ACADEMIC ARTICLE

A Critical Review of Judicial Professionals Working Conditions’ Studies

Paula Casaleiro*, Ana Paula Relvas† and João Paulo Dias‡

The article presents a comprehensive critical review of the empirical literature on judges and public prosecutors’ working conditions in different disciplinary areas from the last 40 years, identifying studies’ characteristics and key results. Although judicial professionals are recognised as having a highly demanding working environment and are one of the groups most vulnerable to occupational stress, studies on this subject are scarce and relatively new. These can be divided into two distinct categories: psychology research studies centred on psychosocial risks and professional stress and burnout; and studies in the field of the sociology of law on questions such as job satisfaction and organisation of work. This review aims to highlight the increasing importance of pursuing studies on the working conditions of professionals responsible for delivering justice with quality and guarantees for all citizens. Without proper and high-quality judicial working conditions the probability increases of having a malfunctioning judicial system delivering poor decisions.

Keywords: Working conditions; judicial professionals; professional stress; burnout

Introduction

Judicial professionals are recognised as having a highly demanding working environment and belong to one of the professions most exposed and vulnerable to occupational stress.¹ In countries such as the United States, Canada, United Kingdom and New Zealand, training projects and programmes for the management of occupational stress have been established since the 1990’s.² However, studies on the working conditions and risks within the judicial professions are scarce and relatively new in most countries. One of the reasons for this shortage of studies may be the researchers’ perception of judicial professionals as a difficult population to study. This perceived “difficulty” stems from the high status and professional remoteness of the judiciary, judicial time constraints, assumed resentment or unwillingness

* Centre for Social Sciences, University of Coimbra, PT (pcasaleiro@ces.uc.pt) (Corresponding author)
† Faculty of Psychology and Education Sciences, University of the Coimbra, and Centre for Social Sciences, University of Coimbra, PT (aprelvas@fpce.uc.pt)
‡ Centre for Social Sciences, University of Coimbra, PT (jpdias@ces.uc.pt)
to be tested, and concerns by judicial professionals about the confidentiality of responses. Furthermore, there is a general resistance to viewing judges and prosecutors as ‘workers’ or ‘employees’. Increasingly, however, there is an acknowledgement that judges and prosecutors are not just judicial officers, representatives and servants of the state, they are also individuals with particular needs and requirements. Although they are in a comparatively privileged position when compared with most employees, the public perception is that these professionals don’t “suffer” from poor quality working conditions.

Socio-legal research has tended to focus on the procedural, institutional and organisational dimensions of law, namely on specific topics such as the new models of judicial management and sentencing practices. On the other hand, sociological scholarship has centred its studies on the nature of work, career trajectories and job satisfaction or stress in professional occupations, rarely investigating the judiciary. One of the few and first social-legal studies on working conditions is the study of Ryan et al. on the working environment of American lower court judges. Around the same time, the first psychology studies on work-related stress in judges and its adverse impact on health and wellbeing appeared in the United States of America and Canada, by authors such as Zimmerman, Rogers et al., and Eells and Showalter.

After these pioneering works, studies on the judicial professions focusing on working conditions and risks declined, re-emerging slowly in the last decade as new models of judicial management and judicial reforms were implemented. This recent research supports previous studies and shows indications of stress and burnout in judicial professionals worldwide, with consequences not only on their health status, but also on their work capacity. The purpose of the present review is to provide a comprehensive, up-to-date picture of the literature on judicial professionals’ (judges and public prosecutors) working conditions and risks, by reviewing empirical research from different disciplinary areas over the last 40 years. More specifically, this review aims to identify the studies’ characteristics, instruments used, subjects covered and main results. Being aware of the issues is extremely important to assure a well-functioning judicial system capable of providing good judicial decisions to assure citizens’ rights.

This paper is a result of the research being developed under the project “QUALIS – Quality of Justice in Portugal! Impact of working conditions in the performance of judges and public prosecutors” (Reference: POCI-01-0145-FEDER-029039), funded by the Portuguese Foundation for Science and Technology. QUALIS aims to examine the changes in working conditions of magistrates in Portugal, in order to evaluate their impact on professional performance and, consequently, on the quality of justice. To fulfil the main objective of QUALIS, it is crucial to critically review the studies on judicial professionals’ working conditions, identifying potentials and limitations, in order to allow the future development of instruments appropriate to the specificities of judicial professionals.

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6 I. M. Zimmerman, Stress: what it does to judges and how it can be lessened. Judges' Journal 20(3) pp. 18–22.
Method – Data sources, literature search and selection procedures

A computerised literature search was conducted on databases that encompassed different fields of research: Google Scholar and B-On. The research strategy focused on judicial professionals’ working conditions. It is important to firstly note that within the different legal and judicial systems, there are a wide range of judicial professions such as magistrates, judges, public prosecutors, law clerks and judicial officers. In addition, members of judicial professions do not hold the same titles in all countries, and their role and status can vary considerably from one country to another. Here by judicial professionals we only mean judges and public prosecutors. Secondly, we have adopted a comprehensive definition of working conditions in line with recent studies on the sociology of work and EUROFOUND, including not only physical working conditions, but also psychological working conditions, management and work organisation models, the working environment and the quality of work and employment.

Thus, the literature research used a combination of the following terms “working conditions”, “job satisfaction”, “judges”, “stress”, “burnout”, “magistrates”, “legal professionals”, “prosecutors”, “public prosecutors”, “judicial professionals”. The studies were gathered through online research, and the cross referencing of literature from different disciplinary areas (psychology, sociology of law, among others). The inclusion criteria for the selected studies were as follows: a) studies written in English and Portuguese; b) studies published in scientific journal articles, books (and book chapters) and monographies, between 1980 and 2018 c) empirical studies that used quantitative or qualitative methods, or both; d) studies whose participants were judicial professions, both judges and/or public prosecutors; e) studies with a focus on issues such as health and safety in the workplace, work organisation, quality of working life, job satisfaction and work-life balance.

There are other studies outside these criteria that were collected, but they were not included: a) for linguistic reasons, namely studies from the Netherlands and Romania; b) due to absence of the complete file in the available electronic research data bases; c) focus on a specific stress factor (e.g. Jaffe et al. – Vicarious Trauma) or specific working conditions (e.g. Álvarez et al. – Young Spanish judges and New technologies). Theoretical studies were also excluded, even though they proposed a model of evaluation for working conditions (e.g. Miller and Richardson), as well as studies undertaken by professional organisations (e.g.

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9 A judge is, generally speaking, a lead official who presides over a court of law, either alone or as part of a panel of judges, hears all the witnesses and any other evidence presented by the parties in the case, assesses the credibility of the parties, and then issues a ruling on the matter at hand based on his or her interpretation of the law and his or her own personal judgment. Vid European Commission. Legal Professions. <https://e-justice.europa.eu/content_legal_professions-29-en.do>[accessed 21 April 2020].

10 A public prosecutor is commonly identified with the tasks and powers exercised in the criminal field, and represents the State, but in some countries public prosecutors have relevant functions assigned to them in other jurisdictional areas, such as family and minors, and labour law (e.g. Portugal). See European Commission, supra note 9.


focused on the judicial career (e.g. Consejo General del Poder Judicial)\textsuperscript{17} and institutional, organizational and safety dimensions (e.g. ASJP; HAY GROUP),\textsuperscript{18} whose difficult/limited access and availability only in the source language precludes a comprehensive and systematic review.

Initially, the authors screened the titles and abstracts of the selected records, and removed duplicate records, identifying 51 potentially relevant studies. The main exclusion criteria applied in this phase were the focus of the studies (e.g. participants and working conditions), the type of records (e.g. conference proceedings) and language (see Figure 1). According to the aforementioned criteria, empirical studies on judges and/or public prosecutor's


\begin{figure}
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\includegraphics[width=\textwidth]{flowchart.png}
\caption{Flowchart of the review process.}
\end{figure}
motivation for entering or leaving the judicial career (e.g. Jensen)\textsuperscript{19} or judicial activism (e.g. Fielding),\textsuperscript{20} or general issues of health, well-being and personality (e.g. Brafford and Rebele)\textsuperscript{21} were excluded. Following this phase, the remaining full texts of the selected studies were examined in depth, and an additional electronic and manual search was carried out based on the cross-referencing of sources, taking into consideration the defined inclusion and exclusion criteria. According to the former criteria, empirical studies on judges' and/or prosecutors' working conditions, including job-related stressors and health and well-being impacts, were included, in contrast to theoretical studies and studies focusing on the prevention/intervention programmes. Taken together, the electronic and manual searches yielded a total of 28 records from all sources worldwide. It is important to note that some of the records corresponded to the same main research (see Table 1) (e.g. Lustig \textit{et al.} and Ciocoiu \textit{et al.}).\textsuperscript{22}

The information on the characteristics of the studies was obtained from the published studies and from the consultation of any documentation, questionnaires or descriptive reports available online. The subjects covered by the studies were categorized according to the European working conditions survey dimensions of Job quality: Physical environment; Work intensity; Working time quality; Social environment; Skills and discretion; Prospects; and Fair pay.\textsuperscript{23}

**Results**

There are two predominantly distinct categories of studies on working conditions focusing on the judicial professions: psychology research studies centred on the psychosocial risks and professional stress and burnout (e.g. Tsai and Chan);\textsuperscript{24} and studies in the field of sociology of law concerning questions such as job satisfaction and work organisation (e.g. Mack and Roach Anleu),\textsuperscript{25} in which working conditions are rarely the main focus of the research. Tables 1 and 2 provide information on the studies’ design and main variables.

**Studies’ Characteristics**

The studies were conducted between 1980 and 2018 worldwide, but most of them (23) were carried out post-2005 in countries with common law legal systems, such as USA, Australia, Canada and UK (see Table 1). The majority of the studies were cross-sectional, except the National Survey of Australian Magistrates, undertaken in 2002 and 2007,\textsuperscript{26} and the UK Judicial Attitude Survey (JAS), carried out in 2014 and 2016,\textsuperscript{27} that employed a longitudinal design. In fact, the UK Judicial Attitude Survey encompassed both longitudinal and cross-sectional

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Study & Design & Variables & Results & References \\
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\textsuperscript{19} J. M. Jensen, Career Satisfaction and State Trial Court Judges’ Plans to leave the Bench. \textit{Judicature}, 95(3) pp. 116–125.
\textsuperscript{21} A. Brafford, R.W. Rebele, Judges’ Well-Being and the Importance of Meaningful Work. \textit{Court Review} 54 pp. 60–72.
\textsuperscript{24} F. Tsai, C. Chan, Occupational stress and burnout of judges and procurators. \textit{International Archives of Occupational and Environmental Health} 83 pp. 133–142.
Table 1: Studies date, country and instruments.

<table>
<thead>
<tr>
<th>Paper</th>
<th>Study date</th>
<th>Country</th>
<th>Instruments</th>
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<tbody>
<tr>
<td>M. Lipp, M. Tanganelli, <em>Stress e Qualidade de Vida em magistrados da Justiça do Trabalho: Diferenças entre Homens e Mulheres</em>. <em>Psicologia: Reflexão e Crítica</em> 15(3) pp. 537–548.</td>
<td>2002</td>
<td>Brazil</td>
<td>Stress Symptoms Inventory (ISS); Occupational Stress Management Scale; Quality of Life Inventory (IQV); Judges’ Stressors Inventory (IFSJ); Magistrates’ Stress Management Strategies (IESM)</td>
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<tr>
<td>S. L. Lustig, K. Delucchi, L. Tennakoon, B. Kaul, D. L. Marks, D. Slavin, Burnout and Stress Among United States Immigration Judges. Bender's Immigration Bulletin 13 pp. 22–30.</td>
<td>2008</td>
<td>USA</td>
<td>Instrument items targeted respondents’ perceptions of jury stress and judges’ own experiences with stress and safety issues; Clinical measures (Center for Epidemiology Studies Depression Scale; Spielberger State Anxiety inventory; Post-Traumatic Stress Disorder Diagnostic); Open-ended question related to coping strategies to reduce stress</td>
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<tr>
<td>M. S. Ciocoiu, M. Cojocaru, S. V. Ciocoiu, Implications of levels of stress factors in the magistrate’s activity. Romanian Biotechnological Letters 15(3) pp. 126–133.</td>
<td>2010</td>
<td>Romania</td>
<td>Job content questionnaire (JCQ); Siegrist’s effort–reward imbalance questionnaire (ERI); Copenhagen Burnout Inventory (CBI); 1 question on self-perceived work stress</td>
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<tr>
<td>F. Tsai, C. Chan, Occupational stress and burnout of judges and procurators. International Archives of Occupational and Environmental Health 83 pp. 133–142.</td>
<td>2010</td>
<td>Taiwan</td>
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<td>K. A. Patel, S. S. Rajderkar, J. D. Naik, V. S. Behere, A study of certain correlates of job satisfaction among judicial personnel, in a district of Western Maharashtra. <em>Indian Journal Occupational &amp; Environmental Medicine</em> 18(2), 2014, pp. 68–74.</td>
<td>2014</td>
<td>India</td>
<td>Maslach Burnout Inventory (MBI); ICMR Psychological Stress Questionnaire Scale</td>
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<tr>
<td>B. Fonseca, <em>Riscos Psicosociais e Engagement nos Magistrados do Ministério Público: Uma relação moderada pelo capital psicológico</em>, Dissertação apresentada à Universidade Católica Portuguesa para obtenção do grau de mestre em Psicologia e Desenvolvimento de Recursos Humanos, Universidade Católica Portuguesa, 2017.</td>
<td>2017</td>
<td>Portugal</td>
<td>Copenhagen Psychosocial Questionnaire (COPSOQ); Utrecht Work Engagement Scale; PsyCap Questionnaire</td>
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Table 2: Working conditions assessed categories/variables.

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<tr>
<td></td>
<td>Work intensity</td>
<td>Working time quality</td>
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<tr>
<td>J. M. Rogers, S. Freeman, P. Lesage, The Occupational Stress of Judges. <em>Canadian Journal of Psychiatry</em> 36(5) pp. 317–322.</td>
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<tr>
<td>I. M. Gomme, M. P. Hall, Prosecutors at work: role overload and strain. <em>Journal of Criminal Justice</em>, 23(2) pp. 191–200</td>
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<td>S. Roach Anleu, K. Mack, The professionalization of Australian magistrates: Autonomy, credentials and prestige. <em>Journal of Sociology</em> 44 pp. 185–203.</td>
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<td>S. Roach Anleu, K. Mack, Gender, judging and job satisfaction. <em>Feminist Legal Studies</em> 17(1) pp. 79–99.</td>
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### Papers

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components: “Almost all the questions from the 2014 JAS were repeated in identical form in the 2016 JAS, but a few questions from the 2014 JAS were phrased differently to increase clarity following a review of the 2014 JAS, and several new questions were added to the 2016 JAS covering reforms taking place within the judiciary since 2014”.

Almost all studies adopted a quantitative methodology, with six mixed-method studies (Ciocoiu et al.; Rogers et al.; Ryan et al.; Ferreira et al.; Na et al.; Ludewig and LaLlave) that comprised surveys, interviews, focus groups and visits to the courts. In addition, it is important to mention that some of the studies included qualitative data (e.g. interviews or open questions) that were further codified in a quantitative way (e.g. Rogers et al.; Lustig et al.) or used to illustrate the quantitative findings (e.g. Na et al.). For instance, Na et al. used unstructured in-depth interviews to illustrate the patterns observed in the quantitative analyses on work-related stressors. Only the studies by Darbyshire and Gomme and Hall adopted exclusively a qualitative methodology. Data for Darbyshire study were collected through interviews and observations, obtained over seven years, and for the Gomme and Hall study they were collected at various points in time, between 1990 and 1992, through structured and unstructured interviews, participant observation, and the analysis of secondary materials.

All studies had the support of judicial institutions, associations or academies in the preparation, dissemination and call for participation in the surveys. The support of these institutions gives credibility to the studies and facilitates access to a ‘difficult population’; it helps surpass the assumed resentment or unwillingness to be tested, and concerns by judges and public prosecutors about the anonymity and confidentiality of survey responses. The studies by Mack and Roach Anleu, Thomas and Ferreira et al. consulted several relevant organisations and individuals in the planning of the surveys, in order to ensure that the major concerns and interests of the judiciary were addressed in the survey questions, so that the findings are valuable to courts and judicial officers as well as to wider audiences. They also helped to establish rapport, general goodwill and trust towards the survey and research team, and maximise the response rate and therefore the validity of the research findings. The dissemination and call for participation in all surveys/studies were supported by judicial institutions, either through the mere authorisation/approval and dissemination of the survey, or

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28 Ibid., p. 7.
30 See Rogers et al., supra note 7. See Lustig et al., supra notes 1 and 22.
31 See Na et al., supra note 29.
32 Ibid.
35 See Darbyshire, supra note 33.
36 See Gomme and Hall, supra note 34.
37 See Mack and Anleu, supra note 26.
38 See Thomas, supra note 27.
39 See Ferreira et al., supra note 29.
through the direct contact of its members. For example, in Flores et al. study, the National Association of Immigration Judges leadership sent reminder emails and contacted union stewards asking them to remind judges to complete the survey.⁴⁰

**Studies’ participants**

The majority of the studies focused on judicial professionals from a single jurisdiction, such as immigration judges,⁴¹ a single judicial category, such as public prosecutors,⁴² or salaried judges,⁴³ or judicial area.⁴⁴ Only the Australian studies by Mack and Roach Anleu,⁴⁵ Ferreira et al.,⁴⁶ and Du and Yu⁴⁷ offer a comprehensive national socio-legal study of the judiciary. Moreover, most of the studies have convenience samples, relying on respondents’ willingness to participate in the research and/or on the opportunity to apply the survey, which reinforces the importance of the collaboration of judicial institutions and of the relevance of the study to the population. For instance, the judges who participated in the study by Eells and Showalter⁴⁸ attended a workshop titled “Fact finding and decision making” funded by the American Academy of Judicial Education. Only two studies opted for a cluster sampling, Ciocoiu et al.⁴⁹ considered a sample of 176 magistrates, representative for Constanța County, including 92 judges and 84 prosecutors, 70 men and 106 women aged 20–60 years with seniority in magistracy between 1–25 years, from 3 sections of activity, court, tribunal and court of appeal. Tsai and Chan⁵⁰ selected six district courts, one appeals court, and three District

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⁴⁰ See Flores et al., supra note 1.
⁴¹ See Lustig et al., supra notes 1 and 22.
⁴² B. Fonseca, *Riscos Psicossociais e Engagement nos Magistrados do Ministério Público: Uma relação moderada pelo capital psicológico*, Dissertação apresentada à Universidade Católica Portuguesa para obtenção do grau de mestre em Psicologia e Desenvolvimento de Recursos Humanos, Universidade Católica Portuguesa, 2017. In Portugal, the Public Prosecution Service (PPS) “represents the State, defends the interests prescribed by law, takes part in the enforcement of criminal policy as defined by the organs of sovereignty, carries out prosecutions according to the principle of legality, and defends democratic legality, pursuant to the Constitution, to this Statute and to the law” [Article 219(1) of the Constitution of the Portuguese Republic (CPR); articles 1 and 3 of the Statute of the Public Prosecution Service]. Although generally identified with the tasks and powers exercised in the criminal field, the PPS’s polymorphous nature extends to the relevant functions assigned to it in the other jurisdictional areas, such as family and minors, and labor law (PGR, 2019). Viç PGR – Procuradoria-Geral da República. 2019. [Public Prosecution Service. <http://en.ministeriopublico.pt/> [accessed 23 April 2020].
⁴³ See Thomas, supra note 27. In the UK, there are two types of professional judge: fee-paid and salaried. Fee-paid judges are recruited through open competition and appointed for a renewable five-year term. They are required to sit for at least 30 days a year, but otherwise may continue other work, including representing a party at a hearing, provided it is not in the region where they sit as a judge. Both salaried and fee-paid professional judges are appointed by the Lord Chancellor (England and Wales) or Lord President (Court of Session, Scotland) and may serve until the age of 70. Normally an appointment as a salaried judge only follows after a judge has served on a fee-paid basis. In England and Wales in 2015 there were 123 salaried professional judges (109.8 full-time equivalent) and 208 fee-paid professional judges. In Scotland, 16 professional judges were listed in 2016. Viç P. Burgess, S. Corby, A, Höland, H. Michel, L. Willemez, *The Roles, Resources And Competencies Of Worker Lay Judges*, Hans-Böckler Stiftung, 2017.
⁴⁴ See Ciocoiu et al., supra note 22.
⁴⁶ See Ferreira et al., supra note 29.
⁴⁸ See Eells and Showalter, supra note 8.
⁴⁹ See Ciocoiu et al., supra note 22.
⁵⁰ See Tsai and Chan, supra note 24.
Court Procurators’ Bureaus to represent all courts and procurators bureaus in Taiwan, and then 211 participants were randomly selected from these organisations.

The response rates are also relatively low in most of the studies analysed, never exceeding 50% (except in the case of UK Judicial Attitude Surveys of 2014 and 2016⁵¹ and in the clustered samples.⁵² As most of the studies have convenience samples and the number of surveys returned is lower than the total number of judicial professionals, the question of representativeness arises in most of the studies. Only the studies by Mack and Roach Anleu⁵³ and Ferreira et al.⁵⁴ ensured that the subset of participants who responded (the sample) reflected the broader “population” of judicial professionals in key aspects, such as type/level of court or gender. A representative sample enables general statements to be made, rather than having to limit observations or conclusions to statements only about those who responded.

Part of the reason for the low response rates may be the persistent concerns of the judicial professionals about anonymity and confidentiality. For example, Rogers et al. were not able to collect comprehensive demographic data from individual respondents, since the seminar participants and organisers were very concerned with confidentiality.⁵⁵ And the study by Ferreira et al. registered higher rates of non-response to questions about biographical details and the magistrates training course than in other survey questions.⁵⁶ However, other factors must be considered, such as the judicial time constraints and instruments used. Darbyshire pointed out that judges welcomed the opportunity to open up the judiciary to outside scrutiny (to portray themselves as human, user-friendly, and diverse) and to the work-shadowing method used by the study. Thus, extensive surveys may not be the best approach to this population.⁵⁷

Subjects covered – Assessed variables and instruments

The majority of studies exclusively addressed individual perceptions of working conditions, relating primarily to issues such as work intensity, work-life balance and social environment. Studies usually pay little attention to the opportunities for training and personal development, and the features of the physical environment in which work is performed. And only the Australian national surveys addressed both objective indicators (e.g. number of days spent attending professional development/education events, frequency of work outside regular hours) and individual perceptions of working conditions.⁵⁸

There is no consensus in the instruments used, although it is possible to find similar questions in different studies. Furthermore, the same instrument is usually applied even if the respondents include different judicial professionals. The exception is the study by Mack and Roach Anleu⁵⁹ that opted to develop two separate questionnaires in 2007, one for the National Survey of Australian Judges and one for the second National Survey of Australian Magistrates.⁶⁰ While both are modelled on the first National Survey of Australian Magistrates sent in 2002, two separate surveys were required in 2007 so that each survey could contain questions and terminology appropriate to the specific level of the judiciary and to the distinctive nature of their work, as well as questions applicable across all levels of the judiciary.

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⁵¹ See Thomas, supra note 27.
⁵² See Ciocoiu et al., supra note 22. See Tsai and Chan, supra note 24.
⁵³ See Mack and Roach Anleu, supra note 26.
⁵⁴ See Ferreira et al., supra note 29.
⁵⁵ See Rogers et al., supra note 7.
⁵⁶ See Ferreira et al., supra note 29.
⁵⁷ See Darbyshire, supra note 33.
⁵⁸ See Mack and Roach Anleu, supra note 26.
⁵⁹ Ibid.
⁶⁰ The terms ‘magistrate’ and ‘judge’ distinguish members of the judiciary who preside in the first instance or lower courts (magistrates) from those who preside in the higher courts (judges).
Most of the psychological studies used standardised instruments, usually combined, for example, Tsai and Chan\textsuperscript{61} administered the Job Content Questionnaire (JCQ), the Siegrist’s Effort–Reward Imbalance questionnaire (ERI) and the Copenhagen Burnout Inventory (CBI), and Fonseca\textsuperscript{62} used the short version of the Copenhagen Psychosocial Questionnaire (COPSOQ), the Utrecht Work Engagement Scale and the PsyCap Questionnaire. But one of the studies by Eells and Showalter used standardised instruments specifically created for the judiciary, namely the National Judges Health Stress Questionnaire (NJHSQ) and the Judicial Stress Inventory (JSI).\textsuperscript{63} The NJHSQ was used to obtain demographic information and the judges’ opinions on several aspects of the working environment, including degree of control experienced, pressure to move cases, satisfaction with case variety, personnel effectiveness, salary satisfaction, and overall stress experienced. The JSI was a 77-item questionnaire comprising specific stressors identified by an independent group of judges.

Another prevalent option to address individual perceptions of working conditions was the creation of questions that were specifically designed for each study purpose. For example, Ciocoiu\textit{ et al.} developed a questionnaire that included 77 types of factors that could be perceived as stressors by the magistrates, classified into 5 categories: physical-chemical environmental factors; current work-related factors; factors related to the magistrate’s role in the profession; features related to the organisational structure and the professional climate; and individual factors related to the interaction between the professional and socio-family environments.\textsuperscript{64} The UK JAS included 50 questions comprising several aspects of working conditions, including working hours, salary and pensions, and opportunities for training and personal development.\textsuperscript{65}

In addition, some studies included clinical measures to assess health and well-being in the workplace, targeting occupational stress, burnout and secondary traumatic stress.\textsuperscript{66} For example, Flores\textit{ et al.},\textsuperscript{67} besides the instrument items, targeted respondents’ perceptions of jury stress and judges’ own experiences with stress issues, included clinical measures such as the Center for Epidemiology Studies Depression Scale, a short form of the Spielberger State-Trait Anxiety Inventory (STAI) – Post-Traumatic Stress Disorder Diagnostic.\textsuperscript{68}

\textbf{Judicial working conditions}

The studies’ results will be presented according to the classification of subjects based on the European working conditions survey main categories: Physical environment; Work intensity; Working time quality; Social environment; Skills and discretion; Prospects; and Fair pay. Following these categories, the results for health and well-being in the workplace will be presented.\textsuperscript{69}

\textbf{Work intensity}

The level of work intensity was assessed/considered in all of the selected studies. The instruments measured the level of work demands, such as working at high speed and under time pressure due to workload, and experiencing emotional demands, such as dealing with child custody cases and or violent crimes. Studies unanimously established that judicial

\begin{itemize}
\item \textsuperscript{61} See Tsai and Chan, supra note 24.
\item \textsuperscript{62} See Fonseca, supra note 42.
\item \textsuperscript{63} See Eells and Showalter, supra note 8.
\item \textsuperscript{64} See Ciocoiu\textit{ et al.}, supra note 22.
\item \textsuperscript{65} See Thomas, supra note 27.
\item \textsuperscript{66} See Lustig\textit{ et al.}, supra notes 1 and 22. See Flores\textit{ et al.}, supra note 1.
\item \textsuperscript{67} See Flores\textit{ et al.}, supra note 1.
\item \textsuperscript{69} See EUROFOUND, supra note 23.
\end{itemize}
professionals regard the volume of the work as excessive and increasing, requiring working at high speed and out of regular hours, and emotionally demanding. The excessive workload (backlog of work, time constraints, overbooking of cases, and problems in meeting deadlines) is identified as a major source of stress.

Furthermore, studies have unanimously concluded that aspects of judicial work itself are major sources of stress. In the study by Rogers et al. almost every judge (95% of the total sample) listed at least one judicial function among his/her top three occupational stressors – for example, sentencing, child custody cases, social isolation, judgements, decision-making, and jury trials are identified as being their primary source of occupational stress. Ciocoui et al. showed that the stressors relating to judges’ actual work diverge significantly from the other categories, such as the factors related to the organisational structure and the professional climate or individual factors related to the interaction between the professional and socio-family environments. And Flores et al. also revealed that the highest levels of stress for judges stemmed from emotionally demanding cases, such as cases involving crimes against children, sexual crimes and violent crimes.

The nature of the work itself and the intellectual challenge it provides, however, is simultaneously identified as a major source of satisfaction. Judges and magistrates in Australia express very high levels of work satisfaction: an overwhelming majority (92%) are satisfied, including very satisfied with their overall work and four in five agree (including strongly agree) that their work is a major source of satisfaction and that the work has lived up to their expectations. Similarly, three-quarters of the UK salaried judges are satisfied with the challenge of their job (77%) and the variety of their work (73%). And almost three-quarters of the Portuguese’s judges and prosecutors’ respondents agreed or strongly agreed, feeling motivated in the exercise of their profession.

Working time quality

Working time quality was considered in all of the selected studies, mainly through specific questions concerning individual perceptions of work-life balance. Studies rarely report/consider the incidence of long working hours or atypical working time, as Mack and Roach Anleau survey in which ¾ of all judges and magistrates reported working outside regular work hours at least a few times a week.

With regards to judicial work interfering in judges and public prosecutors personal/family life, most studies showed that the long working hours and work stress affect judicial professionals personal/family life and reported ‘job-home interaction’ as sources of stress. Moreover, Thomas reported a substantially increase in the percentage of UK salaried judges that feel the amount of out of hours’ work required to do their job is affecting them, from

70 See Rogers et al., supra note 7. See Ferreira et al. and Ludewig and Lallave, supra note 29. See Wallace et al., supra note 45. See Fonseca, supra note 42.
72 See Rogers et al., supra note 7.
73 See Ciocoui et al., supra note 22.
74 See Flores et al., supra note 1.
75 See Roch Anleau and Mack, supra note 25.
76 See Thomas, supra note 27.
77 See Ferreira et al., supra note 29.
78 See Mack and Roach Anleau, supra note 26.
79 See Ferreira et al. and Ludewig and Lallave, supra note 29. See Thomas, supra note 27.
80 See Rogers et al., supra note 1. See Lipp and Tanganelli, supra note 70.
29\% in 2014 to 51\% in 2016.\textsuperscript{81} Rogers et al. reported that over one-third of the judges reported 'job-home interaction' as sources of stress, including in this category social restrictions (generally related to the inadvisability of socialising and retaining professional or political involvements), the problems associated with travel and relocation, and a wide variety of personal stressors such as difficulties with children or marriage.\textsuperscript{82} Darbyshire also registered problems associated to judges' mobility (especially of new judges).\textsuperscript{83} In contrast, studies from Australia\textsuperscript{84} and Romania\textsuperscript{85} concluded that judicial professionals are satisfied with the work's compatibility with family responsibilities and lifestyle and the interaction of the professional with the socio-family environment is not a source of stress. Finally, in this regard, Roach Anleu and Mack found that women may have less success or face more obstacles than men in preventing work from intruding into their family time.\textsuperscript{86}

**Social environment**

The work of judicial officers relies deeply on the activities and inputs of others; it is not solely a product of their own individual behaviour.\textsuperscript{87} Furthermore, using a sample of judicial officers in Taiwan, Tsai and Chan found that stressful working conditions are significantly associated with work-related burnout especially when judicial officers have low social support.\textsuperscript{88} Similarly, the results obtained by Na et al. suggest that the levels of work stress and turnover are negatively related to the organisational support.\textsuperscript{89}

This is a disturbing assessment since studies showed a general dissatisfaction with the support from peers and staff support. In fact, nearly all participants in the UK JAS said that time to discuss work with colleagues was important, but only 20\% said the opportunities for this were good or excellent.\textsuperscript{90} In the study by Rogers et al., more than one-third of the responses also mentioned a lack of opportunity for consultation and support from colleagues, and inadequate support and feedback from peers and superiors was one of the most frequently reported sources of stress.\textsuperscript{91} Moreover, in the study by Ludewig and LaLlave 71\% of judges reported problems with colleagues.\textsuperscript{92} Darbyshire observed that judges had a warm working relationship with the court staff, but only 36 of the 77 judges interviewed considered they had adequate staff and administrative support.\textsuperscript{93} In this regard Roach Anleu and Mack found that the social environment varies between higher and lower courts: nearly two-thirds of judges in the higher courts indicate that adequate support staff are always or often available, while slightly more than a quarter of magistrates make this assessment related with lower courts.\textsuperscript{94}

\textsuperscript{81} See Thomas, supra note 27.
\textsuperscript{82} See Rogers et al., supra note 7.
\textsuperscript{83} See Darbyshire, supra note 33.
\textsuperscript{84} See Roach Anleu and Mack, supra note 25.
\textsuperscript{85} See Ciocoiu et al., supra note 22.
\textsuperscript{86} S. Roach Anleu, K. Mack, Gender, judging and job satisfaction. Feminist Legal Studies 17(1) pp. 79–99.
\textsuperscript{87} See Roach Anleu and Mack, supra note 45.
\textsuperscript{88} See Tsai and Chan, supra note 24.
\textsuperscript{89} See Na et al., supra note 29.
\textsuperscript{90} See Thomas, supra note 27.
\textsuperscript{91} See Rogers et al., supra note 7.
\textsuperscript{92} See Ludewig and LaLlave, supra note 29.
\textsuperscript{93} See Darbyshire, supra note 33.
\textsuperscript{94} See Roach Anleu and Mack, supra note 45.
Learning and training opportunities in the job, prospects for career advancement, earnings and physical environment

With regard to the remaining dimensions of working conditions, the collected studies revealed good levels of satisfaction in broad terms regarding the learning and training opportunities in the job and the prospects for career advancement. And, on the contrary, there was general dissatisfaction with court facilities and financial rewards.

The few studies that considered physical aspects showed discontent with the court facilities. Darbyshire observations in UK courts reported: spectacular old buildings unsuitable for modern life and inadequate facilities for court users; new buildings constructed without consulting the judiciary; and the use of outdated IT hardware and software. Thomas’ study supports these results, showing that 43% of the UK salaried judges said the maintenance of their building was Poor and 31% said the physical quality of the building as a whole was Poor. According to Ciocoiu et al. insufficient lighting in offices and court rooms was among the most common factors of occupational stress found in the Constanta County prosecutors and judges’ activities.

Regarding earnings, most studies reported that judges and magistrates feel displeased about their salary, considering that it does not correspond to the responsibilities and the workload. In contrast, studies from Australia and Switzerland concluded that judicial professionals are content with their salary and standard of living. However, in our analysis, Australian judges and magistrates are generally more satisfied with their working conditions, in particular compatibility with family responsibilities and salary compared with other nationalities.

Health and well-being consequences of working conditions

Finally, studies carried out show indications that stress and burnout in judicial professionals are higher than in other professionals, such as prison wardens or physicians in busy hospitals, reflecting the stressful and psychologically demanding working environment of judicial systems. For example, in the Lipp and Tanganelli study, in a scale of 1 to 10 judges reported rates of stress (8.3) similar to the results that the study by the University of Manchester (1987) obtained for miners (8.3), and greater than those reported in the same study by police officers (7.5), airplane pilots (7.5) and firemen (6.3).

Studies underlined a variety of signs and effects related to stress. Ciocoiu et al. reported tiredness, psychological tension, disillusion, vulnerability to ambiance and back pains for magistrates, together with agitation and headaches for public prosecutors. Similarly, Lipp and Tanganelli’s study revealed that 71% of the judges feel constant physical exhaustion, 60% suffered from muscular tension and 52% had excessive irritability. Studies also highlighted variability in the frequency and types of reactions, signs and effects related to stress among judicial professionals, influenced by factors that are related to the specificity of the actual work, section, position and length of service in the magistracy, but also to sex and
age. For instance, the findings showed that female magistrates reported more stress, burnout and safety concerns than their male colleagues, suggesting that women are either more susceptible to stress or are more open about reporting stress and safety concerns.\textsuperscript{105} Considering the prevalence of burnout and stress experienced by the studies’ participants, some studies asked about coping mechanisms\textsuperscript{106} and gave some recommendations, such as health promotion programmes at work or the adjustment of the workload to the capabilities and resources of judicial professionals.\textsuperscript{107}

**Discussion, research critique and future directions**

This article has aimed to provide a comprehensive critical review of the empirical literature on judges and public prosecutors’ working conditions and risks from different disciplinary areas over the last 40 years, identifying studies’ main characteristics, instruments used, subjects covered and key results. The studies point to three main conclusions. First, a general dissatisfaction with working conditions, particularly the intensity of work. Judges’ and public prosecutors’ perception of work overload and increasingly demanding pace of work reflects the chronic and widely reported heavy caseload, backlog of work, time constraints and overbooking of cases.\textsuperscript{108} This perception may be intensified by the highly demanding nature of management initiatives and court performance evaluation programmes, setting productivity standards to judicial professionals and courts. The effect of these on work pressure is, however, still unclear.

Secondly, the studies highlighted the importance of aspects of the judicial work itself, as primary sources of occupational stress among judicial professionals. Among the specific sources of stress for judges and public prosecutors are the lack of control over their caseload and citizens, social isolation, judgements and decision-making, exercising judicial discretion, cases involving child custody, crimes against children, sexual crimes, and violent crimes, high information and documentation requirements (bureaucracy), and rapidly changing law.\textsuperscript{109} The burden of making decisions that will seriously affect the lives of others may be related to the reported insufficient social support felt by judges and public prosecutors, but also to the insufficient preparation and training for their duties, although studies point to good levels of satisfaction with the learning and training opportunities available in the job.

Finally, the above-mentioned findings do not detract from the fact that judicial professions have high job satisfaction, as different studies have pointed out. Although judicial professionals experienced high workload and occupational stress and suffered from the severe risk of personal and work-related burnout, they also had high job control and reward. Moreover, people working in judicial professions that combine high psychological job demands with high job control, such as judges, have by far the highest job satisfaction.\textsuperscript{110} In sum, judicial professions combine high job demands (workload and stress) with high job satisfaction.

The interpretation of the literature on working conditions has six main limitations.

1) One concern is the focus on individual perceptions of working conditions and risks, at the expense of objective indicators. Individual perceptions and self-report data have well-known limitations, including the possibility of response biases such as over- or underreporting.

\textsuperscript{105} See Lustig et al. and Flores et al., supra note 1. See Lipp and Tanganelli, supra note 71.
\textsuperscript{106} Ibid.
\textsuperscript{107} See Tsai and Chan, supra note 24.
\textsuperscript{108} See Ferreira et al. and Na et al., supra note 29.
\textsuperscript{109} See Flores et al., supra note 1. See Rogers et al., supra note 7.
2) The limited scope of the majority of studies is recognised. Most of the studies focus only on one small part of the judiciary, have low response rates and samples that were non-representative, restricting the generalisability of the research findings.

3) The specificities of judicial careers and terminology in each country and the use of different instruments limits national and international comparisons. Researchers ought to ensure (at least) that the subset of participants who responded (the sample) parallel the broader “population” of judicial professionals, paying attention to the needs and concerns of the judiciary and clarifying the specificities of their national judicial contexts.

4) The majority of the studies were cross-sectional. Longitudinal research would be valuable to map the changes in judicial professionals’ working conditions and possible impacts of the reforms taking place within the judiciary worldwide.

5) The psychological studies draw heavily on the general literature in the fields of work-related stress and burnout and use standardised instruments as there is no unified theoretical framework or sufficient empirical base to explain judges and public prosecutors’ work stress. Working environments and experiences of judicial professionals are inherently different from those of other public and private employees. Thus, future research should continue to develop and incorporate more specific contextual and situational factors that are unique to judges and public prosecutors in the study of their working conditions and risks.

6) The last concern is the neglect of the potential impacts of the judges and public prosecutors’ working conditions on the justice system itself. As Na et al. concluded, it is very unlikely that judicial professionals who are stressed out and dissatisfied with their working conditions would offer quality services and provide justice with quality and fairness.111 Thus, further studies are needed to estimate the long-term health effects and possible social and judicial impacts of high psychological stress and burnout among judges and public prosecutors.

Limitations, Strengths, and Conclusion
The current review presents two key limitations. First, the criterion regarding English and Portuguese languages in the research strategy might have introduced publication bias, namely the weight of studies from countries with common law legal systems. Therefore, future studies should include other languages in the literature searches, namely Spanish, French and Italian, among other. Secondly, the criterion regarding academic studies precludes a comprehensive and systematic review of the literature on judicial working conditions. Considering the known reluctance of academics to study this “universe”, future research can also benefit from including studies promoted by judicial national and international organisations, such as the Portuguese Judges High Council or the Spanish General Council of the Judiciary, among other similar institutions existing in other countries.

This review is, nevertheless, to the best of our knowledge, the first endeavour to systematically address the literature on judicial professional working conditions and psychosocial risks. A careful literature review reveals the existence of a growing body of studies worldwide, drawing attention to the need to encourage international and interdisciplinary dialogue on this subject. Ultimately, the current review provided an overall portrayal of the studies on judges and public prosecutors working conditions and psychosocial risks, identifying their main conclusions and limitations, and contributing to future research. A core recommendation for future research would be to develop instruments appropriate to the specificities of

111 See Na et al., supra note 29.
the judicial professional’s working environment, considering the multiple impacts not only on individuals, but also on the justice system itself.

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Competing Interests
The authors have no competing interests to declare.

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