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Daily stress and coping among Emergency Response Officers: a case study

Abstract

Purpose: Police in Europe are facing increased demands and diminished resources, and this is particularly prominent among Emergency Response Officers (EROs) working in poorer countries such as Portugal. Considering that daily stress and limited coping skills can result in detrimental consequences for officers' health and society welfare, this study investigated stress and coping among Portuguese EROs.

Design: EROs completed daily diaries over 11 working days. Each diary entry included an open-ended stressor, coping section and a Likert-type scale to evaluate coping effectiveness. Data was analyzed using inductive and deductive content analysis procedures. The frequency of stressors, coping and coping effectiveness were calculated.

Findings: EROs reported facing more operational stressors, particularly public disorder situations. However, gun situations were perceived as the most intense stressor. Emotion-focused coping (i.e., peer support) was more used than problem-focused. Despite variation in coping effectiveness in accordance to stressor experienced, longitudinal analysis suggests that PF coping is more effective.

Research limitations/implications: Longitudinal methodologies should contemplate stress appraisal and coping effectiveness in order to fully understand stress and coping. Future studies should employ this methodology at a larger scale and over longer periods.

Practical implications: Intervention programs for EROs should be multidimensional, targeting work conditions and resources, stress management, and coping effectiveness.

Originality/value: Findings provide strong recommendations for future research and applied implications for stress prevention and effective coping interventions.

24 **Keywords:** stress, coping, diary methodology, police forces

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International Journal of Emergency Services

47 **Daily stress and coping among Emergency Response Officers: a case study**

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49 Stress is an inevitable factor in life, but coping plays an important role in modifying
50 stress responses. Police work is one of the most stressful occupations (Strahler and Ziegert,
51 2015). Considering their strong responsibility toward society security maintenance, police
52 officers are constantly under pressure, by being exposed to multiple stressors and uncertainty and
53 they have to respond to problems, typically without sufficient warning or preparation time
54 (Kitaeff, 2011). This is particularly more evident among Emergency Response Officers (EROs),
55 since they are in the first line ready to respond to any emergency situation.

56 The ability to manage stressful events is called coping. According to Lazarus and
57 Folkman (1984) coping is a process that involves cognitive and behavioral efforts to manage
58 stress. According to some researchers in the area of occupational health (Anshel *et al.*, 2013)
59 police officers seems to have limited coping abilities. *In other words, the use of ineffective*
60 *coping could be explained by the highly stressful work environment, lacking in cordial*
61 *professional relationships with supervisors and perceived low self-control (Anshel et al. 2013).*
62 *As suggested by Anshel (2000) the ineffective use of coping by police officers may be related*
63 *with the stereotypical view that any expression of stress or problems associated with the*
64 *policing job might be viewed as a personal weakness.*

65 Despite previous recommendations, police occupational health has been overlooked and
66 several limitations have been found in previous literature. *Particularly, the cross-sectional and*
67 *retrospective nature of study designs, the controversy in stress and coping process definition and*
68 *conceptualization and the diversity of police forces across Europe.* A possible solution to
69 overcome this gap is the use of qualitative and longitudinal methods, to capture the dynamic

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4 70 nature of stress and coping process in ecological settings (Dewe, 2001). Thus, the present study
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6 71 contemplated a diary methodology, based on the assumption that daily diaries give a better
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8 72 understanding of working behavior, since they go beyond traditional static models of human
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10 73 behavior, allowing for the comprehension of changing processes over time, such as stress and
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12 74 coping in the work contexts (Ohly *et al.*, 2010). It is important to note that this study does not
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14 75 intend to replace previous methodological traditions accomplishments, but otherwise aims to
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16 76 provide a deep insight about the potentialities of diary methods as a complementary longitudinal
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18 77 and qualitative method with promising results (Clarkson and Hodgkinson, 2007) particularly
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20 78 among police personnel. Thus, the current diary case study aims to (1) investigate the frequency
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22 79 and the appraisal of daily stressors (2) determine the preferred coping strategies and, (3)
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24 80 ascertain its effectiveness among EROs.
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32 **Transactional model of stress and coping**

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34 83 According to the transactional perspective from Lazarus and Folkman (1984) stress
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36 84 occurs when the individual perceives that the demands of a situation exceed individual resources.
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38 85 Hence, an event will only lead to a stressful response if it is perceived as being threatening to the
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40 86 person, depending on the individual's subjective perception. According to this model, stress and
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42 87 coping is a dynamic and recursive process that includes interactions between the environment,
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44 88 individual appraisal and efforts to cope with the implications originated by these events. The key
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46 89 issue in this model is the appraisal process. According to Lazarus (1990) there are two types of
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48 90 appraisal: Primary appraisal that encompasses the initial evaluation of the situation, where the
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50 91 person gives personal meaning to events in terms of harm, threat or challenge. When an event is
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52 92 perceived as negative in the primary appraisal process, the individual moves to a secondary
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4 93 appraisal, characterized by the evaluation of the individual's ability to cope with a situation, and
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6 94 whether or not the individual has the resources to deal with that situation. Secondary appraisal
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8 95 interacts with the primary appraisal to determine the emotional reaction to event (Lazarus, 2000).

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11 96 Considering that stress is an inevitable factor in life, it is coping that makes the difference
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13 97 in adaptation processes. According to Lazarus and Folkman (1984, p.141) coping is
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15 98 characterized by “constantly changing cognitive and behavioral efforts to manage specific
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17 99 external and/or internal demands that are appraised as taxing or exceeding the resources of the
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21 100 person”. The most popular taxonomy of coping was proposed by Folkman and Lazarus who
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23 101 described coping as either Problem-focused (PF) or Emotion-focused (EF). PF involves people’s
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25 102 efforts to deal with the situation (e.g., planning, information seeking or increasing efforts),
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27 103 whereas EF involves efforts to regulate the emotional distress associated with the situation (e.g.,
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30 104 mental withdrawal, minimizing and wishful thinking).

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32 105 Considering that research on coping is controversial, since some investigation suggested
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34 106 that EF coping is ineffective and increases stress but the opposite has also been described, it is
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36 107 important to consider coping effectiveness measures (Dewe *et al.*, 2010). According to the same
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38 108 authors, it is important to explore both primary and secondary appraisals in particular events, in
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41 109 order to understand why people use specific responses to stressors and whether they are in fact
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44 110 effective.

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48 112 **Stress and coping among police forces**

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51 113 Police work has been identified as one of the most stressful occupations in modern
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53 114 society (Maran *et al.*, 2015; Shane, 2013). European security organizations in particularly have
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56 115 been exposed to additional sources of stress, related with terrorist attacks and emigration. To face
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4 116 these increased demands, security organizations have to adapt quickly what may increase the
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6 117 potential to experience added work-related stress problems. Thus, causing a detrimental impact
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8 118 not only to the officer, but also to society (Stanley *et al.*, 2016). Police stress has been commonly
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10 119 categorized into two dimensions: organizational and operational (Huddleston *et al.*, 2007; Shane,
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12 120 2013). Organizational factors are related with bureaucracies and practices of the police
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14 121 institution (e.g., the quasi-military nature of police institutions), and operational stressors are
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16 122 associated with the unique nature of the work carried out by the officers while working in the
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18 123 field (e.g., shooting episodes). There is some evidence suggesting that organizational stressors
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20 124 are the best predictors of stress. As an example, a study conducted by Suresh *et al.* (2013)
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22 125 among 220 Indian police personnel aiming to examine police stressors cross-sectionally found
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24 126 that organizational stressors were more prevalent than task-oriented stressors. However, it is
25
26 127 important to note that in this particular study similarly to most research in this area, the role of
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28 128 the police is not clearly specified, which leads to a problem when understanding stressors
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30 129 typology among this population. The diversity of police forces and respective duties across
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32 130 European police impairs comparisons between countries (Vertovec, 2007). As an example,
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34 131 Portugal features numerous criminal police organizations, that can be classified according to
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36 132 several criteria (e.g., administration; territorial scope, internal security system inclusion, juridical
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38 133 nature and attributions). Previous evidence among Portuguese police forces suggests that the
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40 134 different roles officers play, result in the experience of distinct stressors (Gonçalo *et al.*, 2010).

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49 135 In response to stress, police uses a variety of coping strategies. According to some
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51 136 researchers, police personnel seem to have limited coping abilities (Anshel *et al.*, 2013).

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53 137 The literature is not unanimous on police coping preferences and abilities. As an example,
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55 138 some evidence suggests that police officers show a tendency to use more PF coping (e.g.,
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4 139 anticipated planning, dealing with problems immediately, priorities establishment) (Brown *et al.*,
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6 140 1996). However, other studies found support for the use of more EF coping (e.g., talk with
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8 141 colleagues, work more, keep things to themselves) (Alexander and Walker, 1994). Although
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10 142 these findings are important, they fail to indicate whether coping strategies used are the ones
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12 143 perceived to be effective.
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17 18 145 **Current study**

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20 146 The current case study sought to investigate: 1) frequency and the appraisal of daily
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22 147 stressors, 2) the coping strategies used to manage daily stressors, and 3) subjective evaluations of
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24 148 coping effectiveness among EROs. A diary research methodology was used following previous
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26 149 research recommendations across police science, stress and coping research (Segerstrom and
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28 150 Connor, 2012; van Gelderen *et al.*, 2016). The transactional perspective of stress and coping
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30 151 proposed by Lazarus and Folkman was the theoretical framework underpinning the study. As a
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32 152 result, instead of only investigating the typology of daily stressors, stress appraisal will also be
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34 153 considered to provide insights on level of stressfulness experienced (Anderson *et al.*, 2002).
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36 154 Furthermore, the way officers deal with stress will also be analyzed in a complementary way, by
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38 155 contemplating coping effectiveness (Lazarus and Folkman, 1984).
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44 156 To our knowledge this is the first study investigating stress, coping and coping
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46 157 effectiveness among police personnel using a daily diary. By adopting this methodology, the
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48 158 current paper promises to impact the occupational health literature in policing by overcoming
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50 159 previous studies limitations. Firstly, most of previous research has been retrospective and cross-
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52 160 sectional in nature, failing to analyze within-person daily stress fluctuations (Segerstrom and
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54 161 Connor, 2012). Secondly, research on stress rarely analyzes the appraisal of a situation and this
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4 162 information is crucial to understand stress experiences (Anderson *et al.*, 2002; Colwell *et al.*,
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6 163 2011). Thirdly, limited studies have contemplated coping effectiveness among police personnel,
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8 164 restricting conclusions on adaptive coping for the population. Finally, most policing studies fail
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10 165 to specify police force roles and duties involved, limiting generability of findings to other
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12 166 countries (Kaiseler *et al.*, 2016). Taking into considerations the particularities of the nature of the
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14 167 police job, it is believed that the current study will provide strong practical implications for stress
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16 168 prevention tailored for this specific population.
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169 **Method**

170 **Participants and Procedure**

171 Fourteen EROs from the National Security Police based in [Porto](#) city in Portugal
172 volunteered to participate in this study. [Regarding the criteria for participation, it was required](#)
173 [that participant's role was Emergency Response Officers.](#) All participants performed emergency
174 police duties, since they were part of a rapid intervention team that were called to intervene in
175 critical situations at any time. The age range was 30-45 years ($M = 35$, $SD = 5.3$), and they have
176 more than 5 years of experience in policing. All police officers worked in daily 8-hour shifts.

177 The study was approved by the University Ethics Committee. The project was presented
178 in a public session to the Police Commanders. Following this stage, instructions for the diary
179 procedure were given face-to-face by the first author and police officers were asked to complete
180 the appropriately date diary booklet at the end of each shift during 11 work days and instructed
181 not to complete the diary on the days off work. Participants were also instructed about the
182 confidentiality of their responses and it was explained that the diary was used only for research
183 purposes. After completing the diary, participants returned it to the researchers.

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185 **Materials**

186 A simple and portable paper and pencil format (A5 sized, 11 pages) was adopted.
187 Participants were asked to note the date of completion and full researcher contact details were
188 given to all officers, who were encouraged to use these whenever they need it. The diary booklet
189 consisted of four sections: a) an open-ended stressor boxes (Levy *et al.*, 2009) where participants
190 indicated the most stressful situation during their working day; b) a stress intensity Lickert-type
191 scale (Barnett *et al.*, 2005) to rate their primary appraisal, by indicating how much stress they
192 felt during the indicated situation on a 5-point Lickert-type scale (1 = *low* to 5 = *high*); c) an
193 open-ended coping responses section, where participants wrote what they did to manage the
194 indicated stressor and d) a perceived coping effectiveness Lickert-type scale (Nicholls *et al.*,
195 2006) to rate how effective their coping strategy was at managing the stressor on a 5-point
196 Lickert-type scale (1 = *ineffective* to 5 = *very effective*).

198 **Data analysis**

199 A qualitative and quantitative between-person variation analysis, based on an event-based
200 approach was conducted. The analysis procedure will be explained below taking in consideration
201 the different types of data: stressors and stress appraisal, coping and coping effectiveness. These
202 analyses are similar to previous research in the area of stress and coping (e.g., Levy *et al.*, 2009;
203 Nicholls *et al.*, 2005; 2006; Nicholls and Polman, 2007).

204 **Stressors and stress appraisal.**

205 The written open-ended responses were transcribed verbatim and subjected to an
206 inductive content analysis procedure as suggested by Maykut and Morehouse (1994). The data
207 was coded into stressors categories by the first author and then verified by the other authors (e.g.

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4 208 Nicholls and Polman, 2007). Then, stressors categories generated for stressor responses were
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6 209 categorized into more general dimensions labeled as Operational or Organizational Stressors as
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8 210 recommended in the literature (e.g., Violanti and Aron, 1995). For instance, “Some citizens tried
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10 211 to attack us” was classified as “Aggression Attempts” that was categorized as “Operational
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12 212 Stressors”. The frequency and stress appraisal was calculated considering the intensity and mean
13
14 213 intensity of each stressor. This approach is similar to previous research in the area of stress
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16 214 appraisal (e.g. Kaiseler *et al.*, 2009).

20 215 **Coping and coping effectiveness.**

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22 216 Data from the open-ended coping responses section were transcribed verbatim and
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24 217 subjected to an inductive content analysis (Maykut and Morehouse, 1994) and deductive content
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26 218 analysis procedure (Patton, 2002). The first phase of data analyzes was inductive. Similar
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28 219 coping strategies were grouped together as first-order themes and assigned a descriptive label. A
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30 220 rule of inclusion was provided for each theme. Similar first-order themes were grouped under
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32 221 more abstract labels as second-order themes (e.g. “Increased concentration on task” was assigned
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34 222 the rule of inclusion “refers to police officer trying to get focused on the task to cope” and was
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36 223 coded in the second order theme of “Active coping”). The second part of data analysis involved a
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38 224 deductive content analysis procedure. A discussion between the first and the second author was
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40 225 performed in order to verify the appropriateness and authenticity of the second-order themes
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42 226 (Patton, 2003). Following the modification of the coding scheme, there was 99,5% agreement.
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44 227 Second-order themes were then deductively classified according to the coping function that they
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46 228 were apparently intended to serve using the dimensions PF and/or EF as recommended in the
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48 229 literature (Lazarus and Folkman, 1984).
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4 230 In this study, we adopt the categorization of Carver *et al.* (1989) in the development of
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6 231 the COPE inventory, considering that this instrument is based on the Lazarus and Folkman
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8 232 model (Lazarus and Folkman, 1984). The COPE inventory includes 13 conceptually different
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10 233 scales: (1) *active coping*: process of taking active steps to remove or circumvent the stressor or to
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12 234 enrich its effects; (2) *planning*: involves thinking about how to cope with the stressor; thinking
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14 235 about what steps to take and how to best handle the problem; (3) *suppression of competing*
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16 236 *activities*: means putting other plans/things aside, trying to avoid becoming distracted by other
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18 237 events; (4) *restraint coping*: waiting until an appropriate opportunity to act presents itself, and
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20 238 not acting prematurely; (5) *seeking social support for instrumental reasons*: asking advice,
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22 239 assistance or information in order to manage or resolve the situation; (6) *seeking social support*
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24 240 *for emotional reasons*: getting moral support, sympathy, or understanding of others; (7) *focusing*
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26 241 *on and venting of emotions*: tendency to focus on the aspects that distress or upset the individual
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28 242 and to ventilate those feelings; (8) *behavioral disengagement*: tendency to reduce the efforts to
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30 243 deal with the stressor, giving up of the aims with which the stressor is interfering; (9) *mental*
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32 244 *disengagement*: assuming a wide diversity of activities that serve to distract the individual from
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34 245 thinking about the behavioral dimension or goal with which the stressor is interfering; (10)
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36 246 *positive reinterpretation and growth*: tendency to attribute a new and different meaning to the
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38 247 distressing emotions rather than dealing with the stressor; (11) *denial*: refusal to believe that the
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40 248 stressor subsists or try to act as though the stressor is not real; (12) *acceptance*: recognizing the
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42 249 reality of a stressful situation, assuming that nothing could be done; (13) *turning to religion*:
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44 250 tendency to turn to religion in time of stress; (Carver et al., 1989).

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46 251 Frequencies for coping, mean coping effectiveness scores for each coping strategy used
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48 252 and global coping effectiveness scores over the 11-day period was calculated for all the
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4 253 participants. To provide an indication of the effectiveness of coping strategies deployed to
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6 254 manage the three most cited stressors, the coping effectiveness of each strategy in relation to
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8 255 each stressor was calculated and divided by the frequency of coping themes reported for
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10 256 managing the particular stressor. This generated a mean coping effectiveness score for each
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13 257 coping strategy in relation to each stressor managed. To understand the effectiveness of both PF
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15 258 and EF coping over the 11 work day period, the sample was divided into two independent groups
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17 259 with the same size using the median point of the ranking orders (PF; EF). An independent
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19 260 variable was created with two levels for representing the two different coping dimensions in a
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21 261 single independent variable. Mann-Whitney U test was used to compare the difference in ratings
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23 262 of coping effectiveness (PF and EF type).
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30 264 **Results**

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32 265 From the 11 daily sheets received, a total of 146 answers were given by the police
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34 266 officers, of which 46 referred to non-stressful events. Eight missing answers were accounted.
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36 267 Additionally, a total of 112 stressors and 112 coping responses were reported. Results found
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38 268 were analyzed separately based on three main categories: stressors (including stress appraisal),
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40 269 coping and coping effectiveness.
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46 271 **Stressors and stress appraisal**

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49 272 Stressors reported were displayed into two general dimensions: operational (cited 88
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51 273 times accounting for 79% of total stressors) and organizational stressors (cited 24 times
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53 274 accounting for 21% of total stressors) (see Table 1). The three most cited stressors were public
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55 275 disorder (32), inadequate resources (11) and vehicles chase (10). Regarding stress appraisals for
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4 276 the stressors cited more than five times, the three more intense stressors were gun situations
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6 277 ($M=4.8$), inadequate resources ($M=4.6$), and public disorder ($M=3.8$).

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9 278 [TABLE 1 ABOUT HERE]

10 279 **Coping**

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13 280 First order themes contemplated **nine** coping strategies; second order themes included **six**
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15 281 coping responses and two coping general dimensions (PF, EF) (see Table 2). Regarding general
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17 282 dimensions, EF coping was the most reported (cited 75 times, accounting for 67% of total coping
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19 283 responses), followed by PF coping (cited 37 times, accounting for 33% of total coping
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21 284 responses). Peer support (cited 34 times) was the most reported coping strategy, followed by
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23 285 distraction (28) and **argued** (24) respectively.

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27 286 [TABLE 2 ABOUT HERE]

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31 288 **Coping effectiveness**

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34 289 Regarding the connections between the three most reported stressors, coping and coping
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36 290 effectiveness, a range of different types of coping strategies were reported (see Table 3). “Peer
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38 291 support” was used to deal with all three of the major stressors. The mean effectiveness of the
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40 292 coping strategies varies in relation to the stressor.

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44 293 [TABLE 3 IS ABOUT HERE]

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49 295 When analyzing a day-to-day variation in coping effectiveness it appears that PF coping
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51 296 seems to be perceived as more effective when dealing with stressors compared with EF coping
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53 297 (see Figure 1). The Mann-Whitney U test indicated that the use of PF coping is significantly
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55 298 **more effective for EROs ($Md=3.89$) than EF coping ($Md=3.30$), $U=10.00$, $p=.037$.**

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[FIGURE 1 ABOUT HERE]

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Discussion

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Our findings indicate that EROs experience a variety of stressors and it appears that operational stressors are the ones more commonly reported. Particularly, “gun situations” seem to be appraised as most stressful. When analyzing coping EROs tend to use more EF coping, particularly “peer support”. However, despite variation in coping effectiveness in accordance to stressor experienced, longitudinal analysis suggests that PF coping seems to be more effective.

Previous cross-sectional research investigating stressors typology among police officers indicate that organizational stressors are the most commonly reported stressors (Suresh *et al.*, 2013). However, current findings suggest that operational stressors seem to be most common among EROs. This could be due to the operational nature of the work, as participants in the current study were part of a rapid intervention team that mainly performed operational duties. In opposition, the study by Suresh *et al.* (2013) does not specify the nature of officers’ duties what restricts conclusions when comparing findings between studies. Hence, reinforcing the need to identify police forces role and responsibilities when conducting research in policing (Kaiseler *et al.*, 2016). Another alternative explanation for the different findings across studies is the novel daily diary method used, which might be more sensitive to assess stress and coping in policing compared with retrospective cross-sectional measures. Future research is required to confirm this assumption.

Regarding the frequency and stress appraisal for each stressor, findings suggest that not always the most frequently reported stressors were the ones perceived by EROs as most intense.

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4 322 As an example, although the stressor “gun situations” was not frequently reported, it seemed to
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6 323 be appraised as severely more intense compared to frequently reported stressors. Hence, these
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8 324 findings suggest that high stressfulness stressors should not be neglected and support the
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10 325 argument that the frequency of a stressor is not necessarily correlated with their impact
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13 326 (Anderson *et al.*, 2002). Current findings highlight the need to assess stress appraisal on a daily
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16 327 basis when aiming to understand sources of stress among EROs.

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18 328 When analyzing the most frequently reported coping strategies used, these were EF,
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20 329 particularly “peer support”. Although EF coping was more frequently reported than PF coping,
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22 330 the latter seems to be consistently rated as more effective. In line with these findings, Kaufmann
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25 331 and Beehr (1989) conducted a study with 121 American PO aiming to understand buffering
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27 332 effects of social support (EF coping) in the stressor-strain relationships. The authors found some
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30 333 evidence of “reverse buffering”, which suggests that social support interacted with job stressors
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32 334 to increase stress intensity rather than alleviate it. Although this is not a common finding, a
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34 335 possible explanation might be that social support may have a “negative buffering” effect
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37 336 (LaRocco *et al* 1980) for officers. In other words, the support from colleagues may be negative,
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39 337 due to lack of supportive colleagues or inefficiency of colleagues’ advice to help officers deal
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42 338 with the situation at hand. Our findings suggest that EROs may not be using EF strategies (e.g.,
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44 339 social support) effectively (e.g., Balmer *et al.*,2013). However, further research is needed to
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46 340 confirm this assumption and fully understand the “reverse buffering” effect. For this purpose, a
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49 341 wider range of variables such as the content of communication with supportive colleagues,
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51 342 sources of stressors and support should be analyzed.

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53 343 In agreement with our current results emphasizing that PF coping was rated as more
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56 344 effective than EF coping among EROs, Evans *et al.* (1993) suggested that police culture and
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4 345 training should emphasize the use of more PF coping rather than EF. Nevertheless, as proposed
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6 346 by Balmer *et al.* (2013) EF coping should not necessarily be perceived as detrimental to officers'
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8 347 wellbeing. Alternatively, PO should be trained to better regulate their emotional responses to
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10 348 stress, in order to better deal internally (e.g., with colleagues) and externally (e.g., with civilians)
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12 349 and meet the professional requirements. As an example, police officers are required to express
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14 350 anger when correcting a criminal, while at the successive moment they should be able to show
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16 351 empathy for a crime victim and it is important to highlight that police public image is created
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18 352 based on these interactions.
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23 353 Current findings add support to previous literature suggesting that coping abilities in
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25 354 policing deserve further attention (Anshel *et al.*, 2013). The methodology used was key to
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27 355 understand the pattern of coping effectiveness, otherwise one could erroneously conclude that EF
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29 356 was most effective. Future research should continue to use longitudinal designs and ecological
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31 357 research methods to assess stress and coping in policing (Rodrigues *et al.*, 2015). Furthermore,
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33 358 applied practitioners and officers may find the results useful for targeted interventions. Hence,
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35 359 considering that the work of EROs is characterized by intervening under high stressful situations,
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37 360 where it is difficult to think clearly and consider the best coping strategy, it seems essential to
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39 361 enhance officers' ability to cope with stressors by developing preventive tailored stress
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41 362 management programs adapted to their needs. As an example, when stressors are operational in
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43 363 nature, police organizations can support EROs by providing training on more oriented-action
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45 364 solutions like motor skills and physical efficiency. Accordingly, increased fitness level in
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47 365 policing can also foster a healthier workforce, able to better cope with chronic stress (Gerber *et*
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49 366 *al.*, 2010). Thus, this investment is likely not only to result in the welfare of EROs but may also
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51 367 impact society safety (Maran *et al.*, 2014).
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4 368 This study has some limitations. Particularly, its exploratory nature and the small sample
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6 369 used that may restrict conclusions and generalizability of findings. However, despite the
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8 370 limitations, the current study is pioneer in terms of specific population under study and
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10 371 methodology used. Future research should use larger samples to test the generalization of the
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12 372 findings. In addition, a comparison between other police forces is encouraged to fully understand
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14 373 stress appraisals and coping mechanisms in policing, informing the design of tailored coping
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16 374 interventions.
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Table 1

Classification, appraisal and frequency of stressors and the correspondence mean.

General dimension	Stressors	Illustrative data	Frequency	Mean Stress appraisal
Operational stressors			88	
	Public disorder	“The citizens did not respect our orders”	32	3.8
	Vehicles chase	“We had to chase a suspect motorcycle driver carrying a child”	10	3.4
	Neighborhoods interventions	“We had to get into a problematic neighborhood”	9	3.7
	Drug traffic	“We conducted an operation to combat drug trafficking”	7	3.3
	Gun situation	“We had to shoot a gun to protect ourselves from the suspects threats”	6	4.8
	Suspects approach	“We had to address suspect men, who seemed outraged about the situation”	5	3.4
	Detentions	“We had to handcuff an exalted man, that was causing problems”	5	2.6
	Suspects escape	“A driver did not stop at a red light and escaped from the police”	4	3.5
	Urgency driving	“We had to drive fast to answer an emergency call”	3	3.3
	Aggression attempts	“Some citizens tried to attack us”	2	5.0
	Use of force	“A suspect resisted the arrestment, so we had to use force to stop him”	2	4.5
	Property issues	“We had a land subsidence and leaking gas situation to solve”	3	3.0
Organizational stressors			24	
	Inadequate resources	“I could not solve a situation because I did not have the material resources I need for that purpose”.	11	4.6
	Conflicts with superiors	“I have a disagreement with my superior”	4	2.8

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7	Conflicts with colleagues	“I have an argued with a colleague”		4	2.8
8	Work overload	“The work was too much”		2	4.0
9	Overtime hours	“I leave the police station long after the shift have finished”		2	5.0
10	Making compensatory day off	“I have to make a compensatory day off”		1	3.0
11					

Note: Bold indicates the total frequency of general dimensions of stress

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Table 2
Classification and frequency of coping responses

General dimension	2 nd order theme	1 st order theme	Illustrative data	Frequency
PF Coping	Active coping	Argued	“I argued for my rights”	37
		Increased concentration on task	“I tried to get focused on what I was doing”	24
		Problem solving	“I solved the situation with the resources that I had available at that moment”	2
		Taking an action plan	“I took actions in order to coordinate the work with my colleagues”	2
		Talk with people involved	“I talked with the people involved in that situation”	4
EF Coping	Seeking social support for instrumental reasons	Peer support	“I talked with my colleagues in order to alleviate stress”	75
		Positive thinking	“I tried to think positive”	34
		Distraction	“I tried to think in something else”	9
		Smoking	“I smoked a cigarette to relax”	28
				4

Note: Bold indicates the total frequency of each general dimension

Table 3

Coping strategies, frequencies and mean effectiveness in managing the three most frequently reported stressors

Stressor	Coping strategy	Frequency	Mean coping effectiveness
Public disorder	Smoking	1	4.0
	Peer support	7	3.7
	Argued	9	3.7
	Positive thinking	13	3.8
	Talking with people involved	3	3.7
	Taking an action plan	1	4.0
Inadequate resources	Peer support	4	2.5
	Positive thinking	5	3.5
	Argued	4	3.0
Vehicles chase	Peer support	5	4.0
	Argued	1	3.0

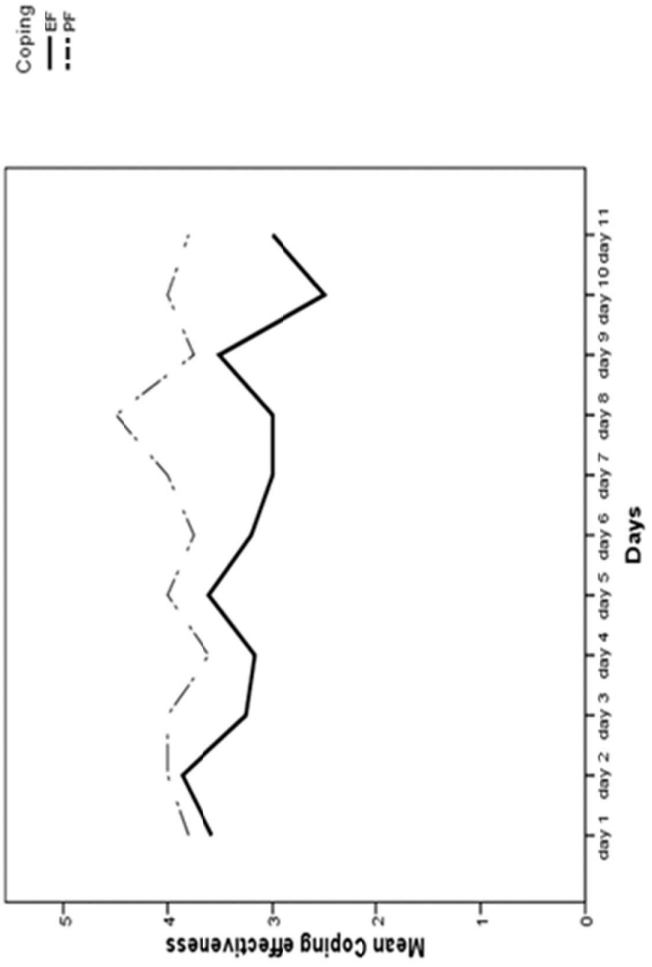


Figure 1. Coping effectiveness variation displayed by dimension of coping during an 11-day period.

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