

Gomes, Gabriela Pedro; Ribeiro, Neuza; Gomes, Daniel Roque

Article

The impact of burnout on police officers' performance and turnover intention: The moderating role of compassion satisfaction

Administrative Sciences

Provided in Cooperation with:

MDPI – Multidisciplinary Digital Publishing Institute, Basel

Suggested Citation: Gomes, Gabriela Pedro; Ribeiro, Neuza; Gomes, Daniel Roque (2022) : The impact of burnout on police officers' performance and turnover intention: The moderating role of compassion satisfaction, Administrative Sciences, ISSN 2076-3387, MDPI, Basel, Vol. 12, Iss. 3, pp. 1-18,
<https://doi.org/10.3390/admsci12030092>

This Version is available at:

<https://hdl.handle.net/10419/275362>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.



If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>

Article

The Impact of Burnout on Police Officers' Performance and Turnover Intention: The Moderating Role of Compassion Satisfaction

Gabriela Pedro Gomes ¹, Neuza Ribeiro ^{1,*} and Daniel Roque Gomes ^{2,3}

¹ CARME—Centre of Applied Research in Management and Economics, School of Technology and Management, Polytechnic Institute of Leiria, Campus 2—Morro do Lena, Alto do Vieiro, 2411-901 Leiria, Portugal; gabriela.p.gomes@ipleiria.pt

² School of Education (ESEC-IPC), Polytechnic Institute of Coimbra, R. Dom João III, 3030-329 Coimbra, Portugal; drmgomes@ipc.pt

³ ICNOVA—NOVA Institute of Communication, 1099-085 Lisboa, Portugal

* Correspondence: neuza.ribeiro@ipleiria.pt

Abstract: Burnout should be seen as an important phenomenon influencing the services provided by police forces, due to its high exposure to stressful events. The study sought to examine the impact of burnout on performance and turnover intention of Portuguese police forces, as well as to analyze the moderating effect of compassion satisfaction (CS) on this relationship. Data were collected in 2021 from 1.682 Portuguese police officers, using individual surveys. The results showed that (1) burnout is negatively related to performance; (2) burnout is positively related to turnover intention; (3) CS, although it has a positive effect on performance, does not assume a moderating role, as expected, in the relationship between burnout and performance; (4) CS assumes a moderating role in the relationship between burnout and turnover intention. That is, when a person who still suffers from burnout feels CS, it decreases the intention to leave the organization. The implications and the bearings of this study are discussed and presented regarding the theoretical, empirical and practical perspectives in order to better support both the comprehension of burnout in police officers and offer the best practical recommendations.

Keywords: burnout; performance; turnover intention; compassion satisfaction; police officers



Citation: Gomes, Gabriela Pedro, Neuza Ribeiro, and Daniel Roque Gomes. 2022. The Impact of Burnout on Police Officers' Performance and Turnover Intention: The Moderating Role of Compassion Satisfaction.

Administrative Sciences 12: 92.

<https://doi.org/10.3390/admsci12030092>

Received: 10 July 2022

Accepted: 25 July 2022

Published: 28 July 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The drastic transformation of the world, especially in the work context, has caused growing concern for employers, as well as for employees insofar as it is a source of demand for them, both to become as versatile as possible and to be able to perform the most varied and sometimes unknown tasks. Moreover, over time, this trend has been associated with the progressive growth of sources of occupational stress and often serious health problems, resulting from an increasing work overload and reduced worker benefits (Turgoose et al. 2017).

The pressure at work is growing and employees are constantly striving to meet objectives and experience satisfaction in their work (Malik and Noreen 2015), which has become very characteristic of helping professions, where workers deal directly with problematic people and are exposed to chronic emotional stress in addition to excessive effort, both physical and mental. Examples of these professions are health, education, and police forces, which are those with a higher risk and a greater vulnerability to burnout, especially the police forces, which are even considered by some authors to be one of the most stressful and dangerous professions in the world (Feijó 2019; Hartley et al. 2012; Malach-Pines and Keinan 2006). In recent years, the concept of burnout has developed and there has been increased research addressing this issue, since it is a situation that eventually results in

negative consequences for both the organization and the worker (Jackson and Schuler 1983). Therefore, in 2019, the World Health Organization recognized burnout as one of the occupational diseases that will appear in the international classification of diseases (Feijó 2019).

Burnout is increasingly associated with harmful and radical situations, namely depressive tendencies or even suicide attempts, especially by the police forces. Therefore, the stress to which police officers are exposed on a daily basis, the aggressiveness with which they are received in the most diverse occurrences and the excessive care for their professional career are some of the factors that often make them vulnerable to burnout disorder (Feijó 2019).

Burnout constitutes a phenomenon that has a strong presence on organizational functioning, both in the work environment and in the services provided by the police forces, one of the professional categories that is constantly and heavily exposed to a series of stress predictors, eventually affecting their lives (Feddock et al. 2007).

When evolving to more extreme situations, stress leads individuals to situations of burnout, which will further affect their lives, both personally and professionally, and will consequently jeopardize their performance at work, as well as increase the turnover intentions of these professionals. Thus, it is pertinent to try to deepen the understanding of the real impact of this phenomenon on the performance and health of employees, especially in the police forces (Maslach et al. 2001).

The concept of compassion satisfaction appears as a contrast to the challenges and problems experienced in organizations, as it represents the positive aspects of helping professions, in those professionals such as police officers who tend to gain pleasure and satisfaction from providing help and making a difference in people's lives (Stamm 2002; Turgoose et al. 2017). Moreover, compassion satisfaction constitutes an important protective factor against compassion fatigue and especially burnout (Wagaman et al. 2015), promoting the decrease of turnover intention and enhancing professionals' performance.

This study aims to assess the impact of burnout on performance and turnover intention in police officers and also seeks to analyze the moderating effect of compassion satisfaction in the relationship between these two variables.

2. Literature Review

2.1. Burnout

The term burnout emerged in the late 1960s to define the physical and emotional stress felt by professionals who worked with people in vulnerable situations (Rotenstein et al. 2018), but the studies about this phenomenon started a little later, in the 1970s, by Freudenberg, the "father" of burnout. Burnout syndrome is a persistent and negative work-related mental state characterized mainly by emotional exhaustion, depersonalization and reduced personal achievement, accompanied by distress, feelings of ineffectiveness and inefficiency, reduced motivation and development of dysfunctional attitudes and behaviors in the workplace and work context (Schaufeli and Enzmann 1998; Hooper et al. 2010). This syndrome is usually associated with professionals who provide support in emergency situations and crisis response, such as police officers, firefighters, social workers and teachers (Florio 2010).

The professional activity of police forces is considered by many authors to be a risky profession, with numerous associated risk factors making these professionals very susceptible to burnout syndrome (Moon and Maxwell 2004). In addition, day shift or night shift work, which is very common in these professions, has been associated with burnout by some authors, to the extent that day shift, and night shift workers tend to develop higher levels of burnout than those who work only during the day (Mallmann et al. 2009).

Organizational factors are also strong predictors of exhaustion and work-related stress for professionals at work (Halbesleben and Buckley 2004), namely the level of workload, the organizational involvement, the values and reward system of the institution and the managers' sense of justice (Leiter and Maslach 2004). However, although personal factors

are also related to burnout and work-related attitudes (Ribeiro et al. 2020a), they are not the main predictors of work-related stress, resulting in burnout being considered a social rather than an individual phenomenon (Maslach et al. 2001). Extreme exposure to stress is reflected in high rates of burnout (Martinussen et al. 2007), making work stress increasingly associated with health problems, especially anxiety, depression, use of medication, or, in more extreme cases, suicidal thoughts, particularly in police officers (Santos 2009). Although burnout is the last stage in an employee experiencing a stress disorder (Schaufeli et al. 2009) and represents a borderline situation of stress, it can be so excessive that it can cause serious negative consequences for professionals.

Recently, burnout has become one of the main topics in social psychology, due to the fact that it represents a strong threat to the physical and psychological health of professionals, especially those who work as police officers, firefighters, medical personnel and members of rescue teams (Brough 2004). They are exposed on a daily basis to scenarios of physical, psychological and spiritual suffering of the people they help, as well as to the despair of their relatives (Jamieson et al. 2010). Moreover, the number of scientific studies on burnout in police officers has become an increasing trend, seeing as this professional group is one of the most vulnerable to high levels of stress (Burke and Mikkelsen 2006; Malach-Pines and Keinan 2006; Yun et al. 2015). Most of these studies focus on determining the causes of job stress, and in general, they reveal that burnout is strongly related to more negative attitudes at work, such as dissatisfaction, low organizational commitment, high levels of absenteeism and turnover, and intention to leave work (Schaufeli and Enzmann 1998). Burnout syndrome does not occur suddenly, but rather because of an accumulation of mental and physical stress in highly complex and stressful jobs, as well as jobs that require greater human interaction (Schaufeli et al. 1993). Clearly, these are aspects that negatively affect the activity of police officers, as they are heavily exposed to serious and unexpected situations with high levels of stress on a daily basis (Anderson et al. 2002). The working conditions of these professionals are also considered quite oppressive, which in many cases result in feelings of pessimism that, in the medium term, cause exhaustion and a decline in performance at work and in life in general (Zhao et al. 1999).

2.2. Performance

Job performance refers to the worker's ability to perform various tasks, according to the organization's needs, i.e., it is about all the behaviors involved in performing a given task, including the effectiveness and outcomes of each behavior, and a rising number of organizations are interested in identifying the variables that influence performance (Jaramillo et al. 2006; Duarte et al. 2021; Yücel et al. 2020). Performance can be divided into task performance and contextual performance (Borman and Motowidlo 1993). Task performance has to do with behaviors in a particular role and generally refers to the outcome of an individual's efforts (Motowidlo and Scotter 1994). Contextual performance refers to individuals' willingness to voluntarily engage in activities not inherent to their role, to insist on performing a certain task, to cooperate with other individuals, to comply with organizational rules and processes, and to support or defend the organization's goals by acting on behalf of the organization (Zhang et al. 2021).

An employee's performance is related to job satisfaction and attitudes (Judge et al. 2001), as well as behaviors. In addition, a strong sense of ownership and connection to the organization's values and goals will increase the level of performance (Rageb et al. 2013). However, to achieve good job performance it is essential to understand the variables that can impact this indicator, both positively and negatively (Kenis 1979). Thus, when a particular factor has a negative effect on performance, it means that this variable negatively pressures the tasks developed by the professional, which will lead to the occurrence of productivity problems, quality of services provided, as well as a lower performance at work. On the other hand, variables that represent positive effects on performance will contribute to the effectiveness of the tasks performed, increased levels of productivity, as well as improved job performance (Zonatto and Lavarda 2013).

To achieve its goals and have a competitive advantage, the organization needs employees who perform well and who, in addition to benefits such as rewards or career promotions, could feel satisfaction and pride in their role. Incentives, for example, emerge as an important instrument to verify employee performance, serving as a motivating force (Fareed et al. 2013).

2.3. Turnover Intention

Turnover is a source of great concern for organizations, as it is an extremely negative aspect for them. It is defined as the replacement of the workforce during a particular time (Hinshaw and Atwood 1984) when employees leave the organization and are replaced by new ones. Although turnover intention defines the employee's plan to leave the job (Basariya and Ahmed 2019), it reflects an employee's willingness to leave the workplace. In this case, there is still an opportunity for the organization to understand the reasons that led the employee to this intention and take measures to avoid it (Gaudêncio et al. 2017). However, according to the literature, turnover intention is a strong predictor of turnover in companies (Hendrix et al. 1998; Tett and Meyer 1993).

Turnover is low in the Portuguese police forces, occurring practically only in situations of non-compliance with the institution's rules or even due to the practice of illegal acts in the work context. On the other hand, turnover intention occurs more frequently, both due to the intention of changing their place of work while remaining in the same institution and to the intention of leaving the profession they occupy, although this is less frequent. The fact that these professionals perform daily high-risk jobs, with very low salaries and few benefits, puts strong pressure on turnover levels (Siyal and Peng 2018).

Researchers have been increasingly dedicating their attention to turnover intention (Gün et al. 2021; Richer et al. 2002; Shim et al. 2015; Siu et al. 2015), especially regarding the relationship of this indicator with absenteeism (Somers 1995), satisfaction (Tett and Meyer 1993), stress (Chao et al. 2015; Li et al. 2021; Summers et al. 1989), performance (McElroy et al. 1995; Ribeiro et al. 2021), compassion satisfaction and organizational justice, which are all determinant variables of turnover (Khatri et al. 2001). Researchers agree on the great impact it has on professionals and organizations. This increases the need for leaders to have the ability to diagnose the nature and possible determinants of turnover intention (Ribeiro et al. 2020b), to take the most appropriate measures and prevent turnover from becoming costly for the company.

2.4. Compassion Satisfaction

Compassion Satisfaction emerges from the division of the concept of Professional Quality of Life by Stamm (2010) into two completely opposite aspects: compassion satisfaction (CS), which is the positive side, and compassion fatigue (CF), as the negative side. CS appears as a balance of CF in the professionals' life, preventing most of them from becoming sick (Stamm 2005), because CF, in turn, is an extremely negative aspect of their lives, also divided into two parts: burnout and secondary trauma. Thus, CS is defined as the individual's ability to be rewarded only for the care that they provide to others, being able to actively make a difference in their lives and contribute positively to the well-being of society (Hooper et al. 2010; Souza et al. 2019). For Lago and Codo (2013) and Stamm (2012), CS is the degree of joy or pleasure felt in being able to perform one's role well, doing good and helping others, characterized by feelings of satisfaction that result from performing their job, namely the health professional, social worker, teacher, lawyer, police officers, firefighter, among other professions that work in helping people, especially in trauma situations (Batalha et al. 2020; Stamm 2010).

This is a positive aspect of the helping professions and one of the elements that attract those who choose to work in nursing (Jakimowicz et al. 2018), for example, similarly to what often happens with police officers, who decide to perform their role for the benefit of society that they help and represent daily, providing them with a sense of satisfaction for what they do. CS is associated with positive affection, satisfaction with one's life, and

self-esteem (Kohan and Mazmanian 2003) and emerges as a source of internal strength for employees, promoting physical and mental health (Neff 2003) and serving as a protective factor, especially in slowing work stress that, sooner or later, may progress to burnout (Hooper et al. 2010; Grant et al. 2019; Wagaman et al. 2015). In addition, and despite this factor implying that professionals are more open and involved with the suffering of those they help (Lago and Codo 2013; Stamm 2010), CS is associated with professional commitment and engagement. This may be related to the fact that positions on the police force are very rewarding, and the more support and recognition they receive from their superiors and the institution itself, the less prone they will be to stress, which will bring a potential return in terms of increased CS (Sacco and Copel 2018). According to some authors, CS ends up being an essential factor for preventing or reversing the harmful impact of burnout (Andersen and Papazoglou 2015; Salloum et al. 2015).

Working out of compassion and helping others provides aid workers who perform their jobs out of compassion daily with increased levels of happiness and well-being that can be highly pleasurable for them; according to some researchers, the positive emotions that come from doing something fun or eating something you love are exactly the same as those that come from doing an act of charity or simply acting in a compassionate way (Galiana et al. 2017; Stamm 2002), as is the case in police forces (Chopko 2011).

According to Perez et al. (2010), the investigation of cases involving child pornography on the Internet, for example, is one of the functions that leads police officers to feel that their mission does indeed have a positive impact on the lives of victims, ultimately promoting their CS. However, these professionals are also often required to respond to highly critical situations, such as cases of terrorist attacks, exposure to death and violence, which are the most traumatic situations to which they are usually subjected and which end up being high factors of work stress (Brown et al. 1999); it is estimated that a police officer may encounter more than 900 potentially traumatic incidents throughout their career (Papazoglou 2013).

In many cases, the authorities end up arresting the offender and at the same time have to provide support to the victims until they receive specialized medical assistance. This causes professionals to have to adopt, often and simultaneously, a dual role of crime-fighter and of social support and safety to the victims (Manzella and Papazoglou 2014), a dual role that Chopko (2011) called “compassionate warrior mentality”, very frequent in police work. However, and despite this type of occurrence putting police officers in vulnerable situations and of possible CF, according to Stamm (2002) it is possible that, even so, they still feel the positive benefits of their function, as well as high levels of CS.

2.5. Burnout and Performance

Burnout describes the exhaustion and detachment behaviors experienced by human services and aid workers in response to excessive emotional exhaustion, quite characteristic of these positions (Harjanti and Todani 2019; Papazoglou et al. 2018). It is like a prolonged reaction to a job environment characterized as stressful, traumatic and routinized, such as that of police forces (Maslach 1998). These professionals are constantly in a state of alertness and pressure, which can be positive in terms of a possible increase in productivity in the first instance, but which, when it becomes excessive, ends up having a negative impact on their lives and their work performance (Wu et al. 2019). Exhaustion, disengagement from work and lack of effectiveness represent the three main dimensions that characterize burnout (Schaufeli and Enzmann 1998). These dimensions, combined with reduced willingness to work, lack of motivation and decreased concentration, will eventually lead the burnout victim to have a cynical attitude towards work and towards the people with whom they deal on a daily basis, harming them and decreasing their work performance (Campbell et al. 2001; Hoel et al. 2011).

Burnout has been associated with absenteeism, ineffectiveness, interpersonal conflict, lower productivity, job dissatisfaction and reduced organizational commitment (Maslach and Jackson 1986). Moreover, there is already evidence that burnout can be contagious

within the work team, compromising its performance and may even affect the satisfaction of its clients, in relation to the services provided by the group (Yu et al. 2020).

In this sense, the following hypothesis was constituted:

Hypothesis 1. *Burnout is negatively related to the performance of police officers.*

2.6. Burnout and Turnover Intention

An employee who experiences situations of extreme stress at work and, consequently, burnout, tends to experience devastating effects, characteristic of this phenomenon, both at a personal and professional level. Especially on a personal level, in addition to being able to trigger high mental exhaustion, stress or even sleep disorders (Peterson et al. 2008). Burnout can lead employees to feeling anxious, depressed, demotivated, exhausted and melancholic, eventually having consequences on their decisions and sometimes leading them to want to leave the organization where they work (Campbell et al. 2001). Furthermore, burnout, frustration and stress factors, in organizations with higher levels of turnover, represent some of the main causes of retention problems (Stancel et al. 2019). These problems imply that burnout is associated with high costs for the organization, namely regarding the expenses inherent to absenteeism, productivity problems and turnover, making turnover intention one of the most serious consequences of burnout for the organization (Ducharme et al. 2008). Both burnout and turnover intention negatively affect the quality of service provided and the organizational effectiveness (Mulvey et al. 2003).

Many studies even consider burnout as one of the main predictors of turnover intention (Kelly et al. 2021; Marshall and Stephenson 2020; Scanlan and Still 2019). Thus, professionals who are in situations of high burnout, due to its inherent negative consequences, tend to develop a higher turnover intention (Ellrich 2015), formulating the following research hypothesis:

Hypothesis 2. *Burnout is positively related to turnover intention of police officers.*

2.7. Burnout, Compassion Satisfaction and Performance

Stress is increasingly inevitable in the work context, which, combined with constant exposure to pressure factors and trauma situations, means that professionals who are subjected to this type of situation almost daily, as the police forces are exposed to, tend to develop critical health problems such as anxiety, depression or even burnout. In addition to compromising their health and causing damage to the personal and professional lives of these individuals (Florio 2010; Turgoose et al. 2017), this will cause demotivation, decreased well-being and commitment to the organization and, of course, affect their performance (Bakker and Heuven 2006; Randall and Buys 2013; Velden et al. 2010).

In addition, more than endangering the organizational commitment and well-being of these professionals, burnout will strongly harm their performance, ultimately damaging the quality of the services they provide (Page and Graves 2021), which means that burnout has a negative influence on the performance of the professionals under study. However, this negative role on burnout can be reduced by the existence of a strong CS for the function they perform. Thus, it is expected that the perception of CS will significantly affect the relationship between burnout and performance, insofar as, on the one hand, in the face of a high CS, so characteristic of the professionals under study. Even in situations of burnout, the practice of their services may not be so strongly affected, compared to what would be expected if it were not helping profession, which weakens the negative relationship between burnout and their performance.

On the other hand, low perception of CS will make professionals feel progressively more job affected by burnout, which is very common in the police forces, increasing the propensity for errors and putting their work at risk (Dasan et al. 2015). This will be reflected in their performance, which will naturally be compromised by stress and lack of satisfaction in relation to the job they perform, increasing the negative influence of burnout on the

performance of these professionals. It is thus expected that CS will significantly affect the relationship between burnout and performance in the police forces, and for the study of this relationship the following research hypothesis was established:

Hypothesis 3. *The relationship between burnout and performance is moderated by compassion satisfaction of police officers.*

2.8. Burnout, Compassion Satisfaction and Turnover Intention

Burnout presents a great association with employee turnover and impairs their productivity (Warren 2015). On the other hand, by leading to an increase in CF, burnout will cause professionals to have an early intention to leave the organization (Dasan et al. 2015). However, the fact that it is possible for an employee to perceive CF and, at the same time, have a good CS (Stamm 2002), makes it essential to develop practices that promote the acquisition of behavioral skills and techniques, to influence the development and participation of employees and increase their sense of belonging and organizational support (Papazoglou et al. 2019). Studies indicate that professionals who have experienced trauma or a significantly greater amount of emergency situations while performing their daily duties have higher rates of CF and lower rates of CS, as well as a higher level of burnout and a higher intention to leave the organization or search for a less demanding position, than professionals who have not yet experienced trauma or have experienced a considerably lower amount of such situations (Stancel et al. 2019).

In this sense, with high levels of job-related CS, the probability of the professionals under study thinking about staying longer in the organization increases, reducing their turnover intention (Yucel and Bektas 2012), i.e., CS reduces the power of burnout on turnover intention. On the other hand, when employees report a low perception of CS in their job, their willingness to leave the organization tends to increase (McHolm 2006), thereby making the relationship between burnout and turnover intention even stronger. Therefore, it is expected that the perception or not of CS, by an employee, will significantly affect the relationship between burnout and turnover intention. Thus, the following and last research hypothesis is formulated:

Hypothesis 4. *The relationship between burnout and turnover intention is moderated by compassion satisfaction of police officers.*

3. Method

3.1. Sample and Procedure

A questionnaire, through a specific link, was distributed by email to the local institutions of Portuguese police forces, allowing the collection of a larger number of responses in a wider geographical area. The questionnaire had voluntary participation, and anonymity was guaranteed. A total of 1.702 questionnaires were collected in the first months of 2021, twenty of which were considered invalid and removed from the study. Thus, the final sample is made up of 1.682 participants, mostly males (91%) and with ages between 39 and 54 years (57.1%). There is a greater predominance of professionals with a high school education level (75.7%) and the others, 20.5% have a higher education degree, 13.5% have a bachelor's degree, 7% have a master's degree and 3.8% completed their education up to the 3rd cycle. In addition, 986 of the individuals are married, 306 are single, 237 are in a consensual union, 148 are divorced and 5 are widowers, while most of them already have children (74.4%). Most professionals have worked in the institution for more than 10 years (62%) and only 6.9% have worked there for less than a year. As for the working hours, the majority work in shifts (1302) and as for the hierarchical position they belong to, 75.1% of the respondents are subordinates, 22.8% hold a middle management position and only 2.1% have a senior management position.

3.2. Measures

The Maslach Burnout Inventory—Human Service Survey (MBI-HSS), developed by Maslach and Jackson (1996) was used to measure burnout. It consists of 22 items, of which 9 items relate to emotional exhaustion, 8 to personal achievement and 5 to depersonalization. As for internal consistency, it has a Cronbach's Alpha of 0.75.

For individual performance, an instrument previously developed by Staples et al. (1999) and later adapted to Portuguese by Rego and Cunha (2008) was used, and it contains 4 items. Regarding its internal consistency, it presents good quality, with a Cronbach's Alpha value of 0.80.

For turnover intention, an instrument previously developed and validated by Peters et al. (1981) and Gyensare et al. (2016) was used, consisting of 4 items as well. It is a measure that also has very good internal consistency, with a Cronbach's Alpha value of 0.91.

CS was measured using the Professional Quality of Life 5 scale (ProQOL—version V) created by Beth Stamm (2009). Therefore, considering the nature of the study, only 10 items from this scale corresponding to CS were used. As regards its internal consistency, it is very efficient, with a Cronbach's Alpha value of 0.91.

4. Results

The data were analyzed using IBM SPSS Statistics 27.0 software. Among all the sociodemographic variables, only those that presented correlations with the variables under study were considered for the study and the others were not considered for the following analyses. According to Table 1, burnout and turnover intention show a significantly moderate and positive correlation ($\rho = 0.43$; $p < 0.01$), which means an increase in burnout tends to translate into an increase in turnover intention.

Table 1. Correlation between variables.

Variable	1	2	3	4	5	6	7	8
1 Burnout	1							
2 Performance	−0.21 **	1						
3 Turnover Intention	0.43 **	−0.35 **	1					
4 Compassion Satisfaction	−0.33 **	0.68 **	−0.50 **	1				
5 Gender	−0.05 *	0.03	−0.08 **	0.08 **	1			
6 Age	0.00	0.06 *	−0.16 **	0.01	−0.04	1		
7 Children	−0.04	−0.04	0.07 **	−0.01	0.09 **	−0.49 **	1	
8 Shift work	−0.06 *	0.07 **	−0.04	0.07	0.18 **	0.13**	−0.06 *	1

* Correlation is significant at the 0.01 level (two-tailed). ** Correlation is significant at the 0.05 level (two-tailed).

On the other hand, it was observed that burnout correlates significantly, but in a negative way, with performance ($\rho = -0.21$; $p < 0.01$) and with CS ($\rho = -0.33$), although they do not show a very strong relationship, they vary in the opposite direction. According to the presented values, there is enough statistical evidence to state that there may be some association between the variables in the study, which suggests that professionals suffering from burnout tend to present low levels of performance and CS and, in turn, have a greater intention to leave the institution where they work. So, the results suggest that hypotheses 1 and 2 are supported.

To test hypotheses 3 and 4, the reliability of the measures used was verified, as were the intended effects, and subsequently, the results were interpreted using the linear regression method presented by Baron and Kenny (1986). After verifying all assumptions, the predictor or independent variable, burnout, was centered and the interaction term was built, based on the research of Baron and Kenny (1986) to allow the study of the expected moderation effects in the initially defined analysis model.

The moderation model aims to evaluate if CS moderates the relationship between burnout and performance, as well as the relationship between burnout and turnover inten-

tion. For the purpose of this analysis, two tests to the moderation model were performed using the software SPSS Statistics, specifically the moderation model Burnout X Compassion Satisfaction—Performance, which was not statistically significant and therefore not successful, and the model Burnout X Compassion Satisfaction—Turnover Intention, which was successfully tested and proved to be statistically significant.

For testing the moderation model which predicts that the relationship between burnout and performance is moderated by CS, it was developed in three steps, following the method suggested by Baron and Kenny (1986) and as shown in the following table (Table 2). In a first step, to test the model of analysis considered, the control variables (gender; age; children; shift work) were included, explaining only 0.6% of the variation in Performance. In a second step, with an explanatory power of 45.7%, in which the predictor variable (Burnout) was included, as well as the moderator variable (CS), allowing the analysis of the main effects of the model. Finally, in the third step (Model 3), still with an explicative power of 45.7%, the interaction term was added for the influence of CS on the relationship between burnout and performance.

Table 2. Regression between Burnout, Performance and Compassion Satisfaction.

	Model	R ²	R ² Adjust	b	r	VIF
1	(Constant)			3.609	0.000	
	Gender			0.051	0.372	1.046
	Age	0.008	0.006	0.042	0.151	1.330
	Children			−0.025	0.548	1.320
	Shift work			0.098	0.012	1.056
2	(Constant)			3.627	0.000	
	Gender			−0.051	0.227	1.051
	Age			0.043	0.047	1.331
	Children	0.459	0.457	−0.014	0.652	1.323
	Shift work			0.039	0.176	1.061
	Burnout			0.016	0.611	1.124
3	Compassion Satisfaction			0.584	0.000	1.127
	(Constant)			3.630	0.000	
	Gender			−0.050	0.230	1.051
	Age			0.043	0.046	1.332
	Children	0.459	0.457	−0.014	0.645	1.324
	Shift work			0.039	0.174	1.061
	Burnout			0.015	0.632	1.131
Compassion Satisfaction			0.583	0.000	1.157	
Interact_Burnout_CS			0.013	0.728	1.031	

Dependent Variable: Performance.

Regarding CS as a moderator variable in the relationship between burnout and performance, assuming that there would be a significant interaction effect between burnout and CS, the following table (Table 2) shows that there is no significant interaction effect between them in determining performance. On the other hand, concerning the shift work control variable, it is possible to verify that it seems to influence the performance of the professionals under study. In addition, concerning the relationship between burnout and performance, moderated by CS, considering the arguments presented above and analyzing Table 2, it is possible to see that CS does not assume the role of moderating variable in this relationship, as expected, so this relationship is unsuccessful and hypothesis 3 (H3) is not confirmed. Therefore, there is only a main effect of CS on performance ($b = 0.583$; $r = 0$), insofar as an increase in CS also leads to an increase in performance.

The moderation model that predicts the moderating effect of CS on the relationship between burnout and turnover intention was also developed in three steps, according to the method suggested by Baron and Kenny (1986), and as shown in the following

table (Table 3). Model 1 includes the control variables (gender; age; children; shift work), explaining only 3% of the variation in turnover intention. Model 2, with an explanatory power of 35.2%, includes the main effects of the predictor variable (burnout), as well as the moderator variable (CS). Furthermore, Model 3, already with an explicative power of 35.4%, adds the interaction term for the role of CS on the relationship between burnout and turnover intention. As for the estimated moderation effect of CS on the relationship between burnout and turnover intention, Table 3 shows that the coefficients associated with CS are statistically significant ($b = -0.165$; $r = 0.005$), confirming the main effect between burnout and the dependent variable turnover intention in the respective model.

Table 3. Regression between Burnout, Turnover Intention and Compassion Satisfaction.

	Model	R ²	R ² Adjust	b	r	VIF
1	(Constant)			20.581	0.000	
	Gender			−0.294	0.000	1.046
	Age	0.033	0.030	−0.251	0.000	1.330
	Children			0.001	0.987	1.320
	Shift work			−0.008	0.886	1.056
2	(Constant)			0.218	0.314	
	Gender			−0.163	0.018	1.051
	Age			−0.243	0.000	1.331
	Children	0.354	0.352	0.024	0.630	1.323
	Shift work			0.078	0.099	1.061
	Burnout			0.740	0.000	1.124
	Compassion Satisfaction			−0.510	0.000	1.127
3	(Constant)			0.175	0.418	
	Gender			−0.167	0.015	1.051
	Age			−0.246	0.000	1.332
	Children			0.028	0.576	1.324
	Shift work	0.357	0.354	0.075	0.112	1.061
	Burnout			0.752	0.000	1.131
	Compassion Satisfaction			−0.498	0.000	1.157
	Interact_Burnout_CS			−0.165	0.005	1.031

Dependent Variable: Turnover Intention.

Finally, it is possible to perceive the main effects of burnout and CS on turnover intention, with burnout producing a direct positive and significant effect on turnover intention ($b = 0.752$; $r = 0$). However, CS causes a negative and significant effect on turnover intention ($b = -0.165$; $r = 0.005$), that is, with an increase in burnout, it is assumed that the professionals under study have a greater intention to leave the organization where they work, in contrast to what happens with CS, which with an increase is expected to decrease turnover intention. Furthermore, it is also possible to observe the existence of a significant interaction effect, in line with the fourth study hypothesis (H4), verifying the main effect of burnout and CS on turnover intention.

Furthermore, in relation to the predicted interaction effect, the analysis of Figure 1 allows us to visualize more clearly the nature of the interaction. In fact, the highest levels of CS felt by the professionals under study occur when there are the lowest levels of turnover intention, so the high or low perception of burnout will cause this relationship to vary very little. However, when the professionals under study reveal a low perception of CS, associated with a higher or lower level of burnout, the highest levels of turnover intention occur.

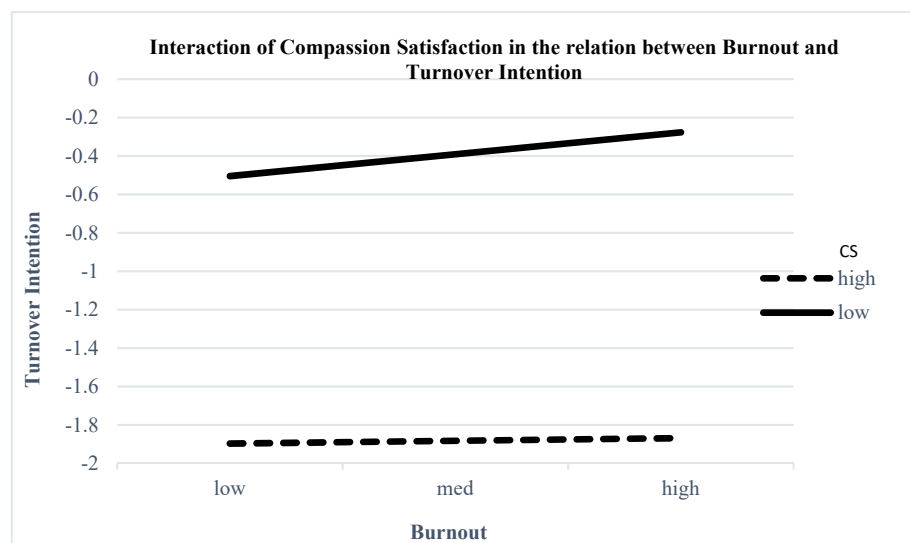


Figure 1. Interaction of Compassion Satisfaction in the relation between Burnout and Turnover Intention.

Therefore, it can be concluded that the overall analysis of the results reveals the existence of the main effect of burnout and CS on turnover intention, as well as an interaction effect of CS on the relationship between burnout and turnover intention, as predicted. Thus, it can be stated that CS does moderate the relationship between burnout and turnover intention, with the rationale that it reduces the effect of burnout on turnover intention, confirming the fourth hypothesis (H4).

5. Discussion and Conclusions

Main Findings

The hypotheses of this study were all supported. With effect, we were able to find empirical confirmation based on our results, which indicated that professionals with higher burnout levels show a worse performance, that is, in an organization with high levels of pressure and professionals constantly exposed to stress, workers tend to be more aggressive (Bakker and Heuven 2006; Velden et al. 2010) and often already in situations of burnout, tend to manifest a worse performance at work (Ashtari et al. 2009). Moreover, individuals who are in high burnout situations, due to the negative consequences inherent to them, tend to manifest themselves a little more dissatisfied, less motivated and, consequently, present a greater willingness to leave the organization where they work, thus increasing turnover intention (Marshall and Stephenson 2020; Willard-Grace et al. 2019).

Contrary to expectations, CS does not significantly affect the relationship between burnout and performance at work, that is, one would expect that when police officers reported more CS, the negative relationship between burnout and performance would become weaker, while those reporting low CS would have lower performance levels. However, this relationship was not confirmed, and the test performed on this relationship did not confirm the moderation effect, with only a main effect of CS on work performance. A possible reason for this result may be related to the fact that burnout is closer to negative indicators and refers more to issues of disruption than to performance, i.e., burnout may be a stronger instigator of protest, inaction or disruption, rather than a contradiction of good performance by nature.

On the other hand, the relationship between burnout and turnover intention was confirmed, when moderated by CS, in that burnout has a positive effect on turnover intention, in the sense that more burnout leads to higher turnover intention, and that CS will moderate this relationship. The results converge with theoretical evidence (Jakimowicz et al. 2018; Kelly et al. 2021; Koo et al. 2020; Mahoney et al. 2020; Sung et al. 2012; Zhang et al. 2021), which suggests that burnout and job satisfaction are important factors affecting

turnover intention, in that burnout increases their desire to leave the organization which, in turn, will be offset by increased satisfaction for their helping work.

6. Study Limitations and Future Research Suggestions

This study has some limitations. First, a convenience sample was inquired, whose representativeness may be questionable seeing as the results may not be generalized to the entire population under study. Second, the fact that the data collection was conducted at a single point in time may have implied a risk of contamination by common method variance (Podsakoff et al. 2000), although confidentiality and anonymity of responses were stressed. Future research may choose to collect data at temporally distant times or even use the dual-source method.

Another suggestion that would make sense for future studies would be, after the pandemic phase, to collect data again, allowing for a comparison and analysis of the pre- and post-pandemic situation. It would also be interesting to understand how burnout affects the level of happiness of professionals, as well as how organizational culture, affective commitment and the effect of leaders influence the relationships already predicted.

7. Theoretical Contributions and Implications of the Study

7.1. Theoretical Contributions

The results of this study thus met the expectations initially developed, although they have some implications, both theoretical and practical, for the research area. At the theoretical level, they contribute to the literature on the different variables studied, particularly on CS, especially among police officers, which has been little explored so far. The literature highlights the role of stress and emotional distress, so characteristic of these professionals, as one of the main predictors of burnout (Harjanti and Todani 2019; Papazoglou et al. 2018). Therefore, the results of this study, in addition to proving the negative effect of burnout on the lives of professionals and on their performance and turnover intention, prove the influence of CS in these relationships.

7.2. Psycho-Social Considerations and Challenges

On a practical level, this study suggests that, given a considerable improvement in CS, the effects of burnout on the professionals' willingness to leave the company may be minimized. One of the main goals of organizations should be to implement measures, both individual and organizational, aimed at reducing burnout and increasing the sense of belonging of individuals, such as stress reduction programs, group dynamics or workshops, which will also become effective intervention tools to improve job satisfaction. The action of companies in this field should include, for example, rethinking the organizational model of shift work and schedules, trying not to be permanently in a shift system, due to the fact that they are associated with extremely harmful effects on health, not yet fully known by science, but it is only known that they contribute to shortening the average life expectancy of professionals in this area and deteriorate their quality of life, becoming increasingly toxic and prone to burnout (Jia et al. 2021; Kijima et al. 2020).

Additionally, it is fundamental for the professionals themselves to recognize that their emotional, personal and professional balance is indispensable for them to become less susceptible to stress and, especially, to burnout syndrome. Organizations should also promote this stability by giving, for example, opportunities for professional growth, providing continuous feedback and giving a greater degree of autonomy in decision-making. This would strengthen their professional fulfillment, motivation and satisfaction with the work they do, leading them to become less prone to work stress and thus less inclined to leave the organization. Periodic psychological assessments should also be implemented to identify possible risk factors in these professions (García-Rivera et al. 2020; Queirós et al. 2020) and, subsequently, a comparative study should be conducted with other countries that have already implemented corrective measures, transposing to Portugal, with due adaptation, that which would effectively contribute to an improvement

of the current system. On the other hand, for those who effectively work shifts, if there is no other alternative, a fair differential should be increased in terms of compensation, which does not exist in Portugal, to compensate for the physical and psychological wear of those who, being on normal working hours, do not suffer. In addition to the risk that professionals on active duty experience, unlike those who only work in the administrative service, it is perceived as routine, and often much less stressful and less risky. The results also allowed us to understand the positive role of CS, which is a relevant aspect to be promoted among the professionals under study since satisfaction with the work performed on a daily basis brings benefits to both individuals and organizations. In combination with the promotion of labor policies that are less invasive of the emotional state of its employees, all the mechanisms, in addition to having a positive presence on professionals, promote an increase in CS which, as a result, will lead to a decrease in CF among professionals, and have very favorable effects from an economic point of view (Klein et al. 2018). It is also important to outline the role of personality traits, family conditions, societal support and encouragement, as well as governmental policies worldwide, that can be offered to give these professionals less stressful working situations.

Author Contributions: Conceptualization, G.P.G. and N.R.; methodology, G.P.G. and N.R.; validation, N.R. and D.R.G.; formal analysis, N.R. and D.R.G.; data curation, G.P.G. and D.R.G.; writing—original draft preparation, G.P.G.; writing—review and editing, N.R. and D.R.G.; supervision, N.R.; funding acquisition, N.R. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by FCT—Portuguese Foundation for Science and Technology—UIDB/04928/2020.

Institutional Review Board Statement: The study was conducted according to the guidelines of the Declaration of Helsinki. Ethical review and approval were not required for the study on participants in this survey in accordance with the local legislation and institutional requirements.

Informed Consent Statement: Informed consent was obtained from all participants involved in the study.

Data Availability Statement: The data that support the findings of this study are available on request from the corresponding author.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Andersen, Judith P., and Konstantinos Papazoglou. 2015. Compassion fatigue and compassion satisfaction among police officers: An understudied topic. *International Journal of Emergency Mental Health and Human Resilience* 17: 661–63. [\[CrossRef\]](#)
- Anderson, Gregory, Robin Litzenberger, and Darryl Plecas. 2002. Physical evidence of police officer stress. *Policing: An International Journal of Police Strategies and Management* 25: 399–420. [\[CrossRef\]](#)
- Ashtari, Zabihollah, Yadollah Farhady, and Morteza R. Khodae. 2009. Relationship between job burnout and work performance in a sample of Iranian mental health staff. *African Journal of Psychiatry* 12: 71–74.
- Bakker, Arnold B., and Ellen Heuven. 2006. Emotional dissonance, burnout, and in-role performance among nurses and police officers. *International Journal of Stress Management* 13: 423–40. [\[CrossRef\]](#)
- Baron, Reuben M., and David A. Kenny. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology* 51: 1173–82. [\[CrossRef\]](#) [\[PubMed\]](#)
- Basariya, Rabiya, and Ramyar Rzgar Ahmed. 2019. A Study on Attrition- Turnover Intentions of Employees. *International Journal of Civil Engineering and Technology* 10: 2594–601.
- Batalha, Edenise, Marta Melleiro, Cristina Queirós, and Elisabete Borges. 2020. Satisfação por compaixão, burnout e estresse traumático secundário em enfermeiros da área hospitalar. *Revista Portuguesa de Enfermagem de Saúde Mental* 24: 25–33. [\[CrossRef\]](#)
- Borman, Walter C., and Stephan J. Motowidlo. 1993. Expanding the criterion domain to include elements of contextual Performance. In *Personnel Selection in Organizations*. Edited by Neil Schmitt and Walter C. Borman. San Francisco: Jossey-Bass, pp. 71–98.
- Brough, Paula. 2004. Comparing the Influence of Traumatic and Organizational Stressors on the Psychological Health of Police, Fire, and Ambulance Officers. *International Journal of Stress Management* 11: 227–44. [\[CrossRef\]](#)
- Brown, Jennifer, Jane Fielding, and Jennifer Grover. 1999. Distinguishing traumatic, vicarious and routine operational stressor exposure and attendant adverse consequences in a sample of police officers. *Work & Stress* 13: 312–25.
- Burke, Ronald J., and Aslaug Mikkelsen. 2006. Burnout Among Norwegian Police Officers: Potential Antecedents and Consequences. *International Journal of Stress Management* 13: 64–83. [\[CrossRef\]](#)

- Campbell, Darrell A., Seema S. Sonnad, Frederic E. Eckhauser, Kyle K. Campbell, and Lazar J. Greenfield. 2001. Burnout among American surgeons. *Surgery* 130: 696–705. [\[CrossRef\]](#)
- Chao, Ming-Che, Rong-Chang Jou, Cing-Chu Liao, and Chung-Wei Kuo. 2015. Workplace stress, job satisfaction, job performance, and turnover intention of health care workers in rural Taiwan. *Asia Pacific Journal of Public Health* 27: 1827–36. [\[CrossRef\]](#) [\[PubMed\]](#)
- Chopko, Brian A. 2011. Walk in balance: Training crisis intervention team police officers as compassionate warriors. *Journal of Creativity in Mental Health* 6: 315–28. [\[CrossRef\]](#)
- Dasan, Sunil, Poonam Gohil, Victoria Cornelius, and Cath Taylor. 2015. Prevalence, causes and consequences of compassion satisfaction and compassion fatigue in emergency care: A mixed-methods study of UK NHS Consultants. *Emergency Medicine Journal* 32: 588–94. [\[CrossRef\]](#) [\[PubMed\]](#)
- Duarte, Ana P., Neuza Ribeiro, Ana S. Semedo, and Daniel R. Gomes. 2021. Authentic Leadership and Improved Individual Performance: Affective Commitment and Individual Creativity's Sequential Mediation. *Frontiers in Psychology* 12: 675749. [\[CrossRef\]](#) [\[PubMed\]](#)
- Ducharme, Lori J., Hannah K. Knudsen, and Paul M. Roman. 2008. Emotional Exhaustion and Turnover Intentions on Human Service Occupations: The Protective Role of Coworker Support. *Sociological Spectrum* 28: 81–104. [\[CrossRef\]](#)
- Ellrich, Karoline. 2015. Burnout and violent victimization in police officers: A dual process model. *Policing: An International Journal of Police Strategies & Management* 39: 652–66.
- Fareed, Zeeshan, Zain ul Abidan, Farrukh Shahzad, Umm-e-Amen, and Rab Nawaz Lodhi. 2013. The impact of rewards on employee's job Performance and job satisfaction. *Management and Administrative Sciences Review* 2: 431–42.
- Feddock, Christophe A., Andrew R. Hoellein, John F. Wilson, Timothy S. Caudill, and Charles H. Griffith. 2007. Do pressure and fatigue influence resident job Performance? *Medical Teacher* 29: 495–97. [\[CrossRef\]](#) [\[PubMed\]](#)
- Feijó, João Miguel de Sousa. 2019. *Burnout nas Forças de Segurança*. Porto: Licenciatura em Criminologia, Faculdade de Ciências Humanas e Sociais.
- Florio, Christine. 2010. *Burnout & Compassion Fatigue: A Guide for Mental Health Professionals and Care Givers*. Lexington: CreateSpace.
- Galiana, Laura, Fernanda Arena, Amparo Oliver, Noemí Sansó, and Enric Benito. 2017. Compassion Satisfaction, Compassion Fatigue, and Burnout in Spain and Brazil: ProQOL Validation and Cross-cultural Diagnosis. *Journal of Pain and Symptom Management* 53: 598–604. [\[CrossRef\]](#)
- García-Rivera, Blanca Rosa, Jesús Everardo Olguín-Tiznado, Mónica Fernanda Aranibar, María Concepción Ramírez-Barón, Claudia Camargo-Wilson, Juan Andrés López-Barreras, and Jorge Luis García-Alcaraz. 2020. Burnout Syndrome in Police Officers and Its Relationship with Physical and Leisure Activities. *International Journal of Environmental Research and Public Health* 17: 5586. [\[CrossRef\]](#) [\[PubMed\]](#)
- Gaudêncio, Pedro, Arnaldo Coelho, and Neuza Ribeiro. 2017. The role of trust in corporate social responsibility and worker relationships. *Journal of Management Development* 36: 478–92. [\[CrossRef\]](#)
- Grant, Heath Blair, Cathryn F. Lavery, and João Decarlo. 2019. An exploratory study of police officers: Low compassion satisfaction and compassion fatigue. *Frontiers in Psychology* 9: 2793. [\[CrossRef\]](#) [\[PubMed\]](#)
- Gün, İbrahim, Selma Söyük, and Salih H. Özsari. 2021. Effects of Job Satisfaction, Affective Commitment, and Organizational Support on Job Performance and Turnover Intention in Healthcare Workers. *Archives of Health Science and Research* 8: 89–95. [\[CrossRef\]](#)
- Gyensare, Michael Asiedu, Olivia Anku-Tsede, Mohammed-Aminu Sanda, and Christopher Adjei Okpoti. 2016. Transformational leadership and employee Turnover intention: The mediating role of affective commitment. *World Journal of Entrepreneurship, Management and Sustainable Development* 12: 243–66. [\[CrossRef\]](#)
- Halbesleben, Jonathon R. B., and Michael Ronald Buckley. 2004. Burnout in Organizational Life. *Journal of Management* 30: 859–79. [\[CrossRef\]](#)
- Harjanti, Dhyah, and Faiz Akbar Todani. 2019. Job Burnout and Employee Performance in Hospitality Industry: The Role of Social Capital. *Jurnal Teknik Industri* 21: 15–24. [\[CrossRef\]](#)
- Hartley, Tara A., Sarah S. Knox, Desta Fekedulegn, Celestina Barbosa-Leiker, John M. Violanti, Michael E. Andrew, and Cecil M. Burchfiel. 2012. Association between Depressive Symptoms and Metabolic Syndrome in Police Officers: Results from Two Cross-Sectional Studies. *Journal of Environmental and Public Health* 2012: 861219. [\[CrossRef\]](#)
- Hendrix, William H., Tina Robbins, Janis Miller, and Timothy P. Summers. 1998. Effects of Procedural and Distributive Justice on Factors Predictive of Turnover. *Journal of Social Behavior & Personality* 13: 611–32.
- Hinshaw, Ada Sue, and Jan R. Atwood. 1984. Nursing Staff Turnover, Stress, and Satisfaction: Models, Measures, and Management. In *Annual Review of Nursing Research*. Edited by Harriell H. Werley and Joyce J. Fitzpatrick. Berlin: Springer, pp. 133–53.
- Hoel, Helge, Carly L. Cooper, and Stale Valvatne Einarsen. 2011. Organisational effects of workplace bullying. In *Bullying and Harassment in the Workplace: Developments in Theory, Research, and Practice*. Edited by Stale Valvatne Einarsen, Helge Hoel, Dieter Kapf and Carly L. Cooper. New York: CRC Press, pp. 129–48.
- Hooper, Crystal, Janet Craig, David R. Janvrin, Margaret A. Wetsel, and Elaine Reimels. 2010. Compassion Satisfaction, Burnout, and Compassion Fatigue among Emergency Nurses compared with nurses in other selected inpatient specialties. *Journal of Emergency Nursing* 36: 420–27. [\[CrossRef\]](#)
- Jackson, Susan E., and Randall S. Schuler. 1983. Preventing employee burnout. *Personnel* 60: 58–68. [\[PubMed\]](#)
- Jakimowicz, Samantha, Lin Perry, and Joanne Lewis. 2018. Compassion satisfaction and fatigue: A cross-sectional survey of Australian intensive care nurses. *Australian Critical Care* 31: 396–405. [\[CrossRef\]](#)

- Jamieson, Liz, Emma Teasdale, Alison Richardson, and Amanda Ramirez. 2010. The stress of professional caregiving. In *Oxford Textbook of Palliative Medicine*. Edited by Geoffrey Hanks, Nathan I. Cherny, Nicholas A. Christakis, Marie Fallon, Stein Kaasa and Russell K. Portenoy. New York: Oxford University Press, pp. 1445–52.
- Jaramillo, Fernando, Jay Prakash Mulki, and Paul Solomon. 2006. The role of ethical climate on salesperson's role stress, job attitudes, turnover intention, and job performance. *Journal of Personal Selling & Sales Management* 26: 271–82.
- Jia, Zhihui, Xiaotong Wen, Xiaohui Lin, Yixiang Lin, Xuyang Li, Guoqing Li, and Zhaokang Yuan. 2021. Working Hours, Job Burnout, and Subjective Well-jia of Hospital Administrators: An Empirical Study Based on China's Tertiary Public Hospitals. *International Journal of Environmental Research and Public Health* 18: 4539. [[CrossRef](#)] [[PubMed](#)]
- Judge, Timothy A., Carl J. Thoresen, Joyce E. Bono, and Gregory K. Patton. 2001. The job satisfaction—Job performance relationship: A qualitative and quantitative review. *Psychological Bulletin* 127: 376–407. [[CrossRef](#)] [[PubMed](#)]
- Kelly, Lesly A., Perry M. Gee, and Richard J. Butler. 2021. Impact of nurse burnout on organizational and position turnover. *Nursing Outlook* 69: 96–102. [[CrossRef](#)] [[PubMed](#)]
- Kenis, Izzettin. 1979. Effects of Budgetary Goal Characteristics on Managerial Attitudes and Performance. *The Accounting Review* 54: 707–21.
- Khatri, Naresh, Samambaia Chong Tze, and Pawan Budhwar. 2001. Explaining employee turnover in an Asian context. *Human Resource Management Journal* 11: 54–74. [[CrossRef](#)]
- Kijima, Saori, Kazuya Tomihara, and Masami Tagawa. 2020. Effect of stress coping ability and working hours on burnout among residents. *BMC Medical Education* 20: 219. [[CrossRef](#)]
- Klein, Colleen J., Jami J. Riggenbach-Hays, Laura M. Sollenberger, Diane M. Harney, and Jeremy S. McGarvey. 2018. Quality of Life and Compassion Satisfaction in Clinicians: A Pilot Intervention Study for Reducing Compassion Fatigue. *American Journal of Hospice and Palliative Medicine* 35: 882–88. [[CrossRef](#)] [[PubMed](#)]
- Kohan, Andrea, and Dwight Mazmanian. 2003. Police work, burnout, and pro-organizational behavior: A consideration of daily work experiences. *Criminal Justice and Behavior* 30: 559–83. [[CrossRef](#)]
- Koo, Bonhak, Jongsik Yu, Bee Lia Chua, Sanghyeop Lee, and Heesup Han. 2020. Relationships among Emotional and Material Rewards, Job Satisfaction, Burnout, Affective Commitment, Job Performance, and Turnover Intention in the Hotel Industry. *Journal of Quality Assurance in Hospitality & Tourism* 21: 371–401.
- Lago, Kennyston, and Wanderley Codo. 2013. Fadiga por compaixão: Evidências de validade fatorial e consistência interna do ProQol-BR. *Estudos de Psicologia* 18: 213–21. [[CrossRef](#)]
- Leiter, Michael P., and Christina Maslach. 2004. Areas of worklife: A structured approach to organizational predictors of job Burnout. In *Research in Occupational Stress and Well Being*. Edited by Pamela L. Perrewé and Daniel C. Ganster. Oxford: Elsevier, vol. 3, pp. 91–134.
- Li, Jessica C. M., Chau-kiu Cheung, Ivan Y. Sun, Yuen-kiu Cheung, and Shimin Zhu. 2021. Work–family conflicts, stress, and turnover intention among Hong Kong police officers amid the covid-19 pandemic. *Police Quarterly*, 1–29. [[CrossRef](#)]
- Mahoney, Christine Brown, Joshua Lea, Paul L. Schuman, and Irene Anne Jillson. 2020. Turnover, Burnout, and Job Satisfaction of Certified Registered Nurse Anesthetists in the United States: Role of Job Characteristics and Personality. *AANA Journal* 88: 39–48. [[PubMed](#)]
- Malach-Pines, Ayala, and Giora Keinan. 2006. Stress and Burnout in Israeli Border Police. *International Journal of Stress Management* 13: 519–40. [[CrossRef](#)]
- Malik, Sadia, and Saima Noreen. 2015. Perceived Organizational Support as a Moderator of Affective Well-being and Occupational Stress among Teachers. *Pakistan Journal of Commerce & Social Sciences* 9: 865–74.
- Mallmann, Clarice Schoenardie, Lilian S. Palazzo, Mary Sandra Carlotto, and Denise Rangel Ganzo de Castro Aerts. 2009. Associate factors at burnout syndrome in municipal public workers. *Psicologia: Teoria e Prática* 11: 69–82.
- Manzella, Christiane, and Konstantinos Papazoglou. 2014. Training police trainees about ways to manage trauma and loss. *International Journal of Mental Health Promotion* 16: 103–16. [[CrossRef](#)]
- Marshall, George H., and Sonya M. Stephenson. 2020. Burnout and turnover intention among electronics manufacturing employees in South Africa. *SAJIP: South African Journal of Industrial Psychology* 46: 1–11. [[CrossRef](#)]
- Martinussen, Monica, Astrid M. Richardsen, and Ronald J. Burke. 2007. Job demands, job resources, and Burnout among police officers. *Journal of Criminal Justice* 35: 239–49. [[CrossRef](#)]
- Maslach, Christina. 1998. A multidimensional theory of burnout. In *Theories of Organizational Stress*. Edited by Carly L. Cooper. Oxford: Oxford University Press, pp. 68–85.
- Maslach, Christina, and Susan E. Jackson. 1986. *Maslach Burnout Inventory Manual*, 2nd ed. Palo Alto: Consulting Psychologists Press.
- Maslach, Christina, and Susan E. Jackson. 1996. Maslach Burnout Inventory–Human Services Survey (MBI-HSS). In *Maslach Burnout Inventory Manual*, 3rd ed. Edited by Maslach Christina, Susan E. Jackson and Michael P. Leiter. Palo Alto: Consulting Psychologists Press.
- Maslach, Christina, Wilmar Schaufeli, and Michael P. Leiter. 2001. Job Burnout. *Annual Review of Psychology* 52: 397–422. [[CrossRef](#)] [[PubMed](#)]
- McElroy, James C., Paula C. Morrow, and James B. Fenton. 1995. Absenteeism and performance as predictors of voluntary turnover. *Journal of Managerial Issues* 7: 91–98.
- McHolm, Fran. 2006. Rx for compassion fatigue. *Journal of Christian Nursing* 23: 12–21. [[CrossRef](#)] [[PubMed](#)]

- Moon, Byongook, and Sheila Royo Maxwell. 2004. The sources and consequences of corrections officers' stress: A South Korean example. *Journal of Criminal Justice* 32: 359–70. [\[CrossRef\]](#)
- Motowidlo, Stephan J., and James R. Van Scotter. 1994. Evidence that task performance should be distinguished from contextual performance. *Journal of Applied Psychology* 79: 475–80. [\[CrossRef\]](#)
- Mulvey, Kevin P., Susan Hubbard, and Susan Hayashi. 2003. A national study of the substance abuse treatment workforce. *Journal of Substance Abuse Treatment* 24: 51–57. [\[CrossRef\]](#)
- Neff, Kristin D. 2003. The Development and Validation of a Scale to Measure Self-Compassion. *Self & Identity* 2: 223–50.
- Page, Katie, and Nicholas Graves. 2021. A cross sectional study of organizational factors and their impact on job satisfaction and emotional burnout in a group of Australian nurses: Infection control practitioners. *BMC Health Services Research* 21: 441. [\[CrossRef\]](#)
- Papazoglou, Konstantinos. 2013. Conceptualizing Police Complex Spiral Trauma and its applications in the police field. *Traumatology* 19: 196–209. [\[CrossRef\]](#)
- Papazoglou, Konstantinos, Mari Koskelainen, and Natalie Stuewe. 2018. Exploring the role of compassion satisfaction and compassion fatigue in predicting burnout among police officers. *Open Journal of Psychiatry & Allied Sciences* 9: 107–12.
- Papazoglou, Konstantinos, Mari Koskelainen, and Natalie Stuewe. 2019. Examining the relationship between personality traits, compassion satisfaction, and compassion fatigue among police officers. *Sage Open* 9: 2158244018825190. [\[CrossRef\]](#)
- Perez, Lisa M., Jeremy Jones, David R. Englert, and Daniel Sachau. 2010. Secondary traumatic stress and burnout among law enforcement investigators exposed to disturbing media images. *Journal of Police and Criminal Psychology* 25: 113–24. [\[CrossRef\]](#)
- Peters, Lawrence H., Ellen F. Jackofsky, and James R. Salter. 1981. Predicting turnover: A comparison of part-time and full-time employees. *Journal of Occupational Behavior* 2: 89–98. [\[CrossRef\]](#)
- Peterson, Ulla, Evangelia Demerouti, Gunnar Bergström, Mats Samuelsson, Marie Åsberg, and Åke Nygren. 2008. Burnout and physical and mental health among Swedish health-care workers. *Journal of Advanced Nursing* 62: 84–95. [\[CrossRef\]](#)
- Podsakoff, Philip M., Scott B. Mackenzie, Julie Beth Paine, and Daniel G. Bachrach. 2000. Organizational citizenship behaviors: A critical review of the theoretical and future research. *Journal of Management* 26: 513–63. [\[CrossRef\]](#)
- Queirós, Cristina, Fernando Passos, Ana Bárto, Sara Faria, Sílvia Monteiro Fonseca, António José Marques, Carlos F. Silva, and Anabela Pereira. 2020. Job Stress, Burnout and Coping in Police Officers: Relationships and Psychometric Properties of the Organizational Police Stress Questionnaire. *International Journal of Environmental Research and Public Health* 17: 6718. [\[CrossRef\]](#) [\[PubMed\]](#)
- Rageb, Mohamed A., Eman Mohamed Abd-El-Salam, Ahmed El-Samadicy, and Shaimaa Farid. 2013. Organizational commitment, job satisfaction and job performance as a mediator between role stressors and turnover intentions: A Study from an Egyptian cultural perspective. *IJBED* 1: 34–54.
- Randall, Christine, and Nicholas Buys. 2013. Managing occupational stress injury in police services: A literature review. *International Public Health Journal* 5: 413–25.
- Rego, António, and Miguel Pina e Cunha. 2008. Authentizotic climates and employee happiness: Pathways to individual performance? *Journal of Business Research* 61: 739–52. [\[CrossRef\]](#)
- Ribeiro, Neuza, Manish Gupta, Daniel R. Gomes, and Nelia Alexandre. 2020a. Impact of PsyCap on Affective Commitment: Mediating Role of Affective Well-being. *International Journal of Organizational Analysis* 29: 1015–29. [\[CrossRef\]](#)
- Ribeiro, Neuza, Patrícia Duarte, and Jessica Fidalgo. 2020b. Authentic leadership's effect on customer orientation and turnover intention among Portuguese hospitality employees: The mediating role of affective commitment. *International Journal of Contemporary Hospitality Management* 32: 2097–116. [\[CrossRef\]](#)
- Ribeiro, Neuza, Daniel R. Gomes, and Ana R. Oliveira. 2021. The impact of the work-family conflict on employee engagement, performance and turnover intention. *International Journal of Organizational Analysis*. in press. [\[CrossRef\]](#)
- Richer, Sylvie F., Cealine Blanchard, and Robert J. Vallerand. 2002. A motivational model of work Turnover. *Journal of Applied Social Psychology* 32: 2089–113. [\[CrossRef\]](#)
- Rotenstein, Lisa S., Mateus Torre, Marco A. Ramos, Rachael C. Rosales, Constance Guille, Srijan Sem, and Douglas A. Mata. 2018. Prevalence of Burnout Among Physicians: A Systematic Review. *Journal of the American Medical Association* 320: 1131–50. [\[CrossRef\]](#)
- Sacco, Tara L., and Linda Carman Copel. 2018. Compassion satisfaction: A concept analysis in nursing. *Nursing Forum* 53: 76–83. [\[CrossRef\]](#) [\[PubMed\]](#)
- Salloum, Alison, David C. Kondrat, Carly Johnco, and Kayla R. Olson. 2015. The role of self-care on compassion satisfaction, Burnout and secondary trauma among child welfare workers. *Children and Youth Services Review* 49: 54–61. [\[CrossRef\]](#)
- Santos, Susana Maria da Silva Derreira Matias dos. 2009. Suicídio nas Forças Policiais: Um Estudo Comparativo na PSP, GNR e PJ. Master's Thesis, Instituto de Ciências Biomédicas Abel Salazar, Universidade do Porto, Porto, Portugal.
- Scanlan, Justin Newton, and Megan Still. 2019. Relationships between burnout, turnover intention, job satisfaction, job demands and job resources for mental health personnel in an Australian mental health service. *BMC Health Services Research* 19: 1–11. [\[CrossRef\]](#) [\[PubMed\]](#)
- Schaufeli, Wilmar B., and Dirk Enzmann. 1998. *The Burnout Companion to Study and Practice: A Critical Analysis*. London: Taylor & Francis.
- Schaufeli, Wilmar B., Christina Maslach, and Tadeusz Marek. 1993. Burnout: A Multidimensional Perspective. In *Professional Burnout: Recent Developments in Theory and Research*. Edited by Christina Maslach. London: Taylor and Francis, pp. 19–32.

- Schaufeli, Wilmar B., Michael Leiter, and Christina Maslach. 2009. Burnout: 35 Years of Research and Practice. *Career Development International* 14: 204–20. [[CrossRef](#)]
- Shim, Hee S., Youngoh Jo, and Larry T. Hoover. 2015. A test of general strain theory on police officers' turnover intention. *Asian Journal of Criminology* 10: 43–62. [[CrossRef](#)]
- Siu, Oi Ling, Francis Cheung, and Steve Lui. 2015. Linking positive emotions to work well-being and turnover intention among Hong Kong police officers: The role of psychological capital. *Journal of Happiness Studies* 16: 367–80. [[CrossRef](#)]
- Siyal, Saeed, and Xiaobao Peng. 2018. Does leadership lessen turnover? The moderated mediation effect of leader–member exchange and perspective taking on public servants. *Journal of Public Affairs* 18: 1–12. [[CrossRef](#)]
- Somers, Mark John. 1995. Organizational commitment, Turnover and absenteeism: An examination of direct and interaction effects. *Journal of Organizational Behavior* 16: 49–58. [[CrossRef](#)]
- Souza, Cláudia Gesserame Vidigal Mendes de, Gláucia Rosana Guerra Benute, Maria Livia Tourinho Moretto, Anna Sara Shafferman Levin, Gracilene Ramos de Assis, Maria Clara Padoveze, and Renata Desordi Lobo. 2019. Qualidade de vida profissional na saúde: Um estudo em Unidades de Terapia Intensiva. *Estudos de Psicologia* 24: 269–80. [[CrossRef](#)]
- Stamm, Beth Hudnall. 2002. Measuring compassion satisfaction as well as fatigue: Developmental history of the Compassion Satisfaction and Fatigue Test. In *Treating Compassion Fatigue*. Edited by Figley Charles R. New York: Taylor & Francis, pp. 107–19.
- Stamm, Beth Hudnall. 2005. *The Pro-QOL Manual: The Professional Quality of Life Scale: Compassion Satisfaction, Burnout & Compassion Fatigue/Secondary Trauma Scales*. Baltimore: Sidran Press.
- Stamm, Beth Hudnall. 2009. *Professional Quality of Life: Compassion Satisfaction and Fatigue Subscales, Version V (ProQOL)*. Saint Paul: Center for Victims of Torture.
- Stamm, Beth Hudnall. 2010. *The concise ProQOL Manual*, 2nd ed. ProQOL.org: ProQOL.
- Stamm, Beth Hudnall. 2012. Helping the Helpers: Compassion Satisfaction and Compassion Fatigue in Self-Care, Management, and Policy of Suicide Prevention Hotlines. In *Resources for Community Suicide Prevention*. Edited by Ann D. Kirkwood and Beth Hudnall Stamm. [CD]. Meridian and Pocatello: Idaho State University.
- Stancel, Karolina, Charles Russo, Mari Koskelainen, Konstantinos Papazoglou, and Brooke McQuerrey Tuttle. 2019. Police moral injury, compassion fatigue, and compassion satisfaction: A brief report. *Salus Journal* 7: 42–57.
- Staples, D. Sandy, John S. Hulland, and Christopher A. Higgins. 1999. A self-efficacy theory explanation for the management of remote workers in virtual organizations. *Organization Science* 10: 758–76. [[CrossRef](#)]
- Summers, Timothy P., Angelo S. DeNisi, and Thomas DeCotiis. 1989. Attitudinal and behavioural consequences of felt job stress and its antecedent factors: A field study using a new measure of felt stress. *Journal of Social Behavior and Personality* 4: 503.
- Sung, Kiwol, Youngsook Seo, and Jee Hee Kim. 2012. Relationships between compassion fatigue, burnout, and turnover intention in Korean hospital nurses. *Journal of Korean Academy of Nursing* 42: 1087–94. [[CrossRef](#)] [[PubMed](#)]
- Tett, Robert P., and John P. Meyer. 1993. Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology* 46: 259–93. [[CrossRef](#)]
- Turgoose, David, Naomi Glover, Chris Barker, and Lucy Maddox. 2017. Empathy, compassion fatigue, and burnout in police officers working with rape victims. *Traumatology* 23: 205–13. [[CrossRef](#)]
- Velden, Peter G., Rolf J. Kleber, Linda Grievink, and Joris C. Yzerman. 2010. Confrontations with aggression and mental health problems in police officers: The role of organizational stressors, life-events and previous mental health problems. *Psychological Trauma: Theory, Research, Practice and Policy* 2: 135–44. [[CrossRef](#)]
- Wagaman, M. Alex, Jennifer M. Geiger, Clara Shockley, and Elizabeth A. Segal. 2015. The role of empathy in burnout, compassion satisfaction, and secondary traumatic stress among social workers. *Social Work* 60: 201–9. [[CrossRef](#)] [[PubMed](#)]
- Warren, Ternarian A. 2015. The Effects of Frequent Exposure to Violence and Trauma on Police Officers. Doctoral dissertation, Walden Dissertations and Doctoral Studies, Walden University, Minneapolis, MN, USA.
- Willard-Grace, Rachel, Margae Knox, Beatrice Huang, Hali Hammer, Coleen Kivlahan, and Kevin Grumbach. 2019. Burnout and health care workforce turnover. *The Annals of Family Medicine* 17: 36–41. [[CrossRef](#)] [[PubMed](#)]
- Wu, Guangdong, Zhibin Hu, and Junwei Zheng. 2019. Role Stress, Job Burnout, and Job Performance in Construction Project Managers: The Moderating Role of Career Calling. *International Journal of Environmental Research and Public Health* 16: 2394. [[CrossRef](#)] [[PubMed](#)]
- Yu, Jongsik, Antonio Ariza-Montes, Felipe Hernández-Perlines, Alejandro Vega-Muñoz, and Heesup Han. 2020. Hotels' Eco-Friendly Physical Environment as Nature-Based Solutions for Decreasing Burnout and Increasing Job Satisfaction and Performance. *International Journal of Environmental Research and Public Health* 17: 6357. [[CrossRef](#)] [[PubMed](#)]
- Yucel, Ilhami, and Cetin Bektas. 2012. Job satisfaction, organizational commitment and demographic characteristics among teachers in Turkey: Younger is better? *Procedia - Social and Behavioral Sciences* 46: 1598–608. [[CrossRef](#)]
- Yücel, Ilhami, Neuza Ribeiro, and Daniel R. Gomes. 2020. Perceived Organisational Support and Employees' Performance: The mediating role of Affective Commitment. *International Journal Management and Enterprise Development* 19: 187–202.
- Yun, Ilhong, EuiGab Hwang, and James Lynch. 2015. Police stressors, job satisfaction, burnout, and turnover intention among South Korean police officers. *Asian Journal of Criminology* 10: 23–41. [[CrossRef](#)]
- Zhang, Tao, Jing Feng, Heng Jiang, Xin Shen, Bo Pu, and Yong Gan. 2021. Association of professional identity, job satisfaction and burnout with turnover intention among general practitioners in China: Evidence from a national survey. *BMC Health Services Research* 21: 382. [[CrossRef](#)]

-
- Zhao, Jihong, Quint Thurman, and Ni He. 1999. Sources of job satisfaction among police officers: A test of demographic and work environment models. *Justice Quarterly* 16: 153–73. [[CrossRef](#)]
- Zonatto, Vinícius Costa da Silva, and Carlos Eduardo Facin Lavarda. 2013. Evidence of budgetary participation effects in information asymmetry, occupational stress, and job performance. *Advances in Scientific and Applied Accounting* 6: 92–111.