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Sara Vanessa Andrade da Costa

**THE EFFECT OF BURNOUT ON THE QUALITY
OF LIFE OF JUDICIAL PROFESSIONALS:
THE MEDIATING ROLE OF PSYCHOPATHOLOGICAL
SYMPTOMS AND MODERATING ROLE OF SEX**

**Dissertação no âmbito do Mestrado em Psicologia Clínica e da Saúde,
Subárea de Especialização em Psicoterapia Sistémica e Familiar orientada
pela Professora Doutora Ana Paula Pais Rodrigues Fonseca Relvas (FPCE-UC)
e pela Doutora Teresa Maneca Lima (CES-UC) e apresentada à Faculdade de
Psicologia e de Ciências da Educação da Universidade de Coimbra.**

julho de 2021

Faculdade de Psicologia e de Ciências da Educação
da Universidade de Coimbra

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Resumo

Objetivos: Este estudo analisou o impacto do *burnout* no domínio físico da qualidade de vida em magistrados e funcionários judiciais dos tribunais em Portugal, examinando o efeito mediador dos sintomas psicopatológicos e o efeito moderador do sexo nesta relação. **Métodos:** Um total de 1,322 profissionais judiciais responderam a um protocolo que, entre outros, avaliou o *burnout* (OLBI), a qualidade de vida (WHOQoL-Bref) e os sintomas psicopatológicos (BSI). Foram usadas análises estruturais (*path analysis*) para a construção de um modelo que analisa a relação entre as variáveis referidas, e a análise de invariância para comparar o modelo nos dois grupos profissionais. **Resultados:** O *burnout* parece ter tido um significativo efeito negativo no domínio físico da qualidade de vida dos profissionais judiciais. Os sintomas psicopatológicos mediam parcialmente esta relação, mas o sexo não demonstrou um efeito moderador. O modelo testado mostrou-se invariante para as duas categorias profissionais. **Conclusões:** Para ambas as categorias profissionais, o *burnout* tem um impacto negativo no domínio da saúde física da qualidade de vida dos profissionais e os sintomas psicopatológicos medeiam esta relação. Pelo contrário, para ambas as categorias, o sexo não é um moderador desta relação entre o *burnout* e o domínio físico da qualidade de vida. O presente estudo, para além de contribuir para preencher uma lacuna existente na literatura, suporta a necessidade de investir na promoção da saúde e bem-estar dos profissionais judiciais, através de programas de intervenção para prevenção do *burnout*, contribuindo, assim, para salvaguardar a qualidade da justiça portuguesa.

Palavras-chave: burnout, qualidade de vida, sintomas psicopatológicos, sexo, profissionais judiciais

Abstract

Aims: This study analyzed the impact of burnout on the physical health domain of quality of life in magistrates and court staff of the courts in Portugal, examining the mediating effect of psychopathological symptoms and the moderating effect of sex on this relationship. **Methods:** A total of 1,322 judicial professionals responded to an online protocol that, assessed burnout (OLBI), quality of life (WHOQoL-Bref) and psychopathological symptoms (BSI), among others. Structural analysis (path analysis) was used to build a model that analyzes the relationship between the variables mentioned, and invariance analysis was used to compare the model across the two professional groups. **Results:** Burnout seems to have a significant negative effect on the physical health domain of judicial professionals' quality of life. Psychopathological symptoms partially mediated this relationship, but sex did not show a moderating effect. The tested model was shown to be invariant for both professional categories. **Conclusions:** For both professional categories, burnout has a negative impact the physical health domain of professionals' quality of life and psychopathological symptoms mediate this relationship. On the contrary, for both categories, sex is not a moderator of this relationship between burnout and the physical health domain of quality of life. The present study, besides contributing to fill a gap in the literature, supports the need to invest in promoting the health and well-being of judicial professionals, through intervention programs for burnout prevention, thus contributing to safeguard the quality of Portuguese justice.

Keywords: burnout, quality of life, psychopathological symptoms, sex, judicial professionals

Index

Introduction	1
Theoretical Framework.....	3
Burnout and quality of life. Conceptual models and associated variables	3
Burnout: definitions and dimensions	3
Burnout, psychopathological symptoms, and sex.....	5
Quality of life: definitions and dimensions	6
Quality of life, psychopathological symptoms, and sex.....	7
The relationship between burnout and quality of life	8
The judicial system in Portugal: a brief characterization	9
Professional characterization of judges, public prosecutors, and court staff.....	10
Psychosocial demands and risks of judicial professionals	11
Burnout and quality of life in judicial professionals.....	12
Objectives.....	14
Materials and Methods.....	15
Participants.....	15
Sampling and data collection procedures.....	15
Instruments.....	16
Data analysis procedures.....	18
Results	20
Relation between burnout, quality of life, and psychopathological symptoms.....	20
Testing mediation and moderating model	20
Model invariance between professional groups.....	22
Burnout and quality of life professional group differences.....	23
Burnout and quality of life sex differences.....	23
Discussion.....	24
Implications, limitations, and future research	27
Bibliography	29

List of Figures and Tables

Figures

Figure 1. Adjusted model and respective standardized estimates of the regression coefficients.....	21
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Tables

Table 1. Sociodemographic and Professional Characteristics of the Sample	15
Table 2. Means, standard deviations and Pearson's correlations of the variables in study.....	20
Table 3. Fit indexes for the base model.....	21
Table 4. Estimates of the Mediation and Moderation Model	21
Table 5. Total, Direct and Indirect Effects of Burnout on Physical Health.....	22
Table 6. Invariance test.....	22
Table 7. Comparisons Between Magistrates and Court Staff	23
Table 8. Comparisons Between Men and Women	23

List of Abbreviations

ASJP	Portuguese Judges' Trade Union Association
BSI	Brief Symptoms Inventory
CSM	Superior Council for the Judiciary
CSMP	Superior Council of the Public Prosecutor's Office
CRP	Constitution of the Portuguese Republic
CSTAF	Superior Council of the Administrative Courts
DGAJ	Directorate-General of the Justice Administration
OLBI	Oldenburg Burnout Inventory
SFJ	Court Staff Union
SMMP	Public Prosecutors' Union
SOJ	Union of Court Clerks
WHOQoL	World Health Organization Quality of Life

Introduction

Research has been conducted on the relationship between *burnout* and *quality of life* in a variety of professions. Few studies have focused on this relationship in *judicial professionals*, particularly in magistrates and court staff (Lipp & Tanganelli, 2002; P. H. Ferreira, 2011; Tsai & Chan, 2010).

Occupational, or work-related, stress has consequences on workers' health, but also for organizations. At physical health level, it can have a triggering effect on diseases, such as burnout, and the consequent detriment to quality of life. This is a current and global concern because prolonged exposure to stress factors in the performance of professional duties has increased, along with the incidence of burnout (Sinval et al., 2019). For organizations, the impairment of workers' psychological health affects behavioral and motivational aspects, which can be expressed, for example, in a reduction of job satisfaction or even a change of profession (Marques Pinto et al., 2003).

Regarding judicial professions, most studies, although scarce, focus on judges and public prosecutors, which demonstrates the social invisibility assigned to the work of court staff (Dias et al., 2020). The literature suggests that the characteristics associated with both professional groups place them in a high level of demand, not only in terms of working conditions, for example by the excessive workload and fast pace of work, but also at the personal level, by the contact with emotionally stressful situations and the difficult balance between work and family life (A. C. Ferreira et al., 2014; Casaleiro et al., 2019; Dias et al., 2020). Thus, the demands to which these professionals are exposed make them one of the professional categories most exposed and vulnerable to occupational stress and burnout (Casaleiro et al., 2019; Dias et al., 2020). In a study with Portuguese magistrates (A. C. Ferreira, 2014), 75.5% of these professionals reported that the exercise of their activity generates professional stress.

Justice and the functioning of the courts reflects the nature and the quality of democracy (Dias & Gomes, 2018). In this sense, studying the relationship between burnout and quality of life of judicial professionals is relevant not only for the potential individual health consequences, but also for the consequences on the judicial system, as a whole. Only physically and mentally stable professionals will be able to make adjusted decisions that do not compromise the quality of justice provided to citizens (Na et al., 2018). This study intends to contribute to fill a gap in the literature, especially with the inclusion of court staff, and aims to pave the way for the implementation of measures, such as occupational health promotion or burnout prevention programs, as an effort to protect these professionals and the integrity of the judicial system.

The present research has two main objectives. First, intends to explore the effect that burnout has on the physical health domain of quality of life in judicial professionals (magistrates and court staff). Based on previous research, we expect burnout to negatively impact the physical health domain of quality of life. Furthermore, we hypothesize that higher levels of burnout and lower levels in the physical health domain of quality of life will be associated with court staff compared to magistrates, and with women compared to men. The second main objective of this study is to

investigate the mediating effect of *psychopathological symptoms* and the moderating effect of *sex*. Given the literature, it is expected that psychopathological symptoms will mediate and sex will moderate the relationship between burnout and physical health domain of quality of life.

In terms of structure, the dissertation begins with a theoretical framework in which are listed topics such as: definitions, dimensions and conceptual models of burnout and quality of life, relationship between the variables considered, and the characterization of the Portuguese judicial system, especially the professional characterization of judges, public prosecutors, and court staff. Next, the general and specific objectives of the study are presented. Afterwards, the method is presented where the participants of the study, the data collection procedure, the measuring instruments used and the data analyses performed are characterized. Immediately after, the results obtained in each of the analyses performed are presented, specifically: correlations, comparisons between professional categories and sexes, path analysis, and testing for invariance between professional categories. Subsequently, the discussion will be presented, which includes reflections of the study and some interpretations of the results. Finally, a brief conclusion is presented with the contributions and limitations of the study.

Theoretical Framework

Burnout and quality of life. Conceptual models and associated variables

Work is an activity of great satisfaction and personal fulfillment, but it can also become a source of significant stress and compromise the health and well-being of professionals. In turn, excessive and continuous stress can lead to burnout, negatively interfering with their quality of life (Lipp & Tanganelli, 2002).

Burnout is a complex concept, with no consensus regarding its definition and dimensionality. In general, it can be defined as a state of physical, emotional, and mental exhaustion resulting from long-term involvement in emotionally demanding work situations (Schaufeli & Greenglass, 2001). The concept of quality of life is also polysemic, with great conceptual and theoretical ambiguity in its definition, according to the areas in which it is applied, such as the health and organizational contexts. It is generally used to indicate states of health, physical capacity, symptoms, psychosocial adjustment, well-being, life satisfaction or happiness (Ferrans, 2005).

Burnout: definitions and dimensions

Stress has potentially negative consequences, namely at the physical, psychological, and behavioral levels (Hespanhol, 2005). Work-related stress, also called occupational stress, is defined in a World Health Organization report as the "response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability cope" (Leka et al., 2003, p.3). When this stress is persistent and prolonged over time, the worker may feel that his/her resources to cope with the demands are exhausted, thus leading to burnout (Maslach & Schaufeli, 1993). Thus, burnout should be considered as an extension of occupational stress, being the result of chronic job stress (Maslach & Schaufeli, 1993). This brings individual consequences, for their health, and collective consequences, for the organization where they work and, consequently, for the receivers of their service (Moraes et al., 2019; Hespanhol, 2005).

There is no single definition of burnout in the literature, and this construct varies according to the underlying theoretical model. However, it is consensual that burnout occurs at the individual level and that it is a negative internal psychological experience involving feelings, attitudes, motives, and expectations (Maslach, 1982). From the scientific point of view, the first definitions appeared in the 1970s, introduced by Herbert Freudenberger and Christina Maslach. The most widely used definition in the literature is the one by Maslach and Jackson (1981), which presents burnout as an emotional fatigue that results in a loss of professional motivation and progresses to feelings of inadequacy and failure. This definition refers to the origin of the clinical concept of burnout, in which it was mainly, or even exclusively, related to human service professions, that is, those oriented towards direct contact with other people, such as health care and education.

However, later, it was extended to any type of profession, namely those in which there is no care relationship (Maslach, 1993).

Just as there is no single definition of the concept of burnout, there is also a discussion in terms of its dimensionality. Although the most accepted and cited framework is Maslach's three-dimensional one (Maslach & Jackson, 1981), the various existing models differ in the number of dimensions, as well as assigning them different constructs (Sinval et al., 2019). Some researchers advocate a three-dimensional model, while others have found support for a two-dimensional model (Cordes & Dougherty, 1993). For Maslach, author of the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981), burnout is a multidimensional construct, consisting of three dimensions: emotional exhaustion (i.e., feeling of being emotionally overwhelmed and depleted of one's own emotional resources), depersonalization (i.e., negative, insensitive, or excessively detached response to others), and personal accomplishment (i.e., diminished feelings of competence and successful achievement in one's work) (Maslach, 1993). Demerouti and Nachreiner (1998), authors of the Oldenburg Burnout Inventory (OLBI), consider it a two-dimensional construct, which encompasses the following dimensions: exhaustion (i.e., feelings of emptiness, work overload, need for rest and physical exhaustion) and disengagement (i.e., negative, and cynical behaviors and attitudes towards one's work in general) (Demerouti et al., 2003; Demerouti & Bakker, 2008; Bakker et al., 2004). For these authors, burnout is defined as a syndrome of negative work-related experiences (Bakker et al., 2004). Unlike exhaustion as operationalized in the MBI, the OLBI covers not only affective aspects of exhaustion but also physical and cognitive aspects. In turn, while depersonalization on the MBI refers to emotional detachment from service recipients, disengagement on the OLBI refers to detachment from the work itself and the experience of negative attitudes towards the object of work, the content of the work, or the work itself in general. In other words, these scales differ both in their content and in the objects to be valued. In the conceptualization of the OLBI authors, depersonalization is only one form of distancing. In addition, this model distances the professional accomplishment dimension from the MBI, since, in the opinion of several authors, this is not a central dimension of burnout, but rather a possible consequence of it (Demerouti et al., 2003; Demerouti & Bakker, 2008).

Although, in the literature, the OLBI is not the most widely used instrument in the study of burnout, there are some investigations that use it, namely to study this syndrome in different professions (Duan-Porter et al., 2018; Mbanga et al., 2018; Zucoloto et al., 2012). For example, Al-Asadi et al. (2018) sought to determine the prevalence and predisposing factors of burnout among primary school teachers in Basrah (Iraq). The results revealed a significant prevalence of burnout and a statistically significant association between burnout and age (i.e., burnout levels tended to decrease with age), sex (i.e., men had a higher prevalence than women) and marital status (i.e., married teachers showed a significantly lower level of burnout compared to unmarried, widowed, or divorced teachers). In addition, work-related factors such as work overload and problems related to career progression also showed a significant positive association with burnout. Another study of health care professional in Sweden (Peterson et al., 2008), which sought to investigate how burnout

relates to physical and mental health, concluded that depression, anxiety, sleep disturbance, memory disorders, and neck and back pain were the health indicators that most discriminated between professionals with burnout and those without burnout. Another recent study (Summers et al., 2020), sought to examine the prevalence of burnout among nearly two thousand US psychiatrists and determine the factors that increase the risk of its development. The results suggest that the presence of depressive symptoms, female gender, inability to control work hours, and poor work environment are significantly associated with higher OLBI scores.

Burnout, psychopathological symptoms, and sex

Burnout can manifest itself in many ways, varying in symptoms and degree, from person to person (Freudenberger, 1974) and give rise to a wide variety of consequences (for a better understanding, see Constantino et al. (2013) and Kahill (1988)). It is predictive of decreased work performance, poor health, and even family relationship problems, meaning that it can both have a significant impact on an individual's work life as well as family life (Maslach, 1982).

Regarding health, burnout has implications on physical health, in terms of problems including, for example, fatigue, insomnia and headaches, among others, but it is also an important risk factor for mental health. Mental health deterioration is characterized, among others, by decreased self-esteem, depression, irritability, or anxiety (Kahill, 1988).

Some studies have explored the relationship between burnout and psychopathological symptoms (Bauer et al., 2006; Oro et al., 2019; Trigo et al., 2007). In a systematic review, Koutsimani et al. (2019) sought to clarify the relationships between burnout and depression and between burnout and anxiety, as there is a great deal of disagreement among research.

With regard to the relationship with depression, several studies (cf. Glass & McKnight, 1996) have shown a positive correlation between burnout and depression. However, justifications vary between there being an overlap between the constructs of burnout and depression (e.g., Ahola et al., 2014) or burnout may be a risk factor for developing depression (e.g., Vasconcelos et al., 2018). Other studies have shown that burnout and depression do not overlap and that burnout is differentiated from depression (Bakker et al., 2000; Toker & Biron, 2012). For instance, a Portuguese study with police officers (Rosa et al., 2015) highlighted depression as the main explanatory factor of burnout among this group.

In turn, regarding the relationship with anxiety, despite not being investigated as the relationship with depression, the association between them is evident in different studies (e.g., Maske et al., 2016; Rössler et al., 2015; Turnipseed, 1998). However, it is inconclusive whether people with higher levels of anxiety are more likely to develop burnout or whether it is burnout that aggravates the anxiety symptoms (Koutsimani et al., 2019). For example, a study of elementary school teachers in Greece (Vasilopoulos, 2012) found that those who experienced high social anxiety also reported higher levels of burnout.

The high correlation between burnout, depression and anxiety is explained by Toker et al. (2005), who states that:

During the early stages of burnout, it may occur concomitantly with a high level of anxiety because of the active coping behaviors that usually entail a high level of arousal. When and if these coping behaviors prove ineffective, the individual may give up and engage in emotional detachment and defensive behaviors that may lead to depressive symptoms. (p. 356)

In terms of the relationship between burnout and sex, the literature is not consensual. Although several studies indicate that women are more likely to develop this syndrome than men (Maske et al., 2016; Norlund et al., 2010; Summers et al., 2020), others report the opposite (Al-Asadi et al., 2018; Burke et al., 1996), and we also can find some studies that point the existence of no significant differences between the two (Maslach & Jackson, 1985; Pšeničný, 2006).

For example, the Portuguese study of Marôco et al. (2016), related to health professionals, found no significant differences in mean levels of burnout between male and female professionals. On the other hand, in a study that aimed to analyze the levels of burnout in a sample of Portuguese psychologists (Gomes & Cruz, 2004), women showed higher levels of burnout compared to men.

Another study in Norway revealed interesting findings in this regard (Innstrand et al., 2011). Men and women from eight different professional groups: lawyers, doctors, nurses, teachers, church ministers, bus drivers, advertising workers, and information technology workers were investigated with the aim of examining sex differences in burnout, within and between the different occupations, using the OLBI. The results showed significant differences between men and women, with women reporting more exhaustion and men more disengagement from work. In addition to this, significant sex differences were found between professional groups, indicating that some professions may be more prone to burnout than others, such as teachers and physicians.

Quality of life: definitions and dimensions

Quality of life is a concept present in common sense, but also the subject of several studies and approaches, both individual and collective (Minayo et al., 2000). Although it is not possible to present a single definition, there is theoretical agreement that this construct encompasses subjectivity (i.e., it is based on the individual's own perception), multidimensionality (i.e., covers the physical, psychological, and social dimensions) and bipolarity (i.e., has positive dimensions, such as mobility, and negative dimensions, such as pain) (Fleck et al., 1999; Minayo et al., 2000; WHOQoL Group, 1995).

In addition to these factors, there is the mutability factor, since the perception of quality of life may change depending on the time, place, or cultural context where individuals live (Kluthcovsky & Takayanagui, 2007). The World Health Organization Quality of Life Group (WHOQoL Group) characterizes quality of life as an individual's "perception of his/her position in life within the context of the culture and value systems in which he/she lives and in relation to his/her goals, expectations, standards, and concerns" (WHOQOL Group, 1994, p. 28), influenced by physical

health, psychological state, level of independence, social relationships, personal beliefs and relationships with the environment (WHOQoL Group, 1995).

Given the lack of an instrument to assess quality of life with a cross-cultural perspective, this group developed the World Health Organization Quality of Life-100 (WHOQoL-100), an instrument composed of 100 items. Later, the need for a shorter and more easily applicable instrument led to the development of a shorter version of this instrument, the WHOQoL-Bref, composed of 26 items. The latter is organized in four domains: Physical Health, Psychological, Social Relationships and Environment.

Various studies have been conducted using this instrument in order to study quality of life in different professions (Gümüş & Işık, 2018; Kale & Gedik, 2020; Yang et al., 2019), the most common being with healthcare professionals (Kupcewicz & Józwick, 2020; Mujchin, 2015; Silva et al., 2020; Vutyavanich et al., 2007). The results are not similar, and there is a diversity of factors that can influence quality of life. For example, in a study of Chilean nurses, increasing age, being in a relationship, and not working night shifts were found to be predictors of better quality of life (Barrientos & Suazo, 2007). In another study with Brazilian nurses working in intensive care (Paschoa et al., 2007), the quality of life was considered relatively low in all domains, especially in the physical health domain, due to the poor quality of sleep related to shift work, and in the environmental domain, justified by the few leisure opportunities and dissatisfaction with wages.

Outside the health area, a study with military police officers in São Paulo (Brazil), showed compromised quality of life of professionals in the factors related to the environment domain, due to dissatisfaction with working conditions, and the high workload obtained the lowest quality of life in the physical health domain (Arroyo, 2019). In addition to those already mentioned, other variables that negatively interfere with quality of life are sedentarism, the use of medication, and unbalanced diet, described in the study by Sanchez et al. (2019a), with Brazilian university teachers.

Most studies use comprehensive instruments to measure quality of life, and there are few investigations that focus, individually, on the different domains of quality of life. However, Pereira et al. (2006) concluded that changes in one domain of quality of life are sufficient to change the overall quality of life. Thus, a low perception in one domain is sufficient to negatively affect overall quality of life. The study by Ruiz Martínez et al. (2018) concluded that the physical health domain is the aspect that has the greatest impact on quality of life.

Quality of life, psychopathological symptoms, and sex

Most studies that relate quality of life and psychopathological symptoms focus on very specific clinical populations (Monteiro, 2017; Tsunoda et al., 2005; Von Visge et al., 2018). However, findings suggest that mental disorders, in particular depression and anxiety, are associated with impairment in physical, social, and role functioning, negatively impacting quality of life (Masthoff et al., 2006; Smernoff et al., 2015). Hohls et al. (2019), in a systematic review on the association between anxiety, depression and quality of life, present several evidences that demonstrate the negative effect that this symptomatology has on people's quality of life. Specifically, Simon's

(2003) study presents evidence showing a strong association between depression and decreased quality of life and, in turn, that an improvement in the quality of depression treatment leads to significant improvements in quality of life. On the other hand, Mendlowicz and Stein (2000) refer that anxiety disorders significantly compromise quality of life and point to improvements through pharmacological or psychotherapeutic treatments. For example, Ruiz-Martínez et al. (2018), sought to evaluate the relationship between psychopathological symptoms and quality of life in a community population composed of women and men living in Mexico. The results showed for the negative impact of psychopathological symptomatology on the quality of life of the participants, as well as identifying the most frequent symptoms in this population: depression, somatization, and obsessions-compulsions. However, the results did not confirm the trend of the impact of anxiety, although this is well established in the literature (Saarni et al., 2007).

In terms of sex differences, the literature indicates a tendency for women to have lower quality of life when compared to men, especially in the areas of physical and psychological health (e.g., Shevington et al., 2004). In the study of Lipp and Tanganelli (2002), the judges' quality of life was significantly compromised in several areas (social, affective, professional, and health), and it was clear that this impairment was greater in women, with female judges presenting a significantly worse quality of life in all areas compared to male judges. Similarly, in the study by Alves et al. (2019) with university professors, female participants had a lower perception of their quality of life in the domains of physical health, psychological, and social relationships. Furthermore, these results corroborate those found by Sanchez et al. (2018b), in which in a sample of clinical doctors and medical surgeons, males obtained higher levels of quality of life in the physical health and environment domains. In the previously mentioned study of Ruiz Martínez et al. (2018), the results also indicate that women have a lower quality of life compared to men. These authors refer that women tend to report, more often, a greater impact on their daily activities, emotional and interpersonal problems, as well as moderate dissatisfaction with their environment.

The relationship between burnout and quality of life

Burnout is considered a public health problem due to the deterioration that it causes in the quality of life of workers, with an impact on their physical and mental health (Gil-Monte, 2009; Paiva, 2017). Psychological problems, such as burnout, associated with a low quality of life, influence not only professional aspects, by reducing motivation and professional achievement, but also social, physical, and cognitive aspects (Moraes et al., 2019).

Several studies in different countries have analyzed the relationship between these variables, particularly in health professionals and teachers (e.g., in Brazil, Galdino et al., 2021; in China, Li et al., 2020; in Greece, Fradelos et al., 2014; in Poland, Kupcewicz and Józwick, 2020; and in Serbia, Vicentic et al., 2013). Moraes et al. (2019) studied vulnerability to burnout and quality of life levels in a sample of physicians and teachers in São Paulo (Brazil). The results showed that participants with high levels of burnout obtained low scores in all domains of quality of life. The same study showed that these variables have a strong influence on the personal and professional lives of

individuals, interfering in their work and family relationships. These results are corroborated by most studies, namely the study of Vidotti et al. (2019), that analyzed the prevalence of burnout and its correlation with quality of life in a sample of Brazilian nurses, and concluded that the occurrence of burnout was correlated with the negative perception of physical, psychological and social quality of life and work environment, that is, in all domains. And also, by the research of Asante et al. (2019) with health professionals working in primary health care in Guangdong province (China) in which 74.6% of the sample studied had low quality of life scores, and this was significantly higher among workers who reported higher levels of burnout.

Most studies show concern that burnout affects the quality of life of professionals in different domains and consequently impacts the care and education provided, highlighting the need to implement intervention programs to prevent burnout (Arandjelovic et al., 2010; EtemadiNezhad et al., 2020; Kupcewicz & Józwik, 2020; Nguyen et al., 2020).

The judicial system in Portugal: a brief characterization

The Constitution of the Portuguese Republic (CRP) defines the principles that form the basis of judicial organization and the functioning of the courts in Portugal. The courts are sovereign and independent bodies, subject to the law, with competence to administer justice. Their function is to guarantee the defense of citizens' rights and interests, to repress the violation of democratic legality, and to prevent conflicts of public and private interests. Their decisions are binding and prevail over those of other authorities (European e-Justice Portal, 2020a).

In the Portuguese judicial system there are two distinct, constitutionally enshrined main jurisdictions: the civil and the administrative. In the civil jurisdiction, the courts deal with ordinary criminal and civil matters, while in the administrative jurisdiction, the courts deal with administrative and tax matters, presenting as a separate system. Other jurisdictions are foreseen namely the jurisdiction of the Constitutional Court, the Court of Auditors, arbitration courts and justices of the peace (Dias & Gomes, 2018; European e-Justice Portal, 2020a). For civil jurisdiction, the Portuguese judicial organization establishes three categories of courts: (1) the courts of first instance; (2) the courts of second instance, or Courts of Appeal; (3) and the Supreme Court of Justice (Dias, 2004; Santos & Gomes, 2005). Judicial courts have the greatest dominance in the public justice system, constituting, in Portuguese society, the privileged instance of conflict resolution (Santos & Gomes, 2005).

The Supreme Court of Justice is the highest in the hierarchy of judicial courts and is responsible for the jurisdiction of the entire Portuguese territory. The distinction between courts of first and second instance is based on the appeals system, that is, courts of second instance are those to which citizens appeal after a decision of the first instance. Currently, there are five courts of second instance or appeal courts. In Portugal, there are 23 courts of first instance, distributed among the different district capitals, with sections operating in different locations within the district (Dias & Gomes, 2018). These assume one of three categories, depending on the matter and value of action:

courts of generic jurisdiction, specialized jurisdiction or specific jurisdiction (European e-Justice Portal, 2020a).

In turn, the administrative jurisdiction comprises: (1) the administrative and fiscal courts (first instance), (2) the central administrative courts (second instance), and (3) the Supreme Administrative Court. There are 17 courts of first instance throughout the country and two courts of second instance, one in Lisbon and the other in Oporto. Finally, the Supreme Administrative Court has national coverage and is divided into two sections: administrative and tax (Dias & Gomes, 2018; European e-Justice Portal, 2020a).

Professional characterization of judges, public prosecutors, and court staff

Judges, public prosecutors, and court staff are central professional categories in the Portuguese judicial system. In 2020, there were a total of 2012 judges (17.97%), 1419 prosecutors (12.67%) and 7547 court clerks (67.41%) (Estatísticas da Justiça, 2020). In recent decades, there has been an increasing trend of feminization in these professions, especially at the bottom of the career ladder (Duarte et al., 2015; Dias et al., 2020). In the three professional categories mentioned, there are more women than men. In 2020, there were 64.83% female prosecutors, 61.83% female judges, and 66.41% female court staff (Estatísticas da Justiça, 2020).

According to the CRP, judges are holders of a sovereign body and have the duty to administer justice on behalf of citizens and owe obedience only to the law. In order to guarantee their independence and impartiality, the CRP provides that they cannot be held accountable for their decisions, except in situations provided for by law. These professionals have continuous training throughout their career and, among other rules, cannot perform any other function, with the exception of unpaid teaching or scientific research in the legal field (European e-Justice Portal, 2020b).

The hierarchy of judicial and administrative courts is composed of three categories: (1) judges of the Supreme Court, referred to as *Conselheiros* (2) judges of the Courts of Appeal, with the title of *Desembargadores*, and (3) Judges of the Courts of First Instance, referred to as *Juízes de Direito* (Conselho Superior da Magistratura, n.d.; European e-Justice Portal, 2020b). In turn, Public Prosecutors are responsible for representing the state and prosecuting, defending democratic legality and the interests of the law. The Public Prosecutor's Office is organized as a procedurally autonomous magistracy and, therefore, these professionals enjoy their own statute. The bodies of the Public Prosecutor's Office are: (1) the Prosecutor-General (*Procurador-Geral da República*), (2) the Vice-Prosecutor-General (*Vice-Procurador-Geral da República*), (3) the Deputy Prosecutor-General (*Procurador-Geral Adjunto*), (4) the District Prosecutor (*Procurador da República*), and (5) Deputy District Prosecutor (*Procurador da República Adjunto*), following this hierarchical order (European e-Justice Portal, 2020b; Ministério Público de Portugal, n.d.). Finally, court staff occupy functions in the secretariats of the courts or in the offices of the Public Prosecutor. They have a specific statute – the Statute of Justice Officials – whose rules are related

to the requirements of their profession, as auxiliary bodies of the courts. The exercise of their functions assumes a preponderant role in international legal cooperation, especially in the execution of European regulations and directives. This category of professionals is distributed as follows: (1) court clerks (who provide support functions for procedural processing), (2) IT technicians, (3) technical assistants and (4) operational assistants (Direção-Geral da Administração da Justiça, n.d.). In 2020, 94.04% of all judicial employees were judicial officers (7097 out of a total of 7547) (Estatísticas da Justiça, 2020).

Psychosocial demands and risks of judicial professionals

The judicial activity is one of the most universally regarded and respected, reflecting in a great responsibility for the professionals, due to the impact they have on society in general (Lipp & Tanganelli, 2002). At the same time, these professionals experience a highly stressful and psychologically demanding work environment (Tsai & Chan, 2010).

Judges and public prosecutors are among the most exposed and vulnerable professional categories to occupational stress and burnout (Casaleiro et al., 2019). These professionals are subject to several sources of stress. They are faced daily with complex decisions, with a direct impact on people's lives (Rossouw & Rothmann, 2020; Guimarães et al., 2017), so their work requires a great deal of emotional management (A. C. Ferreira et al., 2014). They deal with high pressure due to the excessive procedural volume, which requires long hours of work at a very intense pace (Guimarães et al., 2017). They refer to the insufficient human resources to support their work, referring to the shortage of court staff (Guimarães et al., 2017), to which are added the poor physical and material conditions of their workplaces, recognized by these professionals as an obstacle to the performance of their work and to their own quality of life (P. H. Ferreira, 2011). In addition to the excessive workload and the pressure of making important decisions, they also highlight the lack of control over the number of cases, the nature of the crimes (e.g., sexual crimes or crimes against children), security-related concerns, and rapid changes in laws (Casaleiro et al., 2019; Chamberlain, 2009).

Beyond to the impact on the professional level, this also has a major impact on their physical and psychological health, as these stressors often lead to the development of symptoms. Ciociu et al.'s (2010) study of judges and prosecutors in Romania identifies fatigue, back and headaches, and difficulty sleeping as manifestations of stress. Flores et al. (2009) refer that judges reported several physical and emotional manifestations, namely anxiety, irritability, sleep disturbance, muscle tension and anger. They can also result in intolerance towards others, depression, and isolation (Jaffe, 2003, cited by P. H. Ferreira, 2011). Even so, although magistrates work in contexts of adversity and difficulties, with high levels of professional stress, they consider that their profession guarantees them satisfaction, stability, and professional recognition (A. C. Ferreira et al., 2014).

Court staff are also subject to similar performance, productivity, and quality demands as magistrates (Dias et al., 2020). Therefore, they are also exposed to high levels of stress, fatigue, and exhaustion, which puts them at risk of developing burnout (Sá, 2018). However, although they

play a central role in judicial processes, their functions end up in the background, which translates into a social invisibility of this group and a lower recognition of their professional performance (Dias et al., 2020). Dias and colleagues (2020) present us with a variety of characteristics associated with judicial officers (a category of court staff) that place them at a high level of demand, complexity, and wear and tear. Their high levels of work-related stress are mainly due to an overload of work, resulting from a lack of resources, both material and human (Gil-Monte et al., 2016). They report working alone, with inequalities in social exchanges and ambiguity and role conflict (Gil-Monte et al., 2016; Merlo et al., 2012). They work in places with poor working conditions, in physical and organizational terms. They report lack of control and autonomy and lack of recognition by political bodies and administration of justice and also express dissatisfaction with remuneration, salary cuts, and career freezes (Dias et al., 2020; Gil-Monte et al., 2016; Moreira, 2019; Sá, 2018). In addition, the duty of permanence forces them to work beyond their normal working hours, without the right to any remuneration for this overtime work (Dias et al., 2020). In view of all this, it is perceptible that the motivation of these professionals is reduced, as well as the feeling of competent and dignified performance of their duties, and that their job satisfaction is also reduced (Dias et al., 2020). It should be noted that the court staff category in Portugal includes other professional categories in addition to court clerks, but there are no studies that focus on this professional group as a whole. However, since they work in the same context, this study by Dias et al. (2020) provides us with relevant clues about the conditions of the remaining professionals.

As argued by Dalanhol et al. (2017), high demands at work lead to wear and tear on the physical and mental resources of professionals, and may lead to the development of health problems, such as burnout, which will consequently decrease their quality of life. Thus, this argument, coupled with the scarcity of research dedicated to the study of quality of life and burnout in judicial professionals, justifies the relevance of the present study.

Burnout and quality of life in judicial professionals

As previously mentioned, judicial professionals belong to one of the professional categories most exposed and vulnerable to occupational stress and burnout (Casaleiro et al., 2019). In turn, the high incidence of stress verified in judicial activity interferes in the various areas of these professionals' lives (Lipp & Tanganelli, 2002), impairing their quality of life. In a study of Brazilian judicial professionals (Pizzinato et al., 2014), they showed a deterioration of their quality of life, mainly due to work factors.

At the professional level, the studies reviewed by Casaleiro et. al (2019) reflect the demanding environment of judicial systems by showing that these professionals have stress and attrition levels equal to or higher than other professions. For example, in the survey conducted by A. C. Ferreira et al. (2014), 75.5% of magistrates reported that the exercise of their activity generates professional stress. Similarly, in the study by Lipp and Tanganelli (2002), with magistrates of the Labor Court, approximately 71% of professionals manifested significant symptoms of stress, similar to miners

and higher than firemen, police officers and airline pilots. Also, in the study by Lustig et al. (2008), the burnout index in judges is higher than that of prison guards or doctors in crowded hospitals. Other studies with these professionals report a high amount of health problems, high levels of pressure, and need for low averages, related to the work domain and its conditions (Dalanhol et al., 2017; Dias et al., 2020; Gil-Monte et. al., 2016).

In the Portuguese study by P. H. Ferreira (2011), which aimed to study the main sources of stress to which judges are exposed and their impact on their quality of life, some factors that interfere with their quality of life were identified. In the area of health, judges reported health problems resulting from overwork, namely extreme tiredness, exhaustion, physical exhaustion, burnout diagnoses, medication use and the need for sick leave. Regarding family life, it was reported that due to the heavy workload, the relationship with family members was affected, especially with children and spouses, considering that they must make a great sacrifice to reconcile the work domain with family life. In terms of violence, cases of extreme violence were mentioned that resulted in insecurity and concern, especially with the families and the possible reprisals they could suffer. Feelings of disillusionment with the profession were also identified, resulting in demotivation and loss of energy. On the contrary, the feeling of professional achievement for the function they perform was considered to be a variable that has a major positive impact on these professionals' quality of life. It was transversal that this is the main reason why they remain committed to their profession (P. H. Ferreira, 2011). This corroborates the results of Tsai and Chan's (2010) study, which showed that despite the demanding and stressful environment in which judges and public prosecutors work, these professionals had high levels of job satisfaction at the same time.

Existing studies express great concern that the judiciary is being served by professionals whose quality of life is impaired. Recognizing and addressing the problems of these professionals is essential for their protection, as well as for the integrity of the judicial system (Chamberlain, 2009). In this study, we intend to assess the impact that burnout has on the physical health domain of the quality of life of judicial professionals, considering psychopathological symptoms as a mediator variable and sex as a moderator variable.

Objectives

The general objective of this research is to study the effect of burnout on quality of life (physical health domain), investigating the mediating effect of psychopathological symptoms and the moderating effect of sex on this relation. Another objective is to understand if this effect is exerted in the same way in the different professional categories: judges, public prosecutors, and court staff.

To answer these objectives, we formulated, based on the literature review, the following working hypotheses that guided our analysis of the data:

General Hypotheses:

(H1) Burnout has a negative effect on the physical health domain of quality of life for magistrates and court staff.

(H2) Psychopathological symptoms mediate the relationship between burnout and the physical health domain of quality of life.

(H3) Sex moderates the relationship between burnout and the physical health domain of quality of life.

Specific Hypotheses:

(H4) Burnout levels are higher among court staff than among magistrates.

(H5) Magistrates have better perceptions of quality of life in terms of physical health domain than court staff.

(H6) Burnout levels are higher for women than for men.

(H7) Men have better perceptions of quality of life in terms of the physical health domain than women.

Materials and Methods

Participants

The sample for this study consists of 1,322 participants and more detailed sociodemographic and professional characteristics are presented in Table 1. The majority of the respondents to our study are female (60.7%). The age range is from 20 to 69 years ($M = 48.83$, $SD = 9.39$). In terms of their professional category, 62.1% are court staff, 22.3% are judicial magistrates and 15.6% are public prosecutors, although for the purposes of this study, the last two are grouped in a single group (magistrates), with a total of 501 professionals. As for the years of professional experience, these vary between 0 (just a few months) and 47 years ($M = 19.48$, $SD = 10.52$).

Table 1

Sociodemographic and Professional Characteristics of the Sample

Variable	Total sample ($N = 1,322$)	
	<i>M</i>	<i>SD</i>
Age	48.83	9.39
Years of professional experience		
General	19.53	10.59
Magistrates	15.73	10.04
Court staff	21.85	10.24
	<i>n</i>	%
Sex		
Female	802	60.7
Male	520	39.3
Professional category		
Court staff	821	62.1
Judges	295	22.3
Public prosecutors	206	15.6

Note. In the variable age only 1,272 subjects responded, and in the years of professional experience variable only 1,320 responded.

Sampling and data collection procedures

This study is part of a larger study called *QUALIS - Quality of Justice in Portugal! Impact of working conditions in the performance of judicial professions* (Ref. POCI-01-0145-FEDER-029039), of the Centre for Social Studies of the University of Coimbra (CES-UC), funded by FEDER, through the COMPETE 2020 – Competitiveness and Internationalization Operational

Programme (POCI) and by national funds through Foundation for Science and Technology (FCT). This project aims to study the evolution of the working conditions of magistrates in Portugal, seeking to assess the impacts on their professional performance and, consequently, on the quality of justice. It began on the 1st of June 2018 and will end on the 31st of March 2022, being coordinated by PhD João Paulo Dias, and co-coordinated by researcher Conceição Gomes.

The data from this convenience sample was collected through an online survey, developed on the Lime Survey software. In a first phase, before the survey was released, the team met with two project consultants, a public prosecutor, and a judge. Subsequently, a pilot test was conducted consisting of six interviews with spoken reflections on the items. Two professionals from each of the three professional categories considered – public prosecutors, judges, and court staff– participated in these interviews, half of the interviewees being of each sex. The necessary authorizations were also obtained from the Superior Councils of the Judiciary (CSM), of the Public Prosecutor's Office (CSMP) and of the Administrative Courts (CSTAF) and the Directorate-General of the Justice Administration (DGAJ).

In order to obtain a representative sample of the universe under analysis, the dissemination of the research protocol link followed three main routes: (1) the official channels of the partner entities with powers to manage the human resources of the courts, namely the CSM, CSMP, CSTAF and DGAJ, (2) the contact networks of the professional unions: Portuguese Judges' Trade Union (ASJP), Public Prosecutors' Union (SMMP), Court Staff Union (SFJ) and Union of Courts Clerks (SOJ) and (3) through the contact networks of the Second Instance Courts and the Management Councils of the District Courts.

Each entity, represented by a designated point of contact, was contacted by e-mail containing a presentation of the project and the survey, as well as the access link for dissemination to the respective professionals. The means of dissemination were adjusted by each entity according to the systems available. Since the DGAJ did not systematize the contact data of professionals from the second instance courts, it was decided to contact the Superior Courts and the Courts of Appeal. The survey was available online from October 1st to November 15th, 2020, and, throughout this period, the means of dissemination were strengthened and revised, according to the evolution of the response rates for each professional category.

The present study began after the online survey was constructed, just before it was released, so I did not participate directly in the process described above.

Instruments

Sociographic characterization

To assess the sociographic characteristics of our sample, we asked participants about their judicial profession (judge, public prosecutor, or court staff professional) and the respective professional category, gender, year and place of birth, type of household, and academic qualifications.

Burnout

To assess burnout, we used the Oldenburg Burnout Inventory (OLBI; Halbesleben & Demerouti, 2005; Sinval et al., 2019). The Portuguese version of the scale consists of 15 items, divided into two dimensions: 7 items on disengagement and 8 on exhaustion. The questions are presented on a 5-point Likert-type response scale, where 1 means *strongly disagree* and 5 *strongly agree*. Seven items are reversed. A higher score translates to a higher level of burnout.

The Portuguese OLBI version presented excellent internal consistency values (Kline, 2011¹) for the total ($\alpha = .91$) and for the dimensions (Exhaustion: $\alpha = .87$; Disengagement: $\alpha = 0.91$). In the present study, the total and the two dimensions of burnout revealed very good to excellent internal consistency scores ($.85 \leq \alpha \leq .90$), the higher value being presented in the total score.

Quality of life

The short version of the World Health Organization Quality of Life (WHOQoL-Bref; WHOQoL Group, 1998; Vaz-Serra et al., 2006) was used to assess quality of life. The WHOQoL-Bref is a short instrument, composed of 26 items: two general items, related to general quality of life; and twenty-four organized by four domains (Physical Health, Psychological, Social Relationships and Environment). Each item corresponds to a facet of quality of life that, in turn, are organized into domains.

Items are presented on different 5-point Likert-type scales according to intensity, capacity, frequency, and evaluation. Four items are inverted. Higher scores on each item reveal better quality of life. The results should be interpreted by domain since there is no overall score (WHOQoL Group, 1998).

In the present study, only two domains were used: the Physical Health domain (with 7 items that correspond to 7 facets) and the Environment domain (with 8 items that correspond to 8 facets), making a total of 15 items. The Physical Health domain assesses the following facets: pain and discomfort, medical substance dependence, energy and fatigue, mobility, sleep and rest, daily activities, and work capacity. In turn, the Environment domain assesses physical safety and security, physical environment, financial resources, opportunities for acquiring new information, leisure activity, home environment, access to health and social care and transport (WHOQoL Group, 1998).

The Portuguese validation of WHOQoL-BREF (Vaz-Serra et al., 2006) presented very good reliability levels for both Physical Health ($\alpha = .87$) and Environment ($\alpha = .78$) domains. In this study were also obtained very good to excellent levels of internal consistency for Physical Health ($\alpha = .83$) and Environment ($\alpha = .78$) domains.

¹ According to Kline (2011) internal consistency scores are unacceptable when $<.50$, adequate around $.70$, very good around $.80$ and excellent around $.90$.

Psychopathological symptoms

To assess psychopathological symptoms, we used the Brief Symptom Inventory (BSI; Derogatis & Spencer, 1982; Canavarro, 2007). This is a self-report inventory that assesses psychopathological symptoms in terms of nine symptom dimensions (Somatization, Obsessions-Compulsions, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism) and three global indices (General Symptom Index, Positive Symptom Index, and Total Positive Symptoms Index).

In the present study were only included four of the nine dimensions: Anxiety (6 items), Depression (6 items), Obsessions-Compulsions (6 items), and Somatization (7 items), making a total of 25 items. Responses to the items are presented on a 5-point Likert-type scale, with 1 point being *never* and 5 points being *very often*. A higher score on each dimension indicates a higher presence of the symptomatology.

In the original study (Canavarro, 2007), the Somatization ($\alpha = .80$), Anxiety ($\alpha = .77$), Obsession-Compulsion ($\alpha = .77$) and Depression ($\alpha = .73$) dimensions showed adequate internal consistency. In this study, obtained very good to excellent internal consistency scores for all four dimensions mentioned previously ($.87 \leq \alpha \leq .90$).

Data analysis procedures

The database was cleaned and prepared eliminating duplicates and residual respondents. Subjects that presented more than 10% non-response on each instrument were eliminated and we input the missings below this value through expectation-maximization technique (Schafer & Graham, 2002; Tabachnick & Fidell, 2007). We proceed to a codification of few variables and created scores for the instruments' dimensions and global scores. For the path analysis and models submitted to test, we run a complete case analysis, only considering participants with information for the whole variables in the model.

Using SPSS Statistic Software, 25th version, descriptive statistics were analyzed. To better understand the relationships between variables, we performed Pearson correlations. To compare different groups of subjects (magistrates and court staff professionals; male and female professionals) we used Student's t-tests. Finally, the internal consistency of the scales was measured using Cronbach's Alpha coefficient.

For path analysis we used the IBM SPSS Amos Graphics software, 25th version, resorting to the Maximum Likelihood method (ML). The univariate and multivariate normality of the variables was assessed by the asymmetry (sk) and kurtosis (ku) coefficients and preliminary analyses indicate that none of the variables included presented asymmetry ($sk < 3$) and kurtosis ($ku < 10$) coefficients that indicated severe violations of normal distribution (Marôco, 2010). The fit of the model was evaluated using several indices. Although it is considered that not all existing fit indices should be reported, there is no consensus on which ones to consider (Schermelleh-Engel et al., 2003). However, according to Schermelleh-Engel et al. (2003), it is usual to use the following indexes to evaluate the model: chi-square goodness of fit (χ^2), and associated p-value, $\chi^2/\text{degrees of freedom}$

ratio, the Tucker-Lewis (TLI), the Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA) and the Standardized Root Mean Square Residual (SRMR). However, the values of χ^2 and χ^2/df are very sensitive to sample size (Byrne, 2010). Thus, for our sample size, it is difficult for these indices to show values considered adequate (Byrne, 2010). With this in mind, the fit of the model was evaluated based on the combined analysis between the TLI and CFI values, with the SRMR values, suggested by Hu and Bentler (1999). To this end, for the model to have a good fit, the TLI and CFI values should be greater than .95 and the SRMR values should be less than .09 (Hu & Bentler, 1999).

We used the Bootstrap resampling method to test the statistical significance of the indirect effects contained in the structural model.

Finally, for the purpose to analyze the invariance between professional categories, that is, to understand whether the model applied to both magistrates and court staff, we restricted each model path individually, comparing the χ^2 of each of the restricted models with the χ^2 of the base model. Non-significant differences indicate model invariance.

Results

Relation between burnout, quality of life, and psychopathological symptoms

To support the tested model, we tested the magnitude of the association between burnout, quality of life, specifically the physical health domain, and psychopathological symptoms, using Pearson's correlation coefficient (cf., Table 2). Concerning the relationship between burnout and quality of life, the correlation between the OLBI and the Physical Health Domain of the WHOQoL-Bref is strongly negative ($r(1320) = -.50, p < .001$) (Marôco, 2018²). In respect of the relationship between burnout and psychopathological symptoms, the correlation between the BSI and the OLBI is strongly positive ($r(1320) = .56, p < .001$). With regards to psychopathological symptoms and quality of life, the correlation between the BSI and the Physical Health domain of the WHOQoL-Bref is strongly negative ($r(1320) = -.64, p < .001$).

Table 2

Means, standard deviations and Pearson's correlations of the variables in study

<i>Variable</i>	<i>M</i>	<i>DP</i>	1	2	3
1. Burnout	2.98	0.68	-		
2. Physical Health Domain	14.26	2.87	-.64*	-	
3. Psychopathological Symptoms	1.91	0.73	.56*	-.64*	-

* Correlation is significant at the 0.01 level (2-tailed).

Testing mediation and moderating model

Since burnout, quality of life, and psychopathological symptoms are strongly correlated, we built a model to understand the effect of burnout on the physical health domain of quality of life of Portuguese magistrates and court clerks, considering psychopathological symptoms as a mediating variable and sex as a moderating variable (cf., Figure 1).

² According to Marôco (2018), correlations are weak when $|r| < .25$; moderate when $.25 \leq |r| < .50$; strong when $.50 \leq |r| < .75$ and very strong when $|r| \geq .75$.

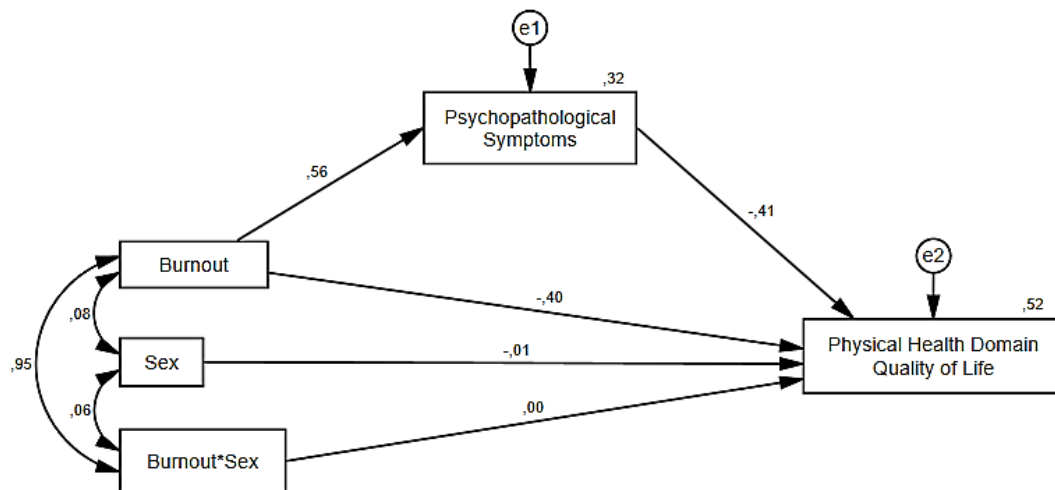


Figure 1

Adjusted model and respective standardized estimates of the regression coefficients

Given the values of the above indicators, the measurement model showed a good fit to the data: TLI = 0.982; CFI = 0.996; SRMR = 0.27 (cf., Table 3).

Table 3

Fit indexes for the base model

Index	χ^2	Df	χ^2/Df	TLI	CFI	RMSEA	SRMR
Base Model	18.897	2	9.449	0.982	0.996	0.080	0.027
	(p < .001)					CI 90% [0.050-0.115], p = .052	

The adjusted model explains 52% of the variability in the perception of the physical health domain of quality of life (cf., Figure 1). The paths between burnout and psychopathological symptoms is positive and statistically significant. The paths linking burnout and psychopathological symptoms to the physical health domain of quality of life are also significant, although negatively (cf., Table 4).

Table 4

Estimates of the Mediation and Moderation Model

Paths	Estimate	SE	p	β
Burnout → Physical Health domain	-1.694	0.271	.000	-.401
Burnout → Psychopathological symptoms	0.609	0.025	.000	.562
Psychopathological symptoms → Physical Health domain	-1.618	0.089	.000	-.415
Sex → Physical Health domain	-.059	0.112	.600	-.010
Burnout*Sex → Physical Health domain	-.007	0.162	.967	-.003

The burnout variable has a negative total effect of .64 on the physical health domain of quality of life, with a negative direct effect of .40 and a negative indirect effect, mediated by psychopathological symptoms, of .23 (cf., Table 5).

Table 5

Total, Direct and Indirect Effects of Burnout on Physical Health

Effect	Unstandardized effect	95% CI		<i>p</i>	Standardized effect
		<i>LB</i>	<i>UB</i>		
Total effect	-2.680	-3.191	-2.140	.001	-.635
Direct effect	-1.694	-2.223	-1.166	.001	-.401
Indirect effect	-0.985	-1.137	-0.848	.001	-.233

To assess the indirect effects, that is, the mediation effect of psychopathological symptoms between burnout and the physical health domain of quality of life, Bootstrap simulation was used, with a 95% confidence interval for two-sided tests, by resampling 2000 samples. The estimate of the indirect effect is framed by a 95% confidence interval, with bounds [-1.137; -0.848], showing a significance value of 0.001.

We used the Bootstrap to assess the ability to mediate psychopathological symptoms between burnout and the physical health domain of quality of life and we concluded that all effects analyzed are highly significant ($p \leq .002$), except for the variable sex, which, in this study, is not a moderator of the relationship between burnout and the physical health domain of quality of life.

Model invariance between professional groups

In terms of invariance between professional categories (magistrates and court staff), all trajectories showed non-significant differences ($.316 \leq p \leq .742$) when compared to the base model i.e. they are invariant between the two groups (cf., Table 6).

Table 6

Invariance test

Path constrained	χ^2	df	<i>p</i>
Burnout → Psychopathological Symptoms	22.438	5	.742
Psychopathological Symptoms → Physical Health domain	22.520	5	.663
Burnout → Physical Health domain	23.335	5	.316
Sex → Physical Health domain	23.255	5	.344
Burnout*Sex → Physical Health domain	22.666	5	.562

Note. Base model: $\chi^2_{(4)} = 22.330$

Burnout and quality of life professional group differences

With respect to burnout, court staff have a higher burnout score mean than magistrates ($M = 3.02$ and $M = 2.91$, respectively). According to the student t-test, these differences are significant, ($t(1,320) = -2.66$; $p = .008$) (cf., Table 7).

Table 7

Comparisons Between Magistrates and Court Staff

Logistic Parameter	Magistrates		Court Staff		t (1320)	p
	M	SD	M	SD		
Burnout	2.91	0.66	3.02	0.69	-2.66	.008
Physical Health domain	14.41	2.87	14.41	2.87	1.48	.138

Burnout and quality of life sex differences

In respect of the burnout, there are significant sex differences ($t(1,320) = -2.70$; $p = .007$). In the present sample, women ($M = 3.02$) have a higher burnout score mean than men ($M = 2.91$). Also, regarding to quality of life, these differences are significant ($t(1,320) = 3.60$; $p < .001$), with men having a higher mean quality of life ($M = 14.62$) compared to women ($M = 14.04$) (cf., Table 8).

Table 8

Comparisons Between Men and Women

Logistic Parameter	Men		Women		t	DF	p
	M	SD	M	SD			
Burnout	2.91	0.71	2.91	0.71	-2.70	1039	.007
Physical Health domain	14.62	2.90	14.62	2.90	3.61	1320	.000

Note. In burnout an unequal variance was assumed.

Discussion

The main objective of the present research was to study the effect that burnout has on the physical health domain of the quality of life of Portuguese judicial professionals. Additionally, it was intended to study the mediating role of psychopathological symptoms and the moderating role of sex in this relationship.

The correlations between the different variables indicated strong associations, providing support for the construction of the model. The model under study suggests that there is a significant negative effect between burnout and the physical health domain of quality of life, thus supporting hypothesis 1 (H1). This means that the professionals' burnout negatively impacts the physical health domain of their quality of life. Although there are no previous investigations with judicial professionals in the literature in which the relationship between these variables has been studied, these results are in line with others from several investigations (Asante et al., 2019; Moraes et al., 2019; Vidotti et al., 2019) that concluded that higher levels of burnout were associated with a more negative perception of quality of life in all domains. Despite the fact that in the present study only the physical health domain was assessed, the findings of Pereira et al. (2006) and Ruiz Martínez et al. (2018) report, respectively, that changes in one domain of quality of life are sufficient to change overall quality of life and that the physical health domain is the aspect that has the greatest impact on quality of life.

Regarding hypothesis 2 (H2), the results, as predicted, show that psychopathological symptoms partially mediate the relationship between burnout and physical health domain of quality of life. Burnout not only directly impacts physical health of quality of life, but also has an indirect effect, since burnout generates psychopathological symptoms that will impact physical health. Although there are also no previous investigations that have considered the relationship between the three variables, or even the mediation relationship studied, the results obtained can be framed in the literature, since they reinforce the thesis that burnout relates positively to various psychopathological symptoms (Marques, 2011) and that psychopathological symptoms negatively affect different areas of quality of life (Ruiz Martínez et al., 2018).

The only hypothesis that is not supported by our results is hypothesis 3 (H3), concerning the moderation of sex. This hypothesis was put forward by the existing evidence in the literature that relates sex with burnout and quality of life, pointing to lower levels in women in both variables (Lipp and Tanganelli, 2002; Norlund et al., 2010; Ruiz Martínez et al., 2018; Summers et al., 2020). However, our results show that sex does not moderate the relationship between burnout and the physical health domain quality of life. This means that in our sample, being male or female does not significantly change how burnout impacts the physical health domain of quality of life. Future studies focusing on this relationship would be needed.

The analysis of invariance allowed for the observation that the tested model applies equally to both professional categories. Although magistrates and court staff perform different functions and are subject to different demands at work (Dias et al., 2020; European e-Justice Portal, 2020b),

which could be indicative of differences, the results show that there are no significant differences for these professionals. Namely, the way burnout impacts the physical health domain of quality of life, as well as the way psychopathological symptoms mediate and sex moderates this relationship, are not different being a magistrate or being a court staff.

In terms of the differences between the two professional categories, the results indicate that court staff have higher levels of burnout compared to magistrates, finding evidence to support hypothesis 4 (H4). Although magistrates and court staff are both subject to professional demands that make them equally vulnerable to developing burnout (Dias et al., 2020), in the literature one can find factors associated with the characteristics of each profession that contribute to this difference. First, magistrates have a high level of professional and social recognition, compared to court staff, who appear to be socially invisibles a result of the social and professional lessening attributed to their functions (Dias et al., 2020). Second, court staff's is characterized by high psychological demands, coupled with little possibility of control, causes high levels of negative tension and chronic stress that can subsequently translate into health problems (Gil-Monte et. al., 2016). In turn, the work of magistrates, although also subject to high psychological demands, at the same time offers high possibilities of control and decision-making that allow to dampen their effect and deal with them appropriately. In this way, it gives rise to positive stressful situations, which are perceived as a challenge and which increase motivation and possibilities for personal and professional growth (Gil-Monte et. al., 2016). Third, magistrates consider that their profession grants them satisfaction, autonomy, and flexibility (A. C. Ferreira, 2014; Rossouw & Rothmann, 2020), in contrast to court staff, who report a lack of control, autonomy and relatively low job satisfaction (Dias et al., 2020). By this logic, the difficulty magistrates may have in managing professional demands, seems to be met to some extent by the satisfaction they feel about their jobs and the status they assume.

Contrary to our fifth hypothesis (H5), magistrates and court staff do not have different perceptions physical health domain of quality of life. This hypothesis was put forward due to the existing differences between these professional categories, both in terms of professional characteristics and demands, and in terms of social valuation and perceived satisfaction. However, it seems that, in the present sample, these characteristics are not sufficient for magistrates and professionals to perceive their quality of life, in terms of the physical health domain, differently.

As expected, the results suggest that burnout levels are higher in women than in men (H6). Although the literature is not consensual on this aspect, the results are in line with evidence from other studies (Gomes & Cruz, 2004; Maske et al., 2016; Norlund et al., 2010; Summers et al., 2020). These point to women being more likely to become emotionally involved with their clients' problems and, as a result, burden themselves more emotionally (Maslach & Jackson, 1985). Or that women are subjected to a dual role, as professionals and as wives and/or mothers, and, with this, are faced with double doses of effort to care for others and, consequently, are more exposed and vulnerable to developing burnout (Maslach & Jackson, 1985). In addition, men seem to give less importance to their physical and psychological symptoms when compared to women, which may

lead to women responding more critically to the instruments (Alves et al., 2019; Ruiz Martínez et al., 2018; Schraiber et al., 2005). These sex differences regarding burnout may also arise from their different risk behaviors (Alves et al., 2019) or the different strategies used by men and women to cope with stress (Cassidy-Vu et al., 2017), however, the present study did not focus on studying this.

Regarding quality of life, men have a significantly higher quality of life in the physical health domain compared to women, which supports the hypothesis at hand (H7). These results are in line with results such as those of Lipp and Tanganelli (2002) and Ruiz Martínez et al. (2018), in which men also had a better perception of quality of life. This may again be due to a greater recognition of symptoms in this sex (Rui Martínez et al., 2018; Schraiber et al., 2005). In addition to this, the fact that women have to expend greater effort to cope with the demands of daily life, both in their work environment and within the family leads to greater wear and tear, which may constitute a risk factor for their health and well-being and, consequently, for their quality of life.

In sum, although there are differences between the variables, at the level of the model, the relationships between the variables do not present differences, that is, they are not different being a magistrate or being a court staff. In other words, for both professional categories, burnout has a negative impact the physical health domain of professionals' quality of life and psychopathological symptoms mediate this relationship. On the contrary, for both categories, sex is not a moderator of this relationship between burnout and the physical health domain of quality of life.

Knowing how burnout impacts the quality of life of judicial professionals can support and guide more effective strategies to promote health in the work environment of these professionals, as has been suggested in the literature (Arandjelovic et al., 2010; EtemadiNezhad et al., 2020; Kupcewicz & Jóźwik, 2020; Nguyen et al., 2020). This may involve implementing intervention programs to prevent burnout or organizational strategies to promote health and well-being. Such programs may include, among other things, training courses aimed at identifying stressors and devising coping strategies (Lima & Dolabela, 2021). Organizational strategies may include offering greater flexibility in working hours and decision-making, providing learning opportunities through mentoring and training, and rewards and recognition (Cassidy-Vu et al., 2017).

In view of the results obtained, this dissertation meets the main objective of studying the relationship between burnout and the physical health domain of quality of life in judicial professionals, confirming the impact of burnout on the deterioration of the quality of life of professionals, as well as the mediating effect of psychopathological symptoms in this relationship.

Implications, limitations, and future research

Considering the professional demands of magistrates and court staff, which puts them under high exposure to stress and, consequently, at risk of developing burnout (Dias et al., 2020; Casaleiro et al., 2019), it was important to understand what impact this has on their quality of life. In this sense, and identifying this gap in the literature, this dissertation aimed to analyze the effect that burnout has on the physical health domain of the quality of life of Portuguese judicial professionals. Additionally, we sought to understand whether psychopathological symptoms mediate this relationship, as well as to analyze how this can be impacted by sex.

The results obtained support the hypothesis that the quality of life (physical health domain) of Portuguese judicial professionals, assessed through the WHOQoL-Bref, is impacted by the levels of burnout found, with a partial mediation of psychopathological symptoms (H1 and H2). That is, burnout directly impacts the physical domain of quality of life, but also indirectly because it generates psychopathological symptoms, which in turn impact quality of life. The results obtained only do not support the hypothesis that sex moderates this relationship (H3). That is, in these professions being male or female does not significantly change how burnout impacts the physical health domain of quality of life. In this sense, it would be important in future investigations to try to better understand the effect of sex, for example, by exploring it qualitatively. The analysis of the interviews conducted by the project in which this study is inserted (QUALIS) may help to better understand the role of this variable.

From the literature and research point of view, the present study contributes to fill the existing gaps in theoretical and empirical terms, especially in Portugal, both in the field of studies on the relationship between burnout and quality of life, and in the field of studies on the judicial professions, especially since it includes court staff, on whom the literature is even scarcer (Dias et al., 2020). From a practical point of view, the results on burnout and the perception of quality of life (physical health domain) among judicial professionals contribute to understand the effects that working conditions and respective demands have on the health and well-being of these professionals. The legal professions are essential to safeguard citizens' rights and ensure the proper functioning of justice (A. C. Ferreira, 2014). Thus, to protect the quality of justice provided to citizens, it is of great importance to look at the problems of these professionals. To this end, the present study provides support for the need to invest in working conditions in order to reduce the occupational risks associated with the judicial professions, for example, through the implementation of intervention programs to prevent burnout or organizational strategies to promote health and well-being.

However, it should be noted that, although this study contributes to a better understanding of the analyzed constructs, it has some limitations. First of all, the non-inclusion of the complete instrument that assesses quality of life (WHOQoL-Bref). Although the literature argues that changes in one domain of quality of life are enough to change the overall quality of life (Pereira, 2006) and that the physical health domain, which we used in this study, is the aspect that has the

greatest impact on quality of life (Ruiz Martínez et al., 2018), the domains, individually, have a limited capacity to measure the construct. Thus, for future studies, we suggest including all domains of quality of life in order to assess the overall perception of the quality of life of these professionals.

As noted earlier, studies focusing on judicial professionals are few in number. Those that exist, have low response rates (Casaleiro et al., 2021). This is also a limitation of our study. From the total sample, a considerable number of participants had to be excluded, according to the defined exclusion criteria, because they only answered a residual percentage of the questionnaire. Some participants avoided answering biographical questions, as seen in the study of A. C. Ferreira et al. (2014). Others responded only to the items that related to the physical and organizational conditions of the work. One of the advanced explanations is that this may be due to concerns about confidentiality and anonymity, that is, with the fear of being identified (Ferreira et al., 2014; Casaleiro et al., 2021). A. C. Ferreira and colleagues (2014), also put forward other plausible hypotheses of justification, namely the greater isolation on the part of magistrates, the different culture of participation, or the lack of time and availability, due to the high workload. Following this, given the percentage difference in responses between magistrates (judges and public prosecutors) and court staff, the former two were grouped together to facilitate comparison between the different professional categories. For future studies, it would be interesting to study the two types of magistrates separately, because even though they are similar, their functions are different.

Finally, it should be noted that, as mentioned, this dissertation contributes not only to the enrichment of the literature, but also opens doors for future research to address the limitations identified.

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