strongly associated with operational stressors: psychophysical symptoms, difficulties related to social functioning and low self-esteem were influenced by aspects related to job characteristics and duties. Operational stressors include aspects such as over-time demands, exposure to traumatic events and occupation-related health issues, therefore we can suppose that their association with psychosomatic symptoms could be plausible.

Taken together, our findings suggest that operational and organizational stressors can exert influence on psychological and physiological well-being, as also demonstrated by previous studies (e.g., 1, 8, 33, 38, 59).

From a methodological point of view, the current study confirms what was previously suggested by McCreary and Thompson (39), i.e., that the PSQ-Op and the PSQ-Org may represent an advance over pre-existing measures because they allow for studying policing-specific stressors. Indeed, some researchers have focused their attention on the general topic of stress among police officers, but very few studies focused on policing-specific operational and organizational stressors. Moreover, much research has been carried out in order to evaluate the well-being of law enforcement, but the municipal police force has received less attention in the international literature. The present study aimed at filling these gaps: in fact, it is the first Italian study to analyze municipal police officers' well-being as potentially related to specific operational and organizational stressors.

Study limitations

One significant limitation of the present study is the cross-sectional design, which does not allow interpretation of the postulated relationships among variables in a causal perspective (63). Therefore, it would be useful to conduct a longitudinal study, as suggested by previous researchers (e.g., 53), with at least one follow-up assessment of the same participants, in order to give more support to our hypotheses. Longitudinal studies would make it possible to verify the true sources of burnout and psy-

chomatic symptoms, and therefore confirm that the onset of these pathological manifestations can effectively be attributed to both operational and organizational stressors. Nor does the cross-sectional design permit verifying the existence of a reverse causation mechanism. We cannot exclude that psychosomatic complaints could facilitate the perception of higher occupational stress. Therefore, conducting a longitudinal design would provide better support for the normal causation hypothesis.

However, the most important limitation to the generalization of our findings is related to the low size of the participants' group. As the results are based on police officers working in a small town in Northern Italy, the present study might serve as a pilot study that could be extended to larger departments and, if possible, to a national sample (63). So, even if the results of this study should be interpreted with caution, they raise interesting questions for future research. For example, administering the same tools set to police officers belonging to larger urban forces would allow verifying the presence of differences between stressors typical of the two different contexts.

Finally, the outcomes were evaluated by means of self-report tools, but they might be more complete if combined with objective and direct physiological measures of stress, with observations in the field (see 32) or with qualitative data collected through individual interviews or focus groups. Indeed, the exclusive use of self-report scales allows determination of the perception of stress by police officers, but direct physiological indexes (for example, heart rate, blood pressure, blood flow to the muscles and levels of cortisol and thyroxin) could provide more objective information on the actual levels of stress (9).

The last limitation of our study regards the common method variance bias: in future research the *Harman's single factor test* (23) could be used in order to control the presence of the common method variance bias (58).

Practical implications

From an application perspective, a central issue related to the improvement of police officers' well-

being regards which effective interventions might be developed. Most of the studies on this topic aimed at reducing or preventing the risk of developing psychosomatic complaints after exposure to critical and traumatic events (40). While not ignoring the importance of these post-event interventions (as suggested, for instance, by 7), we would focus attention also on the management of chronic and organizational stressors. In this perspective, individual and, above all, group interventions with psychological support should be carried out regularly, and not only after exposure to traumatic events. Therefore, police officers should be supported via specific action aimed at reducing the risk of developing long-term effects, such as absenteeism, early retirement, depression and substance abuse (64). Because exposure to emotionally demanding situations is typical for helping professions, regular psychological support, for example disguised as group counselling, might be useful in order to facilitate the development of effective individual and collective coping abilities. Indeed, some previous research has demonstrated the efficacy of group interventions in decreasing stress and burnout (18). Moreover, structured programmes covering operational and organizational stressors, but also life-events, including regular screening for psychosomatic symptoms, might be effective (27, 47, 65).

NO POTENTIAL CONFLICT OF INTEREST RELEVANT TO THIS ARTICLE WAS REPORTED

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