



CATÓLICA  
FACULDADE DE EDUCAÇÃO E PSICOLOGIA

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PORTO

*BURNOUT EM FORÇAS POLICIAIS  
PORTUGUESAS: O PAPEL DA EMPATIA E DA  
REGULAÇÃO EMOCIONAL*

Dissertation presented to Universidade Católica Portuguesa to obtain the  
Master's degree in Psychology

- Specialization in Justice and Deviant Behavior Psychology -

*Ana Carolina Monteiro de Pinho Teixeira*

Porto, July of 2022



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THE ROLE OF EMPATHY AND EMOTION  
REGULATION*

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Work carried out on the orientation of  
*Prof. Dr. Patrícia Oliveira-Silva*

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### **Resumo:**

Esta investigação tem o objetivo de perceber como o burnout está representado nas forças policiais portuguesas e como este se relaciona com a empatia e a regulação emocional, tendo em conta que a literatura aponta para a sua influência, em profissionais de emergência humana. Foi realizada uma investigação de cariz quantitativo, em que os três construtos principais foram medidos e realizados testes para verificar a sua prevalência e correlação entre os mesmos. Verificou-se que o Burnout está muito presente nesta população, como esperado e descrito na literatura. Verificou-se também que a escala da exaustão emocional esta positivamente correlacionada com a escala da empatia e da regulação emocional. Estes resultados mostram uma necessidade de melhor compreender a influencia que estas podem ter no burnout, e requer mais investigação.

*Palavras-chave:* Burnout, Empatia, Regulação Emocional, Forças Policiais

### **Abstract**

This investigation aims to understand how burnout is represented in Portuguese police forces and how it relates to empathy and emotion regulation, considering that the literature points to its influence on human emergency professionals. An investigation of a quantitative nature was carried out, in which the three main constructs were measured and tests were carried out to verify their prevalence and correlation between them. It was found that Burnout is very present in this population, as expected and described in the literature. It was also found that the scale of emotional exhaustion is positively correlated with the scale of empathy and emotion regulation. These results show a need to better understand the influence they can have on burnout, and require further investigation.

*Keywords:* Burnout, empathy, police officers, emotion regulation

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## **Introduction**

Police work is nowadays a hazardous and demanding profession. It falls into the category of human emergency professionals, such the same as doctors, firefighters, and paramedics. Police officers are relied on to uphold the law, prevent crime, assist people in distress, and build close relationships with the community, what means that they assume different roles and identities in our communities (Crowley, 2022). This requires a substantial amount of trust from society in the police officers, who are viewed as responsible for maintaining a safe and secure environment. For that purpose, they are expected not to make mistakes and to be well-regulated, empathic, and resilient professionals.

However, nowadays, the situation for a police officer is very demanding if we take into account the societal problems emerging (such as police brutality, police body cameras, the Black Lives Matter movement, etc.), that increasingly make the general population distrust the police officers. At the same time, it is widely acknowledged that the mental issues of these workers are largely neglected (Zhang et al., 2020).

At the same time, there is enough evidence to demonstrate the stress police officers have connected to job-related situations, such as long work schedules, job-related traumatic events, non-availability duty off periods, getting exposure to human suffering and death very frequently (Collins & Gibbs, 2003). Although some studies have taken place on evaluating and documenting mental health issues in police officers, it still is not enough (Grover et al., 2022). Also, the COVID-19 pandemic came only to make things worse, adding up to the responsibility and stress of a police officer and decreasing any attention from society (Grover et al., 2022).

For those reasons, it strikes as important to evaluate and understand stress and burnout in police forces since, in Portugal, any investigation has been done in the last few years on this topic, to the extent of our knowledge.

The most vulnerable professionals to burnout symptoms are the emergency and human services professionals, mainly the most motivated, the most dedicated and emotionally involved in their work (Tei et al., 2014). This risk should be understood and dealt with, so the professionals can work in their best conditions. Also, the literature suggests that emotion regulation is extremely important in police forces, as it can help with emotional processing and with good and healthy long-term coping mechanisms (Arter, 2007). Therefore, the main objective of the investigation is to explore the association between empathy and emotion regulation to burnout, while exploring the role of four significant sociodemographic variables (age, income, level of education, and length of service).

This study provides crucial first steps in demonstrating that burnout has a significant prevalence among police officers in Portugal and that some potentially controllable variables have an influence on the symptoms and worsening of them. It also demonstrates the importance of emotion regulation as a skill and how it might help with this problem.

## **Literature Review**

Initially, the concept of empathy is discussed and how it is an essential competence for the police profession. Then, the concept of burnout is introduced in order to explain how and why this is a common consequence of the high physical and emotional demands faced by emergency professionals, namely police forces. It is also explained how the potential relationship between burnout and empathy can be understood and how the more empathetic professionals are more exposed to emotional stress and burnout. Finally, the concept of emotion regulation is defined and how it impacts the resilience of police forces and meditates the relationship between empathy and burnout. defined and explained how this is a common process in emergency professionals, namely police forces.

### **The concept of empathy**

Empathy can be defined as the consequence of an individual trying to put himself in the other's shoes to understand better their actions, emotions, and way of thinking. This term was initially proposed by Tichener in 1909, when he used the expression “Einfühlung”, which in German designates the process of the projection of the self onto the object that is perceived (Wispé, 1986). Today, the majority of the psychology texts will say something about empathy because Theodor Lipps presented the concept to psychology, defending it was a “natural instinct” and a “inner imitation” of the other, which we can find some reflection in present-day concepts of emotional contagion and perception-action models of empathy (Montag, Gallinat & Heinz, 2008).

According to Wiseman (1995), empathy can be defined as a projection (not necessarily voluntary) of the self within the feelings of the other, within the “being” of an object, which means a psychological involvement that may arouse joy or pain. This definition suggests that empathy can occur consciously or unconsciously, cause positive or negative emotions and involves an individual’s cognitive effort to understand others’ experiences.

Inzunza (2015) points out that the concept of empathy is not easy to define and causes some confusion with the concept of sympathy. Currently, it is widely accepted that those two terms are far distinct psychological processes. For instance, Wispé (1986) pointed out that the two concepts differ in a central aspect: sympathy refers to the individual's willingness to alleviate the suffering of the other; empathy refers to the individual's attempt to understand the other's positive or negative experiences without judgment or attempt to change it.

Empathy is highly discussed in various fields, and potentially because of its importance for our everyday life and science, it is plagued by conceptual ambiguity and a vast number of

definitions have been suggested. One author who tried to conceptualize empathy was Batson (2009). He identified eight conceptualizations of empathy. These are (a) knowing the other's internal affective and cognitive state, (b) adopting the posture or tuning in to a neural response from the other, (c) feeling what the other feels, (d) projecting oneself into the situation of the other, (e) imagining the thoughts and feelings of the other, (f) imagining how you would feel or how you would think if you were in the other's shoes, (g) feeling suffering when witnessing the suffering of the other and (h) having sensitivity for another person when it is suffering.

It is possible to conclude that empathy is an essential process for prosocial behavior, as it allows us to understand the other without judgment, in the most holistic way.

Besides the range of conceptualizations, empathy is also seen as a multidimensional construct with different components: cognitive and affective. Some researchers argue that empathy is a cognitive process (Decety & Yoder, 2016), while others argue that it is an affective process (Shamay-Tsoory, et al., 2004).

Cognitive empathy refers to the ability to engage in the cognitive process of adopting the psychological perspective of the other to understand the other's feelings and perspectives, relying on other processes like perspective-taking or mentalizing (Cuff, et al, 2016). The investigation of this type of empathy refers to intellectual processes of perceiving as accurately as possible what the other feels or thinks. It is also elucidated that cognitive empathy is independent of cognitive processes such as attention and memory (Shamay-Tsoory et al., 2004). Therefore, this concept can be understood as a rational understanding of the emotions or situations of the other without actually feeling the emotions, that is, just recognizing them (Backer-Eck, et al., 2020). On the other side, some researchers consider empathy as an affective phenomenon study aspect such as helping behavior, feeling concern by the observed other or an emotionally contagious experience known as sharing emotions (Singer & Lamm, 2009). They refer to abilities to experience affective reactions by observing the experiences of others (Davis, 1994) and involve feeling what the other feels. The fundamental difference between these two conceptualizations of empathy is that affective empathy consists in sharing the feelings of the other beyond the understanding of the other's point of view, whereas the cognitive one does not consist in feeling the emotions, but only the cognitive understanding of what the other is feeling.

Also, most theoretical literature suggests that empathy motivates prosocial behavior, which covers the broad scope of social interactions and actions intended to benefit one or more people other than oneself (Decety, et al., 2016). One issue is that prosocial behaviors are critical for a first respondent who provides support to victims and others in need, while empathy enhances

the likelihood of implementing prosocial behaviors at work (Decety, et al, 2016). In fact, Inzunza (2015) highlights the importance of considering empathy as one of the necessary or at least desirable skills to consider in the work of police forces. In addition to the fact that this profession is related to encountering various stressful situations, contact with victims and aggressors, and moments that can provoke negative emotions, empathy is related to communication skills and the ability to deal with stressful situations (Gerdes, et al., 2011). Furthermore, the same author emphasizes that individuals more easily have empathic attitudes when they sustain a set of socially responsible attitudes. In other words, the individual's process of perceiving the situation, processing it, and acting in an empathetic way.

### **Emotion regulation in police officers**

One of the most important abilities necessary for enabling police officers to execute their functions is emotion regulation. The ability to regulate negative emotions is integral and necessary to maintain mental health and well-being (Gross & Muñoz, 1995), particularly considering the population of police officers, who are constantly confronted with situations and people that can lead to feeling negative emotions. Emotion regulation is conceptualized as the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying the type of emotional reactions, especially their intensity and temporal duration, in an attempt to achieve their goals (Thomson, 1994).

Police work is mostly made of situations of violence, dealing with victims of violence and sexual assaults (sometimes abused children), and all these situations are potentially stressful and likely to provoke negative emotions in professionals. However, it is reported by researchers that police officers have difficulty recognizing the presence of these negative emotions (Evans, Coman, et al., 1993; Gasch, 2006; Violanti, et al., 1985 cit in. Berking, et al., 2010) and use compensatory strategies such as denial, suppression and avoidance of emotions, which may initially drive away emotions. Still, the long-term effects of using these strategies are contrary to what was intended, such as mental health problems such as burnout, post-traumatic stress disorder, and substance abuse (Berking et al., 2010). At the same time, police work is more isolated than most of other type-related professions, like firefighters and medical professionals, who work in a more “team-oriented” environment, with more support from one another (Grant et al., 2019). It can even be said police officers are discouraged in their environment to share feelings and emotions, as that is perceived as a weakness from their coworkers (Kop, et al., 1999).

According to Arter (2007), having developed emotion regulation is valued in the work of police forces, as these workers must be able to manage stressful situations and put difficult situations into perspective. Lack of this regulation can result in stress, burnout, irritability or lack of judgment. Although not related to police officers, but a study about the relationship of empathy and burnout in patient-physician relationship concluded it would be crucial to teach professionals some emotion regulation skills, to prevent personal distress and burnout symptoms (Lamothe, et al., 2014)

Taken together, these constructs might have some relationship. For example, it is demonstrated that empathy influences how burnout might develop in an individual who works in the human emergency area. At the same time, emotion regulation might be a protective factor for burnout symptoms, especially in processing negative emotions. Moreover, dealing with negative emotions and stressful situations is paramount in the police force, as violence and stress are always present on a daily basis (Berking et al., 2010). As reviewed above, the literature suggests these variables might have a correlation, and some further studies are in need to understand the relationship between them (Turgoose et al., 2017).

### **Burnout and the relationship with empathy and emotion regulation in police officers**

Burnout can be conceived as a set of negative experiences, reflecting a posture of psychological distress, due to prolonged exposure to work-related stress (Maslach & Schaufeli, 1993). It refers to emotional exhaustion, depersonalization, and feelings of professional inadequacy, which result from situations with clients or work-related individuals who are emotionally charged, and the professional feels that he is no longer able to adequately carry out his personal or professional responsibilities as before they did (Boyas, et al., 2012). Also, burnout is a persistent and chronic state, differentiating it from fatigue and stress, which are more transient, for this reason, it causes long-term consequences, such as workers' mental health problems, deterioration of the work environment, absenteeism, and willingness to leave work (Noblet, et al., 2009). This situation is recognized as a serious problem, particularly with human emergency and service professionals (Kop, et al., 1999).

This is the result of some factors related to specific characteristics of this type of work, which involves a lot of human interaction and contact with many potentially stressful and emotionally draining situations that always involve other individuals. There is a lot of contact with the other person's pain and suffering, which can lead to situations of emotional fatigue. Particularly exposed to this phenomenon are firefighters, doctors and police officers. Some studies have already been carried out to try to measure and understand how burnout affects

these professionals (Wagner, et al., 2019; Wagaman, et al., 2015; Kop et al., 1999; Goodman, 1990). In these types of professions, it is easy to become overworked and overstressed, and in these situations empathy and compassion can become weakened, resulting in states of vulnerability and tension, and similar symptoms felt and suffered by their clients/victims (Figley, 2002).

It has been said by Burke and Mikkelsen (2005) that one of the tremendous long-term consequences of police work is burnout. According to the model by Maslach & Leiter (2008), burnout consists of three factors: emotional exhaustion, depersonalization and reduced personal fulfillment. However, due to some limitations of this model, a two-factor model was proposed by Demerouti (2003): exhaustion and job termination. Exhaustion is the feeling of loss of emotional, physical and cognitive energy required to perform a job, which is a long-term consequence of exposure to certain demands of specific jobs. Dismissal from work refers to a state in which the worker only demonstrates negative feelings and a cynical attitude towards clients and co-workers, as well as distances himself from the work itself and only experiences negative feelings and emotions related to the object and the content of the work. According to Basinska, et al. (2014), this definition could be a better attempt to describe burnout, namely in the case of police forces.

Other authors were focused on understanding the impact of burnout on empathy, namely in the police profession. Most of the available studies are carried out with other types of emergency professionals, such as doctors, nurses, and firefighters. However, the conclusions may be like those we would have with police officers due to the similarity in the type of investment and emotional fatigue that are associated with the professions. Some studies made about burnout in police officers conclude that emotional exhaustion and depersonalization are related to the stressors and characteristics of police work. It may be speculated that some changes in attitudes with the public occur, becoming more cynical and disconnected (Kop et al., 1999).

According to Williams (1989), emotional empathy might be related to emotional exhaustion, a burnout subconstruct. The author argues that empathy requires an imaginative experience of the pain of the other, client or patient's situation, and that, therefore, leads to fatigue and emotional exhaustion. In other words, the more empathy professionals feel, the more exposed they will be to fatigue and burnout. Consequently, certain situations can lead professionals to use defensive methods and strategies to avoid empathy. Thus, as also defended by Maslach and Jackson (1981), emotional exhaustion and avoidance behaviors of empathy

may represent an initial phase of the burnout process, with people with higher levels of empathy being more exposed and vulnerable to burnout, using depersonalization strategies as a defense.

Tei et al. (2014) conducted a study to verify the impact of burnout on the brain activity of more empathetic health professionals. The researchers found that the severity of burnout was related to "reduced" brain activity related to higher levels of empathy. This reduced brain activity was also correlated with alexithymia scores. The authors concluded it can be speculated that alexithymia and reduced emotional recognition might potentially be connected with stronger emotional dissonances and greater burnout severity associated to empathy-related brain activity.

In another example, Wagner et al. (2019) conducted a study on empathy in the firefighter profession, realizing that high levels of empathy in firefighters are related to symptoms of traumatic stress, depression, somatization, anxiety, interpersonal sensitivity and phobic anxiety.

Research has also shown a dependence on the type of support. Turgoose, et al. (2017) found that law enforcement professionals who work with victims of sexual abuse who have higher levels of empathy are more vulnerable to symptoms of burnout. At the same time, they emphasize that empathy is inversely related to burnout (when one goes down, the other goes up, and vice versa), in police officers who work directly with victims of sexual abuse. Several studies have demonstrated similar results in medical students (Brazeau, et al., 2010; Thomas et al., 2007).

Basinska et al. (2014) investigated burnout in police officers, analyzing the relationship between emotions (and emotion regulation), fatigue, and exhaustion. It was noticed that an excess of negative emotions and a deficiency of positive emotions could lead to deterioration of motivation at work and lack of involvement. In this sense, in jobs such as police officers, there are many potential negative-valence stimuli, such as complicated interpersonal relationships with clients or critical incidents (Adams & Buck, 2010). Therefore, most of the researchers concluded that cultivating and strengthening sources of positive emotions are essential to avoid burnout symptoms and situations.

Summing up, empathy and burnout have been two domains extensively studied in police officers, while the role of emotion regulation and some sociodemographic variables, such as income and length of service, are relatively less known. Thus, this study's main objectives are (1) to characterize the police officers' perceptions of violence and risk in their profession, (2) to examine the association of empathy and emotion regulation to burnout in police officers, and (3) to explore the role of four sociodemographic variables (age, income, level of education, and length of service) on those constructs.

## **Method**

Moving forward, this study aimed to understand the relationship between empathy, burnout, and emotion regulation in Portuguese police forces since investigations in Portugal related to these themes are very scarce. To address this, a quantitative study was designed (Basinska et al., 2014; Tei et al., 2014; Turgoose et al., 2017), supported by a correlational design with a moderation model. This study is inserted into the broader international project called "Mental Health NeuroForce", designed, and implemented by the Human Neurobehavioral Laboratory at the CEDH (Research Center for Human Development) of the Universidade Católica Portuguesa in Porto.

### **Main and specific objectives**

The general objective of this project is to understand the role of empathy and emotion regulation in the burnout levels among Portuguese police professionals. According to the previously discussed literature, it is understood that empathy and burnout are related because these professionals are more exposed to burnout when empathy levels are higher. To the best of our knowledge, there is no literature on the relationship of emotion regulation and burnout; however, there is evidence to say that emotion regulation is protective against burnout.

In this sense, the specific objectives of the investigation will be to apply self-report tools to characterize their awareness of the risk they are exposed to; evaluate the level of empathy and emotion regulation skills among Portuguese police forces, as well as the association of those domains with the burnout measures in Portuguese police forces, and the emotion regulation skills in Portuguese police forces. Then, the correlation between empathy and burnout will be analyzed, as well as the mediating role of emotion regulation in the relationship between empathy and burnout.

Thus, it is expected that police force professionals with more emotion regulation will be more protected from symptoms of mental health problems, namely burnout, because skillfulness in emotion regulation might allow the individuals to maintain their empathic abilities and minimize the impact of burnout symptoms. On the other hand, if the emotional responsivity underlying the constant exposure to negative emotions is denied or suppressed, it can lead to burnout situations and a withdrawal that can be considered a loss of empathy, as specified in the theoretical framework above.

## Sample

The sample for the present study was randomly selected through a strong campaign on social media and police stations. Participants included 27 police officers. Participated 22 men (81.5%) and 4 women (14.8%). One participant chose not to answer this question.

Participants age ranges from 23-61 years old ( $M=33.04$ ,  $S=10.29$ ). According to gender, the age average for woman was 33.5 years ( $SD=7.89$ ), and for men was 33.36 ( $SD=10.87$ ).

The inclusion criteria were being a police officer working at PSP (“Polícia de Segurança Pública”) and living in Portugal. We would have accepted any nationality, age, gender, and position at the police force.

All participants are Portuguese and more than half of them have completed their high school education (74.1% of the sample), 11% have a technical degree, and 14.8% have a superior degree (bachelor or master’s degree). Regarding marital status, 55.6% of the participants are married or living with someone, and 40.7% are single. Only one participant responded to be divorced. Related to children, only 11 participants said having children (between 1 and 3). They were also asked about their household, and 10 participants lived with children, and the rest of the participants (17) lived with family without children (11), with friends (3), or alone (3).

Participants were also asked about their financial situation, and 70.4% of the participants claimed their income was enough to live. However, only one said the income allows them to live comfortably, and six participants said it’s hard to live with the current income.

Regarding their position within the police structure, 25 participants are agents, the other two hold a chief or official position in the police force, 92% of the sample held an execution job in the police, and 8% reported having a supervising job. In addition, half of the sample (53.8%) has been in the force for less than two years, five participants have been from 3 to 15 years, six participants have been from 16 to 26 years, and only one participant has been for more than 30 years (38 years on the force).

## Instruments

Three questionnaires validated for the Portuguese population were administered in a police officer sample. In addition to the questionnaires, a sociodemographic questionnaire (see **attachment 2**) was applied in order to collect information about gender, age, place of residence, and type of work carried out in the context of the police in order to carry out a descriptive statistical study.

### ***Interpersonal Reactivity Index (IRI) – Davis, 1980***

To assess empathy, the Interpersonal Reactivity Index (IRI) questionnaire (Davis, 1980), validated for the Portuguese population by Limpo, et al. (2010) was used (see **attachment 3**). This scale consists of 28 statements of thoughts and feelings and four subscales, namely perspective taking, empathic concern, personal discomfort, and fantasy. The initial scale had 28 items (seven in each subscale); however, the Portuguese version has only 24 (one item from each subscale was removed). The answer is provided through a 5-point Likert scale (from 0 to 4). The Portuguese validation presented good psychometric results, namely good reliability with adequate internal consistency indices. (Perspective taking *Cronbach's a*=.74; Empathic Concern *Cronbach's a*=.77; Personal Discomfort *Cronbach's a*=.81; Fantasy *Cronbach's a*=.83) (Limpo et al., 2010).

### ***Difficulties in Emotion Regulation Scale (DERS) – Gratz e Roemer (2004)***

To assess patterns of emotion regulation, the Difficulties in Emotion Regulation Scale (DERS) questionnaire by Gratz e Roemer (2004), adapted for the Portuguese population by Coutinho et al. (2009), was used (see **attachment 4**). In addition to the scale's total score which ranges from 36 to 180, the questionnaire involves six domains of emotional dysregulation, which are: non-acceptance of negative emotions, inability to engage in goal-driven behavior when experiencing negative emotions, difficulties in controlling impulsive behavior when experiencing negative emotions, limited access to emotion regulation strategies that are perceived as effective, lack of emotional awareness and lack of emotional clarity. The more these dimensions are present the less emotion regulation will be.

The questionnaire consists of 36 items on a 5-point Likert scale (from 1 = almost never to 5 = almost always). The higher the scores, the greater the emotion regulation difficulty. The questionnaire validated for the Portuguese population retains all items and has very good psychometric characteristics (*Cronbach's a*=.93) (Coutinho et al., 2009).

### ***Maslach Burnout Inventory – Schaufeli, Leiter, Maslach & Jackson (2005)***

To assess burnout, the Maslach Burnout Inventory (Schaufeli et al., 1996) validated for the population of Portuguese police forces by Marques-Pinto (2009), was used (see **attachment 5**). The questionnaire has 22 items and three dimensions of burnout: emotional exhaustion, depersonalization, and personal accomplishment. It uses a 7-point scale for responses.

According to Maslach et al. (1996), one can consider the individual is in a burnout situation if he or she scores a higher score in the emotional exhaustion and depersonalization

dimensions, and a lower score in the personal accomplishment dimension. Thus, the highest this scale's total score, the higher the burnout symptoms (except with the Personal Achievement scale, which is the higher the score, the lower the burnout symptoms).

It has good psychometric properties in the original version, with a good internal consistency and high Cronbach alpha values (0.90; 0.79 and 0.71). However, it lacks psychometric evaluations for the Portuguese version (Vicente et al., 2013). The same author conducted a study and concluded it has good psychometric properties, with a lower value of *Cronbach's*  $\alpha=0.59$  of the depersonalization dimensions. However, this can be attributed to cultural differences (Vicente et al., 2013).

## **Procedure**

The data collection was carried out online through the Qualtrics online survey. The data collection was done in May of 2022.

Before filling in the questionnaires of the study variables (i.e., empathy, burnout, and emotion regulation) and the sociodemographic questionnaire, all participants read, agreed, and signed the informed consent (see **attachment 1**).

To complete the data collection, participants took on average 13 minutes. All participants filled in all the questionnaire.

After finishing the collection phase, the data were exported from Qualtrics to the IBM SPSS software (version 26) Then, the descriptive statistics tests (mean, mode, median) of the sociodemographic variables were performed, in order to understand how to characterize the sample and sum up the variables. Kolmogorov-Smirnov tests were performed for all variables to explore the assumptions of normality and data distribution. Finally, the analysis was complemented with the analysis of multivariate normality, mainly by analyzing the asymmetry and kurtosis values, considering the recommendations of Kline (2005).

For the inferential analysis, each one of the specific objectives was approached using the appropriate test according to the design of the question.

## Results

### Sociodemographic data

In the sociodemographic questionnaire, participants were asked about the violence, and the risk felt in the profession. Most participants reported they had witnessed violent situations often (sometimes, many times, and frequently, 21 participants). Nineteen participants reported they felt on more than one occasion that their life was in danger in work-related contexts. In more than one moment, all participants considered that they have a risky profession. More than half of the participants reported that ‘all the time’ their profession is very demanding emotionally (see **Table 1**).

**Table 1**

*Characterization of police officers’ perceptions of violence and risk in job-related situations*

Have you...	Never	Rarely	Sometimes	A lot of times	Frequently	Always
... witnessed violent situations in job-related situations?	4 (14.8%)	1 (3.7%)	<b>8</b> <b>(29.6%)</b>	6 (22.2%)	6 (22.2%)	2 (7.4%)
... ever thought your life was in danger in job-related situations?	2 (7.4%)	4 (14.8)	<b>12</b> <b>(44.4%)</b>	6 (22.2%)	1 (3.7%)	2 (7.4%)
... ever felt you have a risk profession?	0 (0%)	0 (0%)	0 (0%)	3 (11.1%)	3 (11.1%)	<b>21</b> <b>(77.8%)</b>
... ever considered you have an emotionally high demanding profession?	0 (0%)	0 (0%)	1 (3.7%)	2 (7.4%)	8 (29.6%)	<b>16</b> <b>(59.3%)</b>

## Burnout scale (MBI) results

As shown in Table 2, based on the reference categories, participants in this study showed high burnout scores. The depersonalization and emotional exhaustion subscales' means are above the high score cutoff:  $M = 16.87$  ( $SD = 11.3$ ) and  $M = 30.24$  ( $SD = 7.02$ ), respectively. Concerning the Personal Achievement scale, on average, participants show a high score, representing a low burnout representation,  $M = 40.42$  ( $SD = 8.95$ ).

The MBI total score was not calculated because the authors do not recommend interpreting the total score, for which they do not attribute a special meaning. Their suggestion is to focus on the meaning underlying each one of the three subscales: Depersonalization and Emotional Exhaustion (higher the score, higher the burnout); and Personal Achievement (higher the score, lower the burnout) (Maslach et al., 1996).

**Table 2**

*Burnout scale's (MBI) descriptive statistics*

<b>MBI</b>	<b>Categories</b>	<b>Min - Max</b>	<b>Mean (SD)</b>
<b>MBI Personal Achievement</b>	H (39 or higher); M (32-38); L (0-31)	22 - 54	40.42 (8.95)
<b>MBI Depersonalization</b>	H (13 or higher); M (7 - 12); L (0-6)	7 - 30	16,87 (7.03)
<b>MBI Emotional Exhaustion</b>	H (27 or higher); M (17-26); L (0-16)	10 - 52	30,24 (11.3)

*Note.* MBI = Maslach Burnout Inventory; Min = minimum; Max = maximum; H = high; M = moderate; L = low.

In order to explore whether the burnout level was correlated with some sociodemographic variables, Spearman and Pearson correlations were calculated between the subscales of the MBI and age, income, level of education, and length of service (see **Table 3**). It was calculated the Spearman correlation value for income and level of education, for being ordinal variables, and the Pearson correlation value for age and length of service, for being continue variables.

There was no statistically significant correlation between the MBI scores and age, income, or length of service. However, there was a significant positive correlation between the level of education and the depersonalization subscale ( $r_s = 0.433$ ,  $p = 0.03$ ) and well as the emotional exhaustion subscale ( $r_s = 0.423$ ,  $p = 0.03$ ), meaning that the higher the level of

education, the higher the level of depersonalization and the emotional exhaustion among police officers. There was not found significant correlation in the other analyses.

**Table 3**

*Associations between Burnout scale's (MBI) and sociodemographic variables*

	<i>r / r<sub>s</sub> (df=25)</i>
<b>MBI Personal Achievement vs. age</b>	-0.100
<b>MBI Depersonalization vs. age</b>	-0.309
<b>MBI Emotional Exhaustion vs. age</b>	-0.347
<b>MBI Personal Achievement vs. income</b>	0.137
<b>MBI Depersonalization vs. income</b>	0.050
<b>MBI Emotional Exhaustion vs. income</b>	0.253
<b>MBI Personal Achievement vs. level of education</b>	-0.239
<b>MBI Depersonalization vs. level of education</b>	0.433* (0.03)
<b>MBI Emotional Exhaustion vs. level of education</b>	0.423* (0.03)
<b>MBI Personal Achievement vs. length of service</b>	-0.038
<b>MBI Depersonalization vs. length of service</b>	-0.225
<b>MBI Emotional Exhaustion vs. length of service</b>	-0.224

*Note.* MBI = Maslach Burnout Inventory; '*r*' = Pearson coefficient; '*r<sub>s</sub>*' = Spearman coefficient; '*df*' = degree of freedom; \* Correlation is significant at the 0.05 level (\**p* > .05).

### **Empathy scale (IRI) results**

The IRI subscale scores were calculated as suggested by the authors (Limpo, Alves & Castro, 2010). The minimum and maximum standard scores for the IRI scale are 28 and 140, respectively, with the total scores in this study ranging from 48 to 84. See Table 4 for the subscales' scores. Any participant failed to answer any item.

**Table 4***Empathy scale's (IRI) descriptive statistics*

<b>IRI</b>	<b>Min – Max*</b>	<b>Mean (SD)</b>
<b>IRI Total Score</b>	48 - 84	65.33 (9.09)
<b>Empathic Concern</b>	14 - 28	20.04 (4.12)
<b>Perspective Taking</b>	14 - 25	20.08 (3.15)
<b>Personal Discomfort</b>	5 - 14	9.24 (2.66)
<b>Fantasy</b>	7-23	15.12 (4.15)

*Note.* IRI=Interpersonal Reactivity Index; SD = standard deviation; \* The standard range for this subscale is between 28 and 140.

In order to explore whether the empathy level was correlated with some sociodemographic variables, Spearman's and Pearson's correlations were calculated between the scale of IRI and age, income, level of education, and length of service (see **Table 5**). It was calculated the Spearman's correlation value for income and level of education, and the Pearson's correlation value for age and length of service (see Table 5). No statistical significance was found between any IRI scale and the sociodemographic variables.

**Table 5***Associations between Empathy's scale (IRI) and sociodemographic variables*

	<b><i>r</i> / <i>r<sub>s</sub></i> (df=25)</b>
<b>IRI score vs. age</b>	-0.162
<b>IRI score vs. income</b>	-0.307
<b>IRI score vs. level of education</b>	0.358
<b>IRI score vs. length of service</b>	-0.091

*Note.* IRI= Interpersonal Reactivity Index; '*r*' = Pearson coefficient; '*r<sub>s</sub>*' = Spearman coefficient; '*df*' = degree of freedom.

### **Emotion Regulation (DERS) Results**

The range DERS score is 36 to 180. The mean of the responses in this study was 76.15 (*SD* = 20.91). Usually, participants are categorized as having high emotion regulation if DERS total score is  $\leq 66$  and low emotion regulation if DERS total score is  $> 66$ . In this study, on

average, the total score mean was 76.15, meaning that they were, on average, above this cutoff. However, 46.2% of the participants scored below this cutoff (see **Table 6**).

**Table 6**

*Emotion Regulation DERS scale descriptive statistics results*

Scores	Min - Max*	Mean (SD)
<b>DERS Total Score</b>	38-124	76.15 (20.91)
<b>Strategies subscale</b>	9-34	17.27 (6.96)
<b>Non-Acceptance subscale</b>	6-28	13.73 (5.25)
<b>Consciousness subscale</b>	6-22	12.19 (4.09)
<b>Impulses subscale</b>	6-17	10.46 (3.46)
<b>Objectives subscale</b>	5-21	12 (4.48)
<b>Clarity subscale</b>	6-20	10.5 (3.44)

*Note.* \* The standard range for this subscale is between 36 and 180.

In order to explore whether the emotion regulation level was correlated with some sociodemographic variables, Spearman's and Pearson's correlations were calculated between the DERS scale and age, income, level of education and length of service (see **Table 7**). It was calculated the Spearman's correlation value for income and level of education, and the Pearson's correlation value for age and length of service. The results showed no statistically significant correlation between the DERS scores and the sociodemographic variables.

**Table 7**

*Association between Emotion Regulation (DERS) and sociodemographic variables*

Correlations	<i>r</i> / <i>r<sub>s</sub></i> ( <i>df</i> =25)
<b>DERS total score vs. age</b>	-0.199
<b>DERS total score vs. income</b>	0.003
<b>DERS total score vs. level of education</b>	0.238
<b>DERS total score vs. length of service</b>	-0.125

*Note.* DERS= Difficulties in Emotion Regulation Scale; '*r*' = Pearson coefficient; '*r<sub>s</sub>*' = Spearman coefficient; '*df*' = degree of freedom.

### Association of Empathy and Emotion Regulation to Burnout

Table 8 shows Spearman's correlation coefficients comparing the scales' total scores (DERS and IRI) and the subscales of Burnout. Results show that emotional exhaustion has a significant positive relationship with the empathy level (IRI) ( $r_s = .661, p = .007$ ) and the difficulty in regulating emotions (DERS) ( $r_s = .632, p = .001$ ). Also, depersonalization has a significant positive relationship with DERS ( $r_s = .598, p = .002$ ), demonstrating that a higher score in depersonalization was associated with higher difficulty in emotion regulation. This result shows that the higher the burnout emotional exhaustion values, the higher the DERS score (greater the emotion regulation difficulties), which means that the emotion regulation is lower or inadequate.

There was no statistically significant correlation between the personal achievement subscale and the DERS or empathy scores, as expected.

**Table 8**

*Correlations between the total scores of Empathy (IRI) and Emotion Regulation (DERS) and the subscales of Burnout (MBI)*

	Empathy (IRI)	Emotion Regulation (DERS)
<b>Emotional Exhaustion (MBI)</b>	0.661** (0.007)	0.632** (0.001)
<b>Depersonalization (MBI)</b>	0.102	0.598** (0.002)
<b>Personal Achievement (MBI) - inverse</b>	-0.083	-0.361

\*\*Correlation is significant at 0.01 level. (two-tailed).

Having a closer look to the correlation between the subscales of burnout (MBI) and difficulties in emotion regulation (DERS), (see **Table 9**), the DERS total score and Clarity subscale has a positive correlation with the subscales depersonalization and emotional exhaustion;  $r_s = .73, p = .001$ ;  $r_s = .484, p = .14$ , respectively. Also, the results showed other positive correlations between Objectives subscale and emotional exhaustion subscale ( $r_s = .547, p = .005$ ), Consciousness subscale with depersonalization ( $r_s = .478, p = .018$ ), Strategies subscale with depersonalization ( $r_s = .495, p = .014$ ) and Emotional Exhaustion ( $r_s = .598, p = .002$ ), and finally, the Non-Acceptance subscale with emotional exhaustion ( $r_s = .553, p = .004$ ). Considering the correlation analysis, it seems that the greater the difficulty of emotion regulation, the higher the impact on many burnout dimensions for the overall sample.

**Table 9***Correlations between difficulty of Emotion Regulation (DERS) and Burnout (MBI) subscales*

	<b>MBI Personal Achievement</b>	<b>MBI Depersonalization</b>	<b>MBI Emotional Exhaustion</b>
<b>DERS Total Scale</b>	-0.361	0.598** (0.002)	0.632** (0.001)
<b>DERS Clarity</b>	-0.449	0.730** (0.001)	0.484* (0.14)
<b>DERS Objectives</b>	-0.348	0.318	0.547* (0.005)
<b>DERS Impulses</b>	-0.102	0.168	0.206
<b>DERS Consciousness</b>	-0.178	0.478* (0.018)	-0.003
<b>DERS Strategies</b>	-0.426	0.495* (0.014)	0.598** (0.002)
<b>DERS Non-Acceptance</b>	-0.111	0.360	0.553** (0.004)

*Note: \*\*Correlation is significant at 0.01 level. (one-tailed); \*Correlation is significant at 0.05 level (two-tailed).*

When we look at the relationship between the burnout (MBI) subscales and empathy (IRI) subscales, results showed a few significant positive correlations (see **Table 10**). Emotional exhaustion has a significant correlation with personal discomfort subscale ( $r_s = .672$ ,  $p = .004$ ), and depersonalization has a correlation with fantasy subscale ( $r_s = .467$ ,  $p = .022$ ). What these results seem to imply is that the more empathetic the police officer, the greater the impact on different measures/subscales of burnout.

**Table 10***Spearman correlations between Burnout (MBI) subscales and Empathy (IRI) subscales*

	<b>MBI Personal Achievement</b>	<b>MBI Depersonalization</b>	<b>MBI Emotional Exhaustion</b>
<b>IRI Total Scale</b>	-0.083	0.102	0.661** (0.007)
<b>IRI Fantasy</b>	-0.046	0.467* (0.022)	0.397
<b>IRI Personal Discomfort</b>	-0.331	0.231	0.672** (0.004)
<b>IRI Empathic Concern</b>	0.274	-0.084	0.301
<b>IRI Perspective Taking</b>	0.190	0.040	0.427

Note: \*\*Correlation is significant at 0.01 level. (two-tailed);

\*Correlation is significant at 0.05 level (two-tailed).

In general, between the subscales of DERS and IRI, higher scores on the Fantasy domain and Personal Discomfort of the empathy scale (IRI), were significantly associated with increased scores in burnout, except for consciousness (see **Table 11**).

**Table 11**

*Spearman correlation between Empathy (IRI) and Emotion Regulation (DERS) subscales*

	<b>IRI Fantasy</b>	<b>IRI Personal Discomfort</b>	<b>IRI Perspective Taking</b>	<b>IRI Empathic Concern</b>	<b>IRI Total Scale</b>
<b>DERS Total Scale</b>	0.657** (0.001)	0.620** (0.008)	-0.018	0.124	0.380
<b>DERS Clarity</b>	0.628** (0.001)	0.482* (0.05)	0.035	0.128	0.293
<b>DERS Objectives</b>	0.341	0.659** (0.004)	-0.211	0.065	0.339
<b>DERS Impulses</b>	0.499** (0.01)	0.592* (0.012)	-0.254	0.252	0.264
<b>DERS consciousness</b>	0.340	-0.253	-0.153	-0.255	-0.168
<b>DERS Strategies</b>	0.520** (0.007)	0.581* (0.01)	-0.051	0.113	0.210
<b>DERS Non- Acceptance</b>	0.528** (0.006)	0.372	0.125	0.225	0.301

Note: \*\*Correlation is significant at 0.01 level. (two-tailed); \*Correlation is significant at 0.05 level (two-tailed).

**The moderation role of Emotion Regulation in the relationship between Burnout and Empathy**

The Pearson test – partial coefficient was performed to control the effect of emotion regulation in the relationship between burnout and empathy. Initially, the Pearson test between empathy and burnout was performed, and then the moderation of emotion regulation was verified by the Pearson coefficient (partial coefficient) extension. This test was performed by comparing all subscales and the total score of the burnout scale (MBI). The results are described below in Table 12.

**Table 12**  
*Pearson correlations between Empathy (IRI) total score and Burnout (MBI) subscales (with and without the moderation of emotion regulation - DERS)*

	<b>MBI Personal Achievement</b>	<b>MBI Depersonalization</b>	<b>MBI Emotional Exhaustion</b>
<b>IRI Total Scale (without DERS moderation)</b>	-0.124	0.149	0.713
<b>IRI Total Scale (with DERS moderation)</b>	0.91	0.053	0.680

As demonstrated in the table above, there was no meaningful differences in the correlations of the scales with or without the DERS moderation.

It is important to mention that the score for difficulties in emotion regulation (DERS) were low, which means the sample has relatively good emotion regulation mechanisms. Additionally, results also showed that the empathy scores were comparatively high, as well as burnout values.

## Discussion

The literature review showed that much research is needed to better understand the complex relationship between empathy, emotion regulation, and burnout among police officers. In addition, given that this is a risky and stressful profession, potentially impacting the individuals' physical and mental health, professional performance, and general quality of life (Magnavita et al., 2018). As such, this study explored the association of empathy and emotion regulation to burnout in police officers and the role of age, income, educational level and length of service.

This work had some results in accordance with the literature, while others were unexpected. It was expected to be found prominent levels of burnout and a negative correlation between burnout and empathy. Also, it was expected that the mediating role of emotion regulation had a significant impact on that correlation, and that it would invert the negative correlation due to the protective role it has on professionals, allowing them to better deal with emotions and prevent burnout symptoms.

In this study, as expected, police officers presented a prominent level of burnout, as demonstrated and warned by several authors (Vila, 2006, Basinska & Vast, 2014, Turgoose et al., 2017), believed as the consequence of an exhausting work without enough training and resources, which will reflect on professional performance and family and social life.

However, there were also high results on the Personal Achievement subscale, which is an inverse measure of burnout. This situation may be related to a limitation already mentioned in the literature (Basinska & Vast, 2014). Several authors have claimed that Personal Achievement may not be related to burnout due to the conceptualization of personality traits, such as self-efficacy (Marques-Pinto, 2014). In this sense, the depersonalization and emotional exhaustion subscales become more relevant. However, this limitation does not prove that this subscale is not related to burnout, and it is also possible that, in this case, the sample demonstrates elevated burnout levels and also of personal achievement. This situation may be due to all the positive issues related to police work, which have also been mentioned in the literature (Kop et al., 1999).

Regarding empathy, although the scale does not have a cutoff point, the results showed that the police officers' sample in this study presented low results for personal discomfort and fantasy. These subscales measure people's tendencies to identify imaginatively with fictional characters in books or movies (Fantasy) and the self-oriented feelings of distress during others' misfortunes (Personal Discomfort) (Davis, 1983), which might be why they are associated with difficulties in emotion regulation. This result can be expected from police officers since the job

they perform and the way they are selected to do the job, it is not expected for them to have high levels of discomfort during stressful situations, like when presented with an armed robbery or when presented with a rape victim. Police officers undergo serious training and are only selected as the most stress-resistant individuals (Kop et al., 1999).

Still the IRI empathy scale, the results are higher for empathic concern, which measures people's other-oriented feelings of sympathy for the misfortunes of others and, as such, is considered one of the emotional components of empathy, and the perspective taking is a more cognitive or intellectual component, measuring people's tendencies to imagine other people's points of view (Davis, 1983). The competence of a police officer to be able to take the perspective of the other and show emotional understanding is reported in several international reports (Inzunza, 2014). Also, Perspective Taking is associated with better interpersonal functioning, higher self-esteem, and lower emotionality. Empathic Concern is characterized by a positive relationship with emotional reactivity (Limpo et al., 2010).

Focusing on burnout, emotional exhaustion was positively related to empathy; however, it was not found any other significant correlation with the other burnout subscales. Some empathy subscales also correlate with emotional exhaustion, as is the case of the Personal Discomfort subscale. As emotional exhaustion measures the feelings of exhaustion and overwhelming feelings at work, it can be concluded that the higher the empathic response, the higher the demand for the police officer, causing emotional fatigue and emotional tiredness (Turgoose et al., 2017). These findings strike as extremely important as the police officer profession has considerable exposure to stress and emotionally charged situations, as demonstrated above, and it is crucial to understand if that causes any problems to the professionals. As concluded by the results, high empathy officers might be more exposed to emotional exhaustion symptoms, which can lead to high severity burnout.

Concerning the emotion regulation scale used in this study, it was found a high correlation between difficulties in emotion regulation and the emotional exhaustion and depersonalization burnout subscales. These results show that the higher the difficulties in emotion regulation, the higher the burnout symptoms and severity. It is a very important finding, as it shows the importance of strategies of emotion regulation in the prevention of burnout symptoms and stress-related emotional problems.

Concerning the sociodemographic variables, the only significant correlation was between level of education and emotional exhaustion and depersonalization, which are the burnout subscales. As such, we can conclude the level of education might have an important correlation with burnout.

This study has some limitations. The number of participants is low, and the results could be better supported if the number of participants was bigger. Also, in this study only 4 women participated, and for that matter we could not access gender differences. Moreover, it would be expected to have more differentiated functions of the participants (jobs inside de PSP), however that not happened.

Concluding, we can see that some of the results are as expected. The emotion regulation might play a part in protecting against burnout, especially in this profession, which as a high level of stress and emotional demanding situations. At the same time, we can conclude that the most empathic professionals have a higher exposure to burnout symptoms, and especially emotional exhaustion. Possibly, the more empathic professionals and with less emotion regulation skills are the most exposed to burnout, stress and fatigue, but much more investigation on the matter is needed to draw that conclusion. To better understand burnout and the relationship with other psychological variables is the beginning of the path to understand how to prevent burnout and emotional exhaustion.

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# ATTACHMENTS

## **Attachment 1 - Informed Consent**

Dear Participant, welcome!

This document aims to invite you to participate in an investigation about empathy, burnout and emotion regulation in Portuguese police forces ("Burnout in Portuguese Police Forces: The Role of Empathy and Emotion Regulation").

It is expected that the document will clarify all doubts regarding the relevance of the studies, the importance of your participation, if you decide to participate, as well as what you can expect from them. Please read the information that follows carefully and, if it does not clarify your doubts or you feel that you need more data to decide, we will be fully available to provide them.

What is the purpose of the study?

This study aims to understand the relationship between empathy and burnout in Portuguese police forces, and to understand the mediation of emotion regulation in this relationship.

What does my participation involve?

To make participation official, it is necessary for the participant to complete a questionnaire consisting of sociodemographic questions, about episodes of burnout, empathy and emotion regulation. It won't take more than 15 minutes.

Is my confidentiality guaranteed?

All information collected will be confidential and will be treated and kept anonymously. It will not be necessary to identify yourself at any time during data collection. These will be used exclusively by our research team.

Can I withdraw after starting my participation?

Your participation is completely voluntary and you remain free to withdraw from the study at any time (without having to give any reason), even if you have already completed the informed consent.

Who can I contact if I have questions? Who is responsible for this study?

If you have any questions, interest or curiosity, and would like to clarify any doubts, or if this study adversely affects you in any way, please do not hesitate to contact the principal investigator, Prof. Patrícia Oliveira-Silva – [posilva@porto.ucp.pt](mailto:posilva@porto.ucp.pt) or research assistant, Ana Carolina Teixeira, [anacarolinateixeira19@gmail.com](mailto:anacarolinateixeira19@gmail.com).

Please note that by ticking the last box you are indicating your consent to participate in this study. Please tick all that apply:

- I have read and understood all the information regarding my participation.
- I had the opportunity to ask questions and discuss the study with the researcher, if it was of interest to me.
- I feel I understand the study well enough to make an informed decision and complete the online questionnaire.
- I understand that I cannot answer any question if I want to.
- I understand that my data will be anonymous and confidential, respecting the Data Protection law.
- I understand that I am free to withdraw from this study at any time, without giving any reason, and that I can request that my data be withdrawn at any time until the publication of any report or other material.
- I am over 18 years old.
- I consent to enter part 1 of the study (online questionnaire).**

## Attachment 2 – Sociodemographic Questionnaire

### Part I

**1. Gender**

Masculine \_\_\_\_\_

Feminine \_\_\_\_\_

I rather not respond \_\_\_\_\_

**2. Age:** \_\_\_\_\_ years

**3. Nationality:**

Portuguese: \_\_\_\_\_

Other. Which one? \_\_\_\_\_

**4. If you answered above that you do not have Portuguese nationality, how long have you lived in Portugal?** \_\_\_\_\_ (in months or years)

**5. What is your level of education (already completed)?**

Primary education \_\_\_\_\_

Secondary education \_\_\_\_\_

Technical education \_\_\_\_\_

Graduation \_\_\_\_\_

Master's degree \_\_\_\_\_

Doctorate \_\_\_\_\_

Other. Which one? \_\_\_\_\_

**6. What is your profession or area of expertise?**

\_\_\_\_\_

**7. Marital status:**

Single \_\_\_\_\_

Married/ Domestic Union \_\_\_\_\_

Divorced/separated \_\_\_\_\_

Widower \_\_\_\_\_

Other. Which one? \_\_\_\_\_

**8. Do you have children?**

Yes \_\_\_\_\_

No \_\_\_\_\_

**9. If you answered yes in the last question, how many children do you have?**

\_\_\_\_\_

**10. With whom do you live?**

I live alone \_\_\_\_\_

With family (without children) \_\_\_\_\_

With family (with children) \_\_\_\_\_

With friends \_\_\_\_\_

Other. Which one? \_\_\_\_\_

**11. Which of the following descriptions comes closest to what you feel about your household's current income?**

Current income allows me to live comfortably \_\_\_\_\_

Current income is enough to live on \_\_\_\_\_

It's hard to live on my current income \_\_\_\_\_

It is very difficult to live on my current income \_\_\_\_\_

I don't know/prefer not to answer \_\_\_\_\_

**12. Current job position: \_\_\_\_\_**

**13. Time of service in the police: \_\_\_\_\_ years**

## Part II

Please select the option that seems most appropriate to you.

- 1 – never
- 2 - rarely
- 3 – sometimes
- 4 – a lot of times
- 5 – frequently
- 6 – always

**Have you ever witnessed violent situations in job-related situations?**

1                      2                      3                      4                      5                      6

**Have you ever thought your life was in danger in job-related situations?**

1                      2                      3                      4                      5                      6

**Have you ever felt you have a risk profession?**

1                      2                      3                      4                      5                      6

**Have you ever considered you have an emotionally high demanding profession?**

1                      2                      3                      4                      5                      6

### **Attachment 3 – Interpersonal Reactivity Index (IRI)**

The following statements refer to ideas or feelings you may have had in different situations.

Please indicate to what extent each of these applies to you by choosing the appropriate number from the scale below: 0, 1, 2, 3, or 4, where 0 is “Does not describe me well” and 4 is “Describes me very well”.

Please read each authorization before responding in the corresponding space.

Please answer as frankly as possible.

1. I often have feelings of tenderness and concern for people less fortunate than myself.
2. I sometimes have difficulty seeing things from others' perspectives.
3. Sometimes I don't feel very sorry when other people are having problems.
4. I easily get caught up in the feelings of characters in a novel.
5. In emergency situations, I feel uncomfortable and apprehensive.
6. I usually maintain objectivity when watching a movie or a theater and don't get completely involved.
7. When there is disagreement, I try to consider all points of view before making a decision.
8. When I see someone being taken advantage of, I feel like protecting them.
9. I sometimes try to understand my friends better by imagining their perspective of seeing things.
10. It is rare to get completely involved in a good book or movie.
11. When I see someone getting hurt, I tend to stay calm.
12. The misfortunes of others do not usually disturb me much.
13. After seeing a movie or a theater, I feel like I was one of the characters.
14. Being in a tense emotional situation scares me.
15. I am usually very effective at dealing with emergencies.
16. I am often touched by things I see happening.
17. I believe that an issue always has two sides and I try to look at both.
18. I would describe myself as a soft-hearted person.
19. When I see a good movie, I can finally put myself in the protagonist's shoes.
20. I tend to lose control in emergency situations.
21. When I am upset with someone, I usually try to put myself in their shoes for a moment.
22. When I am reading an interesting story or novel, I imagine how I would feel if those events had happened to me.

23. When I see someone in an emergency in dire need of help, I get completely lost.
24. Before criticizing someone, I try to imagine how I would feel if I were in their shoes.

#### **Attachment 4 – Difficulties in Emotion Regulation Scale (DERS)**

The following questions are related to your feelings and emotions.

Indicate the extent to which each of these applies to you by choosing the appropriate number from the scale below:

1, 2, 3, 4 or 5, where 1 is “Almost never applies to me” and 5 is “Always applies to me”.

Read each statement carefully before responding in the corresponding space.

Please answer as frankly as possible.

1. I clearly understand my feelings.
2. I pay attention to how I feel.
3. I experience my emotions as overwhelming and out of control.
4. I have no idea how I feel.
5. I have difficulty making sense of my feelings.
6. I am attentive to my feelings.
7. I know exactly how I am feeling.
8. I am interested in what I am feeling.
9. I am confused about how I feel.
10. When I'm down, I become aware of my emotions.
11. When I'm down, I get angry with myself for feeling this way.
12. When I'm down, I'm embarrassed to feel this way.
13. When I'm down, I find it difficult to get things done.
14. When I'm down, I get out of control.
15. When I'm down, I think I'm going to feel this way for a long time.
16. When I'm down, I think I'm going to end up feeling really depressed.
17. When I'm feeling down, I believe my feelings are valid and important.
18. When I'm down, I have trouble focusing on other things.
19. When I'm down, I feel out of control.
20. When I'm down, I still get things done.
21. When I'm down, I feel ashamed of myself for feeling this way.
22. When I'm down, I know I'll be able to find a way to feel good.
23. When I'm down, I feel like I'm weak.
24. When I'm down, I feel like I can keep control of my behavior.
25. When I'm down, I feel guilty for feeling this way.

26. When I'm down, I have trouble concentrating.
27. When I'm down, I have a hard time controlling my behaviors.
28. When I'm down, I don't think there's anything I can do to feel better.
29. When I'm down, I get angry with myself for feeling this way.
30. When I'm down, I start to feel really bad about myself.
31. When I'm down, I think the only thing I can do is sink into it.
32. When I'm down, I lose control of my behavior.
33. When I'm down, I have trouble thinking about anything else.
34. When I'm feeling down, I spend some time figuring out what I'm really feeling.
35. When I'm down, it takes a long time for me to feel better.
36. When I'm down, my emotions feel overwhelming.

## Attachment 5 - Maslach Burnout Inventory (MBI)

The aim of this study is to find out how professionals see their profession and the people they work with closely.

On this page are 22 statements about feelings associated with work. Please read each statement carefully and decide if you have ever felt this way about your work. If you have never felt this way, tick the "0" (zero). If you have ever felt this way, please indicate how many times this has happened to you by circling the number (from 1 to 6) that best describes how often you feel this way.

Below is an example.

How often:

0 - never

1 – A few times a year or less

2 – Once a month

3 – A few times a month

4 – Once a week

5 – A few times a week

6 – Every day

1. I feel emotionally empty because of my job.
2. At the end of the workday, I feel exhausted.
3. I feel fatigued when I wake up in the morning and face another day at work.
4. I can easily understand how my clients feel about things.
5. I feel that I treat some clients as if they were impersonal objects.
6. Working with people all day is a real effort for me.
7. I deal very effectively with my clients' problems.
8. I feel drained from my work.
9. I feel drained from my work.
10. I have become more insensitive towards people since I started this job.
11. I worry that this job is "hardening" me emotionally.
12. I feel very energetic.
13. I feel very frustrated with my job.
14. I feel like I'm working too hard at my job.

15. In fact, I don't care what happens to some users.
16. Working directly with people puts me under too much strain.
17. I can easily create a relaxed atmosphere with my clients.
18. I feel excited after working closely with my clients.
19. I have accomplished many important things in this profession.
20. I feel like I'm at my limit ("end of the line").
21. In my work, I deal with emotional problems very calmly.
22. I feel that clients blame me for some of their problems.