The Mediating Role of Social Support in the Relationship between Operational Stress and Well-Being in Military Personnel

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Abstract: *Introduction. Little is known about the activity of the military gendarmes in south-eastern Europe, which involves managing high-risk missions. In order to understand the factors underlying well-being in this population, the aim was to examine the relationship between operational stress and well-being, as well as the mediating role of social support and coping strategies. Methodology. This a cross-sectional corellational study of the relationship between perceived operational stress and well-being. Moreover, the mediating role of social support and coping strategies (seeking social support, positive reassessment, self-control) was examined. Results. Stress has a significant negative effect on well-being. Social support, but not the coping strategies, acts as a mediator of the relationship between operational stress and well-being. Discussions and conclusions. The results have implications for improving the overall well-being of military gendarmes, by developing intervention strategies focused on raising awareness of the importance of social support, increasing perceptions of available support, understanding supplier value and developing skills to provide support within the military organization.*

Keywords: *operational stress; well-being; social support; coping strategies; self-control; military gendarmes.*

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1. Introduction

Constant exposure to stressors has significant effects on the health of emergency service personnel (Nielsen et al., 2011). In particular, the specific tasks and responsibilities of public safety and order personnel place them in countless stressful situations, which can have a significant impact on mental health and performance (Garbarino et al., 2013). The specialized literature identifies two categories of factors that police officers face, with an impact on their well-being and mental health: operational and organizational stressors. They generate various problems, such as depression, anxiety, burnout (Garbarino et al., 2013), PTSD (Violanti et al., 2007) or family problems (Kapade-Nikam & Shaikh, 2014). Organizational stress factors refer to work schedule, high workload or organizational changes (Baron & Kenny, 1986; Purba & Demou, 2019). The operational stress factors are found in the specific activity of the military gendarmerie, including: missions with a high degree of risk, permanent confrontation with criminals, interaction with citizens and their problems, the risk of being injured, exposure to hostile attitudes, long hours, over normal working hours.

Studies focused on analyzing police activity indentified the significant but smaller impact of organizational stress on well-being, compared operational stress (Brough, 2004; Brough & O'Driscoll, 2005). Operational stress, to which this study refers, has significant negative effects on the well-being of military and police officers, leading to increased alcohol consumption, reduced productivity, difficult relationships with superiors and colleagues, and reduced performance (Williamson et al., 2018).

In identifying the resources that help prevent stress impact, the literature refers to social support, either as a direct contributor to well-being (direct effect model, Wheaton, 1985), or as a moderator of the stress-well-being relationship (hypothesis buffer, Cohen & Wills, 1985). When faced with stressors, high social support has been associated with increased well-being and reduced mental health problems (Beehr & McGrath, 1992). Social support is a stress-reducing factor (Etzion, 1984), being able to damage its direct association with well-being (Chao, 2012). However, the role of social support as a response to the stressors faced by military gendarmes has not been analyzed to date.

When faced with stressors, soldiers can adopt both adaptive and maladaptive coping strategies (Hart et al., 1994). The study investigates the mediating role of coping strategies: positive reappraisal (by identifying the positive effects of stress factors), the search for social support (in the form of informational, tangible or emotional support) and self-control in the

management of actions and emotions (Folkman & Lazarus, 1986) in the case of military gendarmes confrunted with operational stress.

2. Research overview and hypotheses

Based on the previously mentioned theoretical framework, but taking into account the lack of research investigating the impact of stress on the well-being of military gendarmes, we formulated the following hypotheses:

Hypothesis H1: Operational stress perceived by military gendarmes significantly negatively predicts well-being.

Hypotheses H2: Social support mediates the relationship between operational stress perceived by military gendarmes and well-being.

Hypothesis H3: Positive refocusing, seeking social support and self-control mediate the relationship between military gendarmes' operational stress and well-being.

3. Method

3.1. Measures

Operational Police Stress Questionnaire (PSQ-OP, McCreary et al. 2013)- instrument composed of 20 items, evaluates the stress factors associated with the performance of specific activities, missions. Each item ("Risk of being injured at work") is rated on a 7-point scale ranging from 1 ("not at all stressful") to 7 ("very stressful") with 4 indicating moderate stress. Cronbach's alpha for this study was .96.

The Ways of Coping Scale (WCS, Folkamn & Lazarus, 1985) - instrument composed of 66 items, structured in the following dimensions: (1) confrontational coping, measured by items such as: "I did something that I didn't think would work, but the little did I do something"; (2) distancing, measured by items such as "I continued as if nothing had happened"; (3) self-control, measured by items such as "I tried to hide my emotions"; (4) seeking social support, measured by items such as "I accepted understanding and sympathy from someone"; (5) acceptance of responsibility, measured by items such as "I apologized or did something to make up for it"; (6) avoidance, measured by items such as "I slept more than usual"; (7) problem solving, as measured by items such as "I made a plan of action and followed it"; (8) positive refocusing, measured by items such as "I was inspired to do something creative." Items are scored on a 4-point Likert scale from 0 (Not at all used) to 3 (Very much used). In this study only the adaptive coping strategies were used in the analysis: seeking social support, positive refocusing and self-control. Cronbach's alphas for this coping strategies

ranged bewteen .78 and .88 (self-control scale: .88; seeking social support: 78; positive refocusing: .852).

Psychological Well-Being Scale (*PWBS, Ryff, 1989*) - instrument made up of 42 items divided into 6 subscales: autonomy ("I trust my opinions even if they are contrary to the general opinion"), control over the environment ("I managed to build my a home and a lifestyle that is to my liking"), personal development ("I think it's important to have new experiences that challenge the way you think about the world"), positive relationships with others ("I like personal and shared conversations with family members or friends"), purpose in life ("I like to make plans for the future and make them come true") and self-acceptance ("The past had its ups and downs, but in general I would not want to exchange") and score on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Cronbach's alpha for this study was .88.

Interpersonal Support Evaluation List (*ISEL, Cohen et al., 1985*) measures the functional components of social support and consists of 40 items. Cronbach's alpha for this study was .85.

3.2. Procedure

The study involved testing individually according to individual consent. The research objectives were communicated to the subjects and anonymity and confidentiality were ensured. Subjects were informed of the possibility to withdraw from the studio at any time.

The study procedure and the instruments administered were fully compliant with the Declaration of Helsinki and the University's Code of Ethics.

3.3. Participants

The sample consisted of 210 military gendarmes, 202 men (96.19%), 8 women (16.8%). The average age of the participants was 38.52 years, and the standard deviation was SD= 8.92.

3.4. Statistical analysis

3.4.1. Preliminary analysis

The first step was represented by the descriptive and correlational analyzes made using SPSS 28.0.1.0 software. We calculated means, standard deviations, and Pearson correlations between study variables. The second step proposed and analyzed two mediation models using Model 4 (Hayes, 2018) of Process version 4.0 with IBM SPSS 28. We adopted 5000 bootstrap samples by constructing bootstrap-based confidence intervals to estimate

intervals of 95% confidence (Hayes, 2017). Confidence intervals that do not include zero indicate significant effects (Hayes & Scharkow, 2013). Mediation analysis was conducted to verify the mediating role of social support and coping strategies: social support seeking, positive refocusing, and self-control in the relationship between operational stress and well-being.

The means and standard deviations for the main variables, together with the Pearson correlation coefficients can be consulted in the table below - Table no.1. The results show a number of significant correlations. Operational stress correlates significantly negatively with well-being (r= -0.365, p < 0.01), social support (r= -0.269, p < 0.01), positive refocusing (r= -0.291, p< 0.01), seeking social support (r=-0.230, p < 0.01) and self-control (r=-0.306, p < 0.01). Social support correlates significantly positively with well-being (r=0.342, p < 0.01).

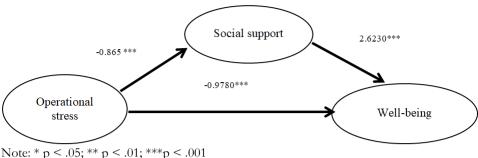**Table 1 -** Pearson correlations among the variables of the study

Variable	Measures		Correlations					
	M	*SD*	*1*	*2*	*3*	*4*	*5*	*6*
1. Operational stress	36.17	18.38	1	-.365**	-.269**	-.291**	-.230**	-.306**
2. Well- being	105.50	60.71	-.365**	1	.342**	.216**	.174*	.272**
3. Social support	29.20	6.15	-.259**	.342**	1	.103	.276**	.121
4. Positive refocusing	16.58	3.21	-.291**	.216**	.103	1	.265**	.452**
5. Seeking social support	14.46	2.80	-.230**	.174*	.276**	.265**	1	.211**
6. Self control	16.42	3.51	-.306**	.272**	.121	.452**	.211**	1

Note.
**. Correlation is significant at the 0.01 level (2-tailed); *. Correlation is significant at the 0.05 level (2-tailed).
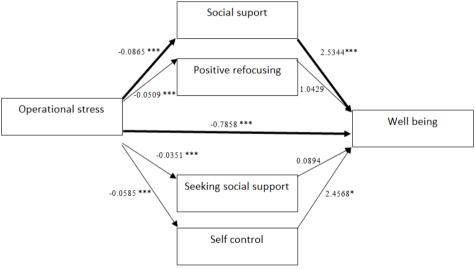*Source: Author's own conception*

3.4.2. Mediation analysis

Note: * p < .05; ** p < .01; ***p < .001
Source: Author's own conception

Figure 1 - Mediation analysis: operational stress- well being, with social support as a mediator

Note: * p < .05; ** p < .01; ***p < .001
Source: Author's own conception

Figure 2 - Mediation analysis: operational stress- well being, with social support, positive refocusing, seeking social support and self- control as mediators

The first model of the study tested the predictive effect of operational stress on well-being and the mediating role of social support. The second model of the study tested both the predictive effect of operational stress on well-being and the mediating role of social support and coping strategies: social support seeking, positive refocusing, and self-

control. Multiple regression analysis was performed to estimate the components of the mediation model.

For the first and the second models, the direct effect of operational stress on well-being was statistically significant and negative (β = -0.9780; p<.001 and, respectively, β = -0.7858; p<.001), confirming the first hypothesis H1.

In the first model, the relationship between operational stress and well-being was partially mediated by social support, confirming hypothesis H2. (figure 1). Both the direct effect of operational stress (c' = -0.7858; 95% CI [-1.2277; -.3438) and the indirect effect of social support (a1*b1 = -.4192; 95% CI [-.6647; - .1710]) are statistically significant because the confidence interval does not include 0. This demonstrates that social support partially mediates the relationship between organizational stress and well-being, as the direct path still remains significant. Therefore, hypothesis H2 is confirmed.

In the second model, the relationship between operational stress and well-being was partially mediated by social support, confirming hypothesis H3. (figure 2). The indirect effects of positive refocusing (a2*b2 = -.0531; 95% CI [-.01993; .0838]), seeking social support (a3*b3 = -.0031; 95% CI [-.1157; .1308] and self-control (a4*b4 = -.1436; 95% CI [-.3160; .0055] are statistically insignificant because the confidence interval includes 0. Therefore, hypothesis H3 is rejected.

Also, in the second model, the results showed that operational stress significantly negatively predicted social support (β = -0.0865; p<.001), positive refocusing (β =- 0.0509; p<.001), seeking social support (β = -0.0351; p<.001) and self-control (β = -0.0585; p<.001).

4. Discussion

Through the two mediation models analyzed by the present study, both the significantly negative effect of operational stress on well-being and the protective role of social support are demonstrated. Social support have a mediating role in the relationship between stress and well-being, which turns it into an important external resource of the military gendarmerie in the confrontation with specific work risks. But adaptive coping strategies, positive reappraisal, the search for social support, and self-control does not explain the link between operational stress on well-being.

The stress associated with long working hours, overloading with tasks, the risk of being injured or frequent exposure to anti-social acts directly affects the well-being of military gendarmes. The result is in agreement with previous research that mentioned operational factors as an

important source of stress for personnel working in the field of public order and safety (Violanti et al., 2016), being significantly associated with the well-being of the military (McDougall & Drummond, 2010) and leading to police officer burnout and dissatisfaction (Gershon, 2000).

A protective factor that can mitigate the negative effects of stress on the well-being of military gendarmes is social support. Military gendarmerie who enjoy the support of the people they belong to, both family and friends or colleagues, experience a lower level of operational stress and have a higher state of well-being, compared to soldiers who do not enjoy social support. Social support has a significant positive effect on well-being. This result provides a complement to previous studies by referring to the gendarmerie military population, along with those that mentioned the significant predictive effect of social support on well-being, among police personnel (Rodwell et al., 2011) or that of security services emergency (Shakespeare-Finch et al., 2015). Operational stress correlates significantly negatively with social support. Social support is thus an external resource with a protective role, offering military gendarmerie an adaptive threat in the sense of reducing the tension associated with specific missions. The sense of belonging provided to military gendarmes by social support can facilitate beneficial communication for managing stressors and improving well-being.

The mediation of coping strategies was found to be non-significant. In the case of military gendarmes, a significant partial mediation of social support was preserved. Reducing the negative effect of stress factors can be done both through the direct action of social support and through the buffering effect (Beehr et al., 1990; Cohen & Wills, 1985). Emotional and tangible social support provides supportive relationships that mitigate the effects of potentially traumatic events specific to professional activity (Beehr et al., 1990).

The study has important practical implications by raising awareness of the need to develop intervention programs in order to strengt the social support network of military gendarmes, as well as to educate the support behavior. The psychological well-being of military gendarmes can be supported by an organizational culture of mutual support, provided by managers and mental health specialists, as well as by offering strategies to manage negative behavior or stressful situations at work.

5. Limitations and future directions

First of all, the data collection was carried out through quantitative measurements, by administering some self-report scales, which limits the complex investigation of the association between the analyzed variables.

Future studies should therefore be oriented towards dynamic measurements, which also address qualitative aspects in the nuanced understanding of the types of social support used by military gendarmes and in investigating its relationship with other variables that can be associated with well-being. Second, the obtained results must be interpreted in the context of the sample represented by a single military unit. Future studies can be extended to other public safety and order workers. Also, future research could analyze the cultural implications, given the military's mistrust of mental health professionals and the difficulty of investigating stress at the level of strong organizational cultures, where resilient personalities operate who consider the display of difficulties a sign of weakness.

6. Conclusion

This paper investigates how the stress associated with frequent high-risk missions affects the well-being of military gendarmes. Considering the fundamental role that this category of personnel has for maintaining public order and safety, the results obtained are of particular importance. First, this research claims that operational stress significantly negatively predicts the well-being of military gendarmes. Second, the results show that social support significantly mediates the relationship between operational stress and well-being, but not the adaptive coping strategies. Social support becomes an important external resource, with the help of which the military gendarmerie can mitigate or reduce the negative impact of operational stress.

Acknowledgement

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