

Millenium, 2(29)

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O STRESS NO DESEMPENHO PROFISSIONAL: ANÁLISE BIBLIOMÉTRICA E REVISÃO SISTEMÁTICA NA PERSPECTIVA DAS CIÊNCIAS DA SAÚDE

STRESS IN JOB PERFORMANCE: BIBLIOMETRIC ANALYSIS AND SYSTEMATIC REVIEW FROM A HEALTH SCIENCES PERSPECTIVE

EL ESTRÉS EN EL RENDIMIENTO LABORAL: ANÁLISIS BIBLIOMÉTRICO Y REVISIÓN SISTEMÁTICA DESDE LA PERSPECTIVA DE LAS CIENCIAS DE LA SALUD

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RECEIVED: 08th May, 2025

REVIEWED: 13th December, 2025

ACCEPTED: 30th December, 2025

PUBLISHED: 15th January, 2026

RESUMO

Introdução: O stress relacionado com o trabalho é uma questão central na psicologia organizacional, devido à sua alta prevalência entre os trabalhadores e ao seu impacto negativo sobre o desempenho, o humor e a saúde física.

Objetivo: Identificar a evolução da produção científica internacional e o impacto do stress no desempenho profissional numa perspetiva das ciências da saúde.

Métodos: Foi concluída uma análise bibliométrica de 1724 estudos publicados na base de dados Scopus, utilizando a ferramenta VOSviewer. Posteriormente, foi efectuada uma revisão sistemática da literatura, seguindo a metodologia Prisma, que incluiu 24 estudos que cumpriam os critérios de inclusão estabelecidos.

Resultados: Os resultados mostraram um interesse crescente na investigação sobre o impacto do stress no desempenho profissional, embora a produção científica tenha diminuído entre 2023 e 2024. Em relação à distribuição temática, 34,9% dos estudos foram publicados em revistas médicas, seguidos por 11,4% na área da psicologia. Além disso, 79,9% dos documentos analisados eram artigos científicos.

Conclusão: Os resultados indicaram que o stress tem um impacto significativo no desempenho profissional, particularmente, em profissões relacionadas com a saúde, e está associado a problemas organizacionais, ao aumento da carga de trabalho e a horários inflexíveis.

Palavras-chave: stress; desempenho no trabalho; profissionais de saúde; ciências da saúde; produção científica

ABSTRACT

Introduction: Job stress is a central issue in organizational psychology, due to its high prevalence among workers and its negative impact on performance, mood, and physical health.

Objective: To identify the evolution of international scientific production and the impact of stress on job performance from a health sciences perspective.

Methods: A bibliometric analysis of 1724 studies published in the Scopus database was carried out using the VOSviewer tool. Subsequently, a systematic literature review was conducted, following the PRISMA methodology, which included 24 studies that met the established inclusion criteria.

Results: The results showed a growing interest in research on the impact of stress on work performance, although scientific production decreased between 2023 and 2024. In terms of subject distribution, 34.9% of the studies were published in medical journals, followed by 11.4% in psychology. In addition, 79.9% of the articles reviewed were scientific articles.

Conclusion: The findings indicated that stress significantly impacts job performance, particularly in health-related professions, and is linked to organisational problems, increased workload, and inflexible schedules.

Keywords: stress; work performance; health professionals; health sciences; scientific production

RESUMEN

Introducción: El estrés laboral es un tema central en la psicología organizacional, debido a su alta prevalencia entre trabajadores y su impacto negativo en el rendimiento, el estado de ánimo y la salud física.

Objetivo: Identificar la evolución de la producción científica internacional y el impacto del estrés en el desempeño laboral desde la perspectiva de las ciencias de la salud.

Métodos: Se realizó un análisis bibliométrico de 1724 estudios publicados en la base de datos Scopus mediante la herramienta VOSviewer. Posteriormente, se realizó una revisión sistemática de la literatura, siguiendo la metodología Prisma, que incluyó 24 estudios que cumplieron con los criterios de inclusión establecidos.

Resultados: Los resultados mostraron un creciente interés en la investigación sobre el impacto del estrés en el desempeño laboral, si bien la producción científica disminuyó entre 2023 y 2024. En cuanto a la distribución temática, el 34,9 % de los estudios se publicaron en revistas médicas, seguido del 11,4 % en psicología. Además, el 79,9 % de los artículos revisados correspondieron a artículos científicos.

Conclusión: Los hallazgos indicaron que el estrés impacta significativamente el desempeño laboral, particularmente en las profesiones relacionadas con la salud, y está vinculado a problemas organizacionales, una mayor carga de trabajo y horarios inflexibles.

Palabras clave: estrés; desempeño laboral; profesionales de la salud; ciencias de la salud; producción científica

INTRODUCTION

Over the years, the study of work stress has become one of the most common and important research topics in organizational psychology. This interest is because companies worldwide report that a large proportion of their workers experience stress, which influences job performance and hurts mood and physical health (Oliver et al., 2023; Sonnentag et al., 2023; Barrera-Pintado & Baculima-Suarez, 2024).

According to the report of the International Labor Organization (ILO), published in 2016, in Europe, about 40 million people were suffering from work-related stress (International Labor Organization, 2016). Likewise, in the United States, 1 in 10 people experiencing stress due to work concerns and conditions present a health problem. Recently, important data have been added by the Canadian Mental Health Commission regarding the stress experienced by healthcare workers in the aftermath of the COVID-19 pandemic, which resulted in 40% of workers suffering from burnout (Mental Health Commission of Canada, 2022; Arpasi et al., 2022).

It is necessary to highlight the specific case of burnout suffered by health personnel as a result of stress caused by the work performed, since it represents one of the causes that generate unfavorable situations for providing quality care to patients in health institutions; likewise, it is a central element that should not be ignored, since the mental health of workers requires special attention.

In this regard, the Ibero-American Social Security Organization (2023) points out that business organizations should take the lead in terms of the mental health of their personnel, since, in addition to contributing to the well-being of their workers, this will help to reduce absenteeism, consequently, to increase the organization's productivity and achieve effective worker performance.

In addition, in today's knowledge society, there are rapid transformations in the labor field, such as digitalization, remote work, and an increase in labor demand, which generate new dimensions regarding the aforementioned problems, which should be explored in detail (Barsallo, 2024).

Likewise, the technological changes that occurred after COVID-19 have caused most companies to use new technology; therefore, organizations have found it necessary to train their employees on the proper way to use technology (Torous et al., 2020; Renu, 2021; Molleví et al., 2023). However, despite the growing need for personnel to be technologically equipped, insecurity has been observed among older workers, who face difficulties in complying with this requirement, something that generates insecurity, since job stability is no longer guaranteed due to increased stress (Sunkel & Ullman, 2019; Ghani et al., 2022).

To understand these aspects, a systematic review and a bibliometric analysis of stress and job performance of workers in the light of health sciences were carried out. The objective was to identify the evolution of international scientific production on the impact of stress on work performance, according to the health sciences perspective; to this end, the following research questions were posed:

- How has the literature on stress and job performance evolved?
- What are the main authors, countries, and subject areas in the field?
- What is the main empirical evidence on the impact of stress on job performance under the health sciences approach?

1. METHODS

The procedure for the search for studies consisted of two parts. First, the bibliometric analysis was carried out considering the Scopus database, which provides greater coverage and access to high-quality studies; an aspect that favors adequate information management by researchers (Baas et al., 2020; Livia et al., 2021).

For the search strategy, descriptors were defined in both Spanish and English, and the final search query was adapted to the Scopus database syntax. The keyword search encompassed the "title," "abstract," and "keywords" fields of each study. The Boolean operators "AND" and "OR" were used to consider the keywords (stress, job performance, health sciences, health professionals); in addition, the following terms were included: professional work, exhaustion, and quality care. The search formula used is detailed below:

(TITLE-ABS-KEY ("stress*" OR "job performance" OR "health sciences*" OR "profissionais de saúde*" OR "agotamiento*") AND TITLE-ABS-KEY ("job performance *" OR "profissionais de saúde" OR "stress*" OR "professional work*") AND TITLE-ABS-KEY ("job performance" OR "stress" OR "health sciences*" OR "profissionais de saúde*" OR "exhaustion" OR "quality care")).

The bibliographic information was compiled as of February 2024 and ended in June of the same year, and the VOSviewer tool was used for its analysis, the purpose of which is to generate important graphic elements for the development of bibliometric analyses. The second methodological phase consisted of the systematic review itself, in which different studies in health sciences related to the impact of stress on work performance were considered. The search process was supported by the Prisma (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flowchart, which is a guide that facilitates planning and improving the quality of systematic review reports (Page et al., 2021).

The search strategy was the same as that used in the bibliometric analysis, and the same database (Scopus) was used. To identify the most representative articles or studies, the following inclusion criteria were used: studies conducted between 2014 and 2024; research with different methodologies (qualitative, quantitative, mixed, and reviews); studies related to health, organizational psychology, and human resource management; and publications in English or Spanish, open access. Exclusion criteria included the following: documents without open access, studies published before 2014, and those studies published in a language other than English or Spanish.

Both stages are summarized as follows: a search was performed in Scopus for 2 weeks by entering the keywords: (Stress) AND (Work performance) AND (Health sciences). The decision was made to work exclusively with Scopus for several reasons. Firstly, it offers approximately 20% greater coverage than Web of Science, and secondly, it encompasses a wider range of journals (Fagalas et al., 2008; Pranckuté, 2021). Compared to PubMed, Scopus contains a larger number of documents due to its scope and coverage (AIRyalat et al., 2019).

Once the articles were selected, the title, abstract, and keywords were reviewed, which had to coincide with the inclusion criteria; finally, the complete article was read.

The data provided by the articles resulting from the above process were organized in tables; such organization included the following information: identification of the author(s), year of publication, title, place, objectives, methods or research design, and findings.

Furthermore, two of the authors (RJGCh and JHGCh) independently conducted the quality assessment of each study examined. The Mixed Methods Assessment Tool (Hong et al., 2018) was used, which is designed to critically evaluate studies of different methodologies together. It comprises five main numbered sections: qualitative research, randomized controlled trials, non-randomized studies, quantitative descriptive studies, and mixed methods studies. Each section contains five questions to assess the methodological quality of the studies. The studies reviewed and included in the review achieved an average score above 65%. Similarly, if any discrepancies arose during this process, an independent reviewer was consulted to further discuss the situation and reach a consensus.

2. RESULTS

2.1 Study selection process

The electronic search yielded 1724 records in Scopus; of these, 155 were duplicates and were therefore removed. The 1569 documents resulting from the previous process were reviewed based on their titles, abstracts, and keywords. In this process, 199 publications were excluded because they were in a language other than English or Spanish, 210 because they were not within the established time period, and 375 because they were restricted-access documents.

The next stage, concerning the evaluation of reports to determine their eligibility, resulted in the exclusion of 761 studies; primarily because their descriptors were not related to the non-descriptors established in this review (No.=283) and because they were studies that did not focus on the areas of health, psychology, or human resource management (No.=478). Based on their eligibility, the full-text publications were thoroughly analyzed, resulting in only 24 publications being reviewed (Figure 1).

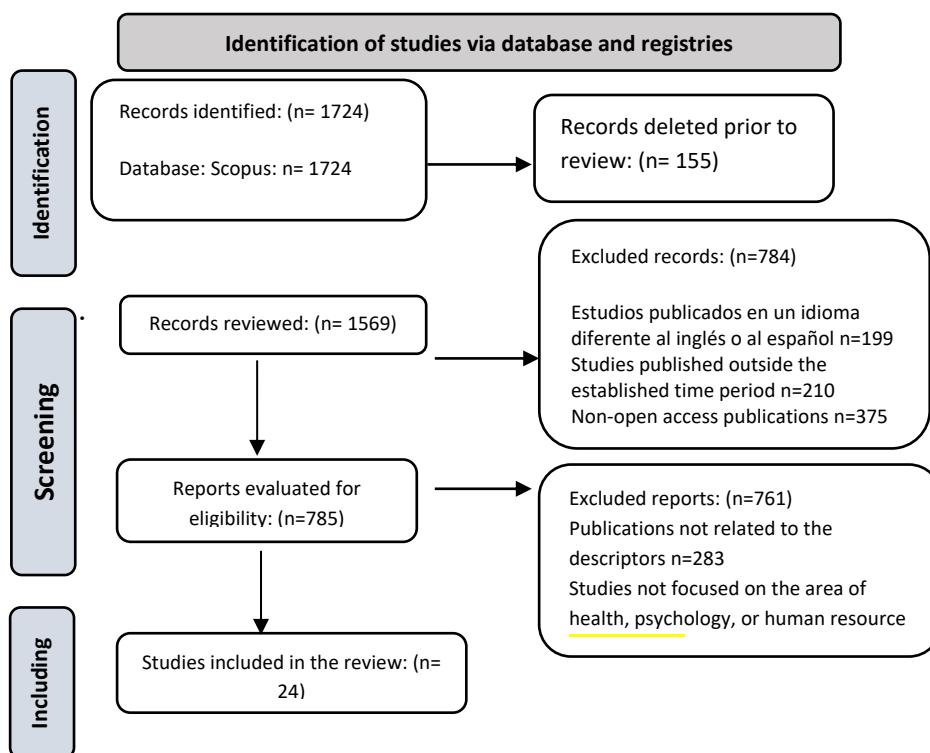


Figure 1 - PRISMA 2020 Flow Diagram

2.2 Analysis of bibliometric indicators

To answer the first and second research questions, a descriptive analysis was carried out that allowed us to contemplate the trend in the publication of scientific articles on the impact of stress on work performance, from the perspective of health science over time; likewise, it was possible to identify the main countries, journals, and institutions actively involved in research on this topic. The scientific production on stress and job performance is presented in Figure 2. It shows the number of publications related to the corresponding year of publication. The study of the influence of stress on the work performance of workers had its beginnings in 1962; however, for this review, the period from 2014 to 2024 was established. It should be noted that during 2019, there was an upturn with a total of 175 publications; however, by 2020, the production decreased to 165. During 2021, there was a remarkable increase in the production of research (188), but in 2022 was the most productive year (217 articles). By 2023 and 2024, the number of publications referring to stress in the workplace decreased (183 and 181, respectively).

These figures show a downward trend in scientific output related to the variables examined over the last two years. This demonstrates how current interest in aspects related to stress and job performance in the health sciences has declined.

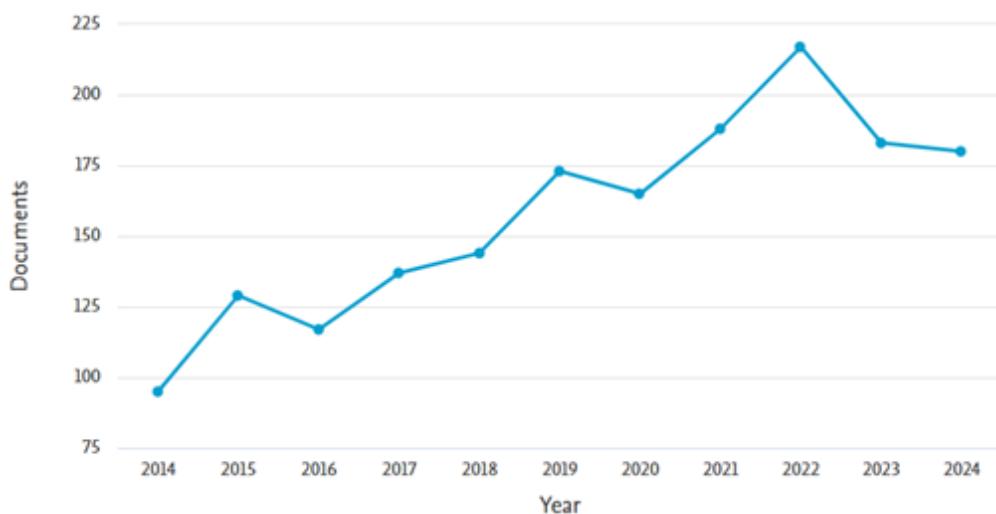


Figure 2 - Number of documents per year

According to the 1,724 documents compiled in the Scopus database, research on stress and job performance of workers covers 11 thematic areas (Figure 3). This is evidence that a variety of areas are interested in the study of the influence or impact of stress on job performance. As shown in Figure 3, the literature on work stress is concentrated in the fields of medicine (34.9 %), psychology (11.4 %), and social sciences (10.4 %), and business management (8.6 %); however, other unspecified subject areas stand out and have a fairly significant percentage (14.5 %).

Due to the increasing intensity of work relationships and demands, stress has become a health problem that is very present in workers and has a direct impact on their work performance. For this reason, research on this topic is mostly addressed by the health sciences (medicine), followed by psychology and the social sciences.

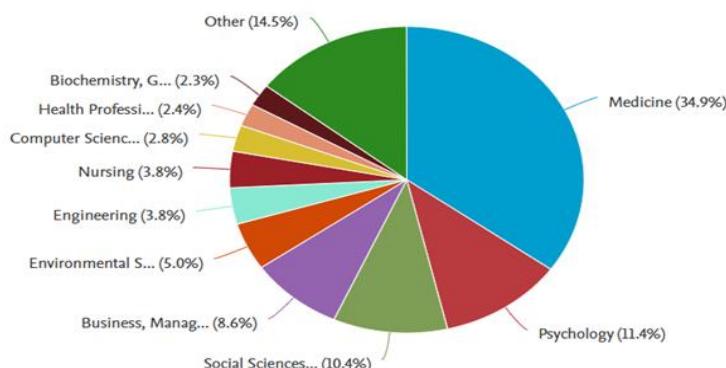


Figure 3 - Distribution of documents by subject area

Figure 4 shows that most of the documents are articles (79.9%) and only 7.3% are reviews. The remaining documents, which were presented in a smaller percentage, included conference papers, book chapters, editorials, letters, notes, books, data documents, conference reviews, and other types of documents.

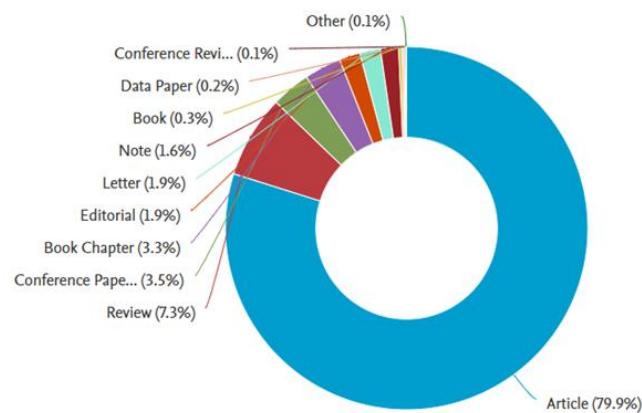


Figure 4 - Type of document

2.3 Analysis of keyword co-occurrence

One of the most appropriate ways to explore the structure of scientific-technical knowledge is based on the method of keyword co-occurrence networks. This focuses on understanding the components and structure of the knowledge of a specific field by exploring the links between keywords in the literature (Radhakrishnan et al., 2017; Galvez, 2018); it also allows the researcher to identify the predominant themes in these fields.

Figure 5 shows the co-occurrence of keywords regarding stress and job performance. In this analysis, the VOSviewer software made it possible to extract the keywords to identify the central aspects of the research on the impact of stress on workers' job performance from a health sciences perspective. Initially, the VOSviewer analysis yielded 1052 different keywords.

To ensure the importance of the keywords found, a minimum occurrence threshold of 5 was established, so that the keywords decreased to 69. Subsequently, repeating terms were eliminated, and only those that presented the strongest semantic relationships within the data set were retained. Finally, a map was obtained that revealed the presence of four (4) specific thematic groups or clusters. "Job performance" (with a total link strength of 111) was the most recurrent keyword and was identified with yellow color, followed by "job stress" in red color, "mental stress" in blue color, and "psychology" in green color (Figure 5).

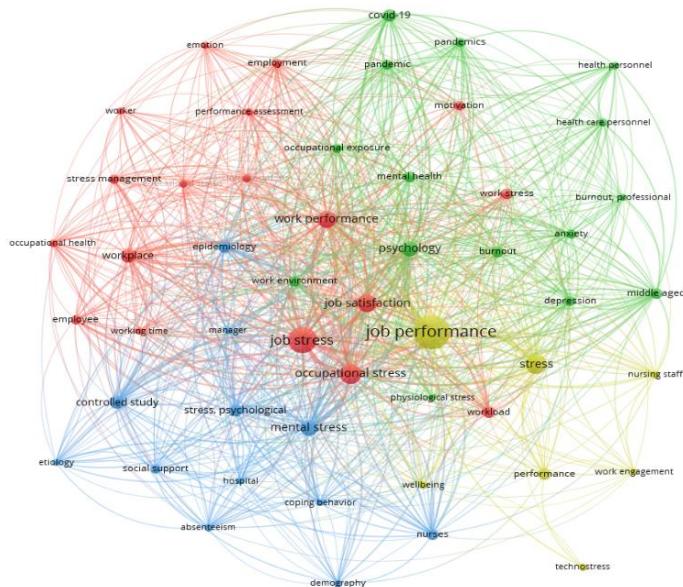


Figure 5 - Keyword co-occurrence map

2.4 Author cocitation network

The cocitation relationships between the different authors of the studies examined are shown below. Three nodes are distinguished, each of which has a color that identifies the group to which each author belongs, according to the thematic relationship established. The first group of green nodes is Bakker, Schaufeli, Demerouti, and Lambert; this is the node with the highest cocitation. This is followed by the red node, in which Tarafdar, Cooper, Ragu-Nathan, Tu, Maier, and Lazarus are located; finally, the blue node is constituted by Leiter and Maslach (Figure 6).

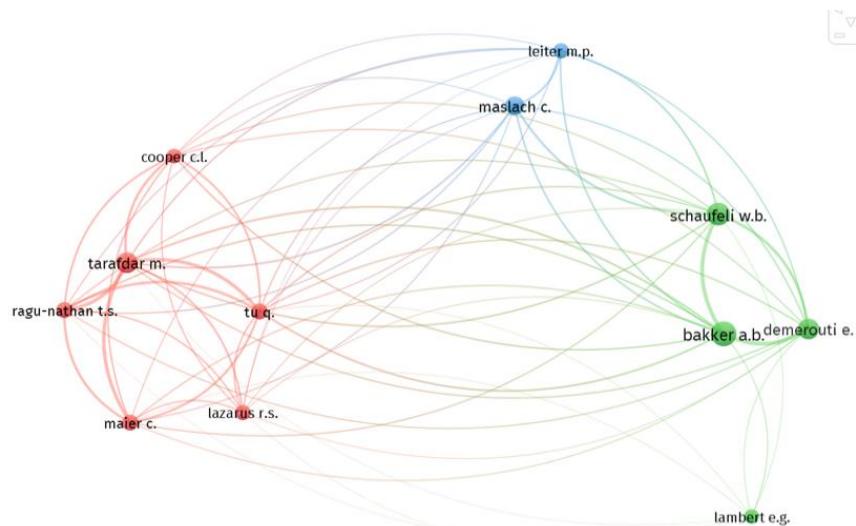


Figure 6 - Co-citation relationships of authors

2.5 Co-authorship network (author's country)

The countries with the most studies on stress and job performance are located in four clusters; in the first cluster are the United States, Turkey, and South Korea; the second cluster is made up of China, Malaysia, and Pakistan; the third cluster is made up of India and Canada; and finally, the fourth cluster is made up of Indonesia, Vietnam and Taiwan (Figure 7).

This map shows that most researchers are located on the Asian continent. This continent is characterized by the speed and intensity of its economic development, which has caused workers to face significant stress due to long and inflexible working hours, as well as the imbalance between work and personal life; in addition, there is no effective formal labor regulation (Le et al., 2020). All these aspects have led a large number of specialists in this continent to focus on the study of the impact of stress on work performance.

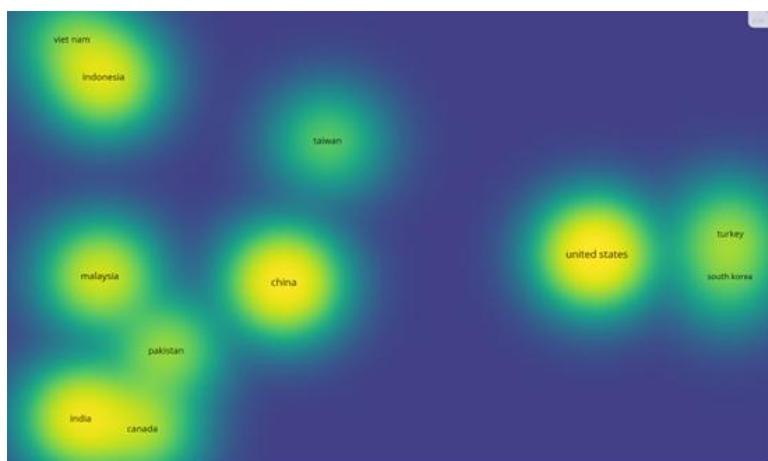


Figure 7 - Mapa de países con mayor producción científica

2.6 Systematic literature review

Once the bibliometric analysis of the results had been carried out, a systematic review of worldwide studies was made. Twenty-four documents were read to delve deeper into the analysis of the topic raised, and also to extract the most relevant information from these studies.

This information refers to the author(s), year of publication, type of document, language, journal, quartile, methodology, sample, and instruments used in the research. In other words, the data synthesis was put into a table designed by the authors that allowed the information related to various characteristics of the analyzed studies to be organized.

Among the most important aspects are that 18 studies have a quantitative methodology, which represents 75 % of all the documents examined, four (4) present a mixed approach, and one (1) is qualitative, and one (1) was presented as a clinical study. It was also observed that 22 (91.66 %) studies were published in English and only 2 were published in Spanish.

Concerning the samples used in the studies consulted, they are very diverse, ranging from one (1) person (Riyadi, 2019) to 1594 healthcare workers (Deng et al., 2019). Only one study limited itself to presenting its sample as "administrative collaborators" without specifying the total number of these (Flores et al., 2024). On the other hand, 9 studies of the total reviewed included health personnel (physicians and nurses) in their sample, while 7 studies presented administrative personnel from business, health, and education organizations. The rest of the studies presented samples of sailors, teachers, and police officers; the variety of settings whose workers are impacted by stress in their work performance stood out.

The instruments used for data collection included questionnaires (such as the Alcohol Use Disorder Identification Test (AUDIT) and the International Physical Activity Questionnaire Version 8 (IPAQ-8)) and surveys. Scales were the most commonly used, due to their ease of collecting quantitative information. These included the C-HSS scale, Coursey and Pandey scale, Darwish scale, Spector's Job Satisfaction Survey (JSS), Schwirian Six-Dimensional Scale Nursing Performance (6-DSNP), Perceived Stress Scale (PSS), Patient Health Questionnaire (PHQ-4), Health and Work Performance Questionnaire (HPQ), Work Efficacy Scale, Technocomplexity subscale, Mental Health Continuum - Short Form (MHC-SF) scale, Perceived Stress Scale (PSS-14), among others.

3. DISCUSSION

The studies reviewed analyzed the impact of stress on the job performance of workers; in addition, they identified the relationship between job stress and job burnout (Enshassi et al., 2015; Sun et al., 2022; Malta et al., 2024). Authors such as Deng et al. (2019) relate job stress to the motivation of workers who provide some public service; specifically, they mention health workers, since they are the ones who can improve the quality of public service in this area.

Healthcare professionals, both physicians and nurses, generally experience high levels of stress as a consequence of their professional practice and workload, which can inevitably lead to a loss of motivation (Deng et al., 2019; Bjaalidm et al., 2019) and poor work performance. Similarly, it highlights the presence of certain factors in the professional practice of employees who provide medical care, related to inflexible work schedules and work overload (Wushe & Shenje, 2019). These factors were shown to hinder staff performance, as they reached a level of burnout that prevented them from performing effectively.

However, other research has shown that nurses' nationality and hours of work per week are associated with their perceived stress level. In this sense, the stress level of nurses from India was much higher compared to nurses of other nationalities. Another aspect that stood out was the number of working hours; Thus, the more working hours per week, the higher the stress level of nurses (Almazan et al., 2019). In this regard, Sani et al. (2024) include an element that is affected by the work stress experienced by nurses, which has to do with the patient safety culture. The authors state that chronic job stress among nurses is capable of hindering patient safety and the quality of nursing care.

Similarly, the study by Alayoubi et al. (2022) established that there is a significant relationship between stress and job performance among nursing workers at Al-Awda Hospital in the Gaza Strip. In the same area, but in the construction industry, workers experienced stress caused by work environment factors and organizational stressors, including lack of job stability, inadequate safety training, low pay, lack of evaluation, safety performance monitoring, rewards, unfair treatment, employers' focus on productivity, ignoring employee safety, and poor communication (Enshassi et al., 2015). In addition, long working hours and work overload became the main stressors of construction work, since working in a hazardous environment represents the most stressful environmental factor of such work.

In the same vein, Safarpour et al. (2018) refer to the link between occupational stress and job satisfaction, and how the former influences job performance. These variables were affected by the demographic characteristics of the staff. In the case of nurses, perceived occupational stress was related to demographic profile; in other words, the nationality of the nursing staff and working hours per week were associated with their perceived stress level (Almazan et al., 2019).

The excessive number of hours and work activities to which teachers are exposed also generate illnesses and, as a result of these, they take time off work; therefore, it is necessary to monitor teachers and create strategies to cope with stress (Rocha et al., 2023). Likewise, preschool teachers present stress at the interpersonal and organizational levels, which was evidenced in the answers given by teachers when interviewed; this aspect constitutes a significant barrier to effective teacher support for students (Koçyiğit & Sezer, 2024).

The police force in charge of maintaining public order and the safety of citizens has also been affected by stress. For this group of workers, professional satisfaction plays a primordial role, since it serves as a mediator in the relationship between occupational stress and job performance. That is to say, the occupational stress experienced by police officers significantly reduces their performance, since its effect is oriented towards damaging their professional satisfaction; this represents an important underlying psychological mechanism for understanding why and how to do things. Hence, job stress among police personnel negatively affects their job performance (Nisar & Rasheed, 2019).

Likewise, Flores et al. (2024) state that it is extremely important to consider job stress in administrative workers. They add that it not only impacts their work performance but also affects their health and general well-being. Job stress has a major impact on job performance, as administrative workers are exposed to enormous workloads, inflexible work deadlines, and the pressure of making crucial financial decisions.

The COVID-19 pandemic had a profound impact on the work performance of workers in almost all areas. An example of this is the study conducted by Sun et al. (2022), in which it was observed that stress and depression increased due to the presence of this disease; this caused employees to lose interest in their work for fear of contagion. This fear was externalized through anxiety and directly influenced performance. Studies related to this topic show that stress, depression, and anxiety influence mental health and work performance.

Meunier et al. (2022) assert that, amid the pandemic, the high level of stress experienced may have been associated with psychological distress, which may also be associated with decreased job performance. Managers who valued and implemented health care management practices for their staff were considerate and supportive and found that such practices helped to buffer the impact of perceived stress on the psychological health and work performance of staff.

However, as a result of the pandemic, remote work was introduced, which, together with organizational support systems, adaptation to virtual work, and control over scheduling, allowed the reduction of psychological exhaustion and work stress, thus improving the well-being of employees during this stage. However, another stress-causing aspect in workers appeared: the lack of training in remote work and the fact of not knowing how to handle the required technology (Banerjee & Gupta, 2024). These aspects, in addition to the responsibilities of the job and working long hours, triggered greater perceived stress and a precarious work-life balance among workers.

In this context, "technostress" appeared, especially in the case of teachers who do not know how to use technological tools, so this situation had an impact on their psychological well-being and professional performance. In other words, the forced use of technologies, the little organizational support received, and the different individual capabilities of teachers to manage technologies favored the emergence of technostress (Herrera-Sánchez et al., 2024). In turn, the increasing integration of ICT in academic and administrative functions has generated a series of challenges that significantly affect both the psychological well-being and professional performance of teachers. It has been shown that high technological demands, lack of adequate organizational support, and variations in individual abilities to handle technologies are determining factors in the experience of technostress.

It is worth mentioning that technostress occurs due to techno-complexity, which occurs when individuals are forced to struggle to understand how to use new technologies without having the necessary skills, as has occurred in the educational field with many teachers. Using new technologies in remote work required a group of workers to acquire new skills, which significantly affected the relative perception of complexity in their use and, therefore, their well-being (Capone et al., 2024). Currently, this happens when staff are not supported to use new technologies, so appropriate training is required to avoid stress, and thus improve the well-being and performance of employees (Capone et al., 2024).

Among the studies analyzed, the one by Siswadi et al. (2024), showed that there is no direct effect of job stress on workers' performance; however, there is evidence of an indirect effect of job stress on performance through job satisfaction. In addition, they were able to establish that there is a direct and indirect effect of job seniority and mental workload on employee performance through job satisfaction.

3.1. Study gaps according to the analysis performed

The vast majority of the studies reviewed presented limitations that were used to recommend future lines of research and to continue delving into the subject. Only seven (7) of them did not explicitly present their limitations (Alayoubi et al., 2022; Anggraeny et al., 2024; Behzadi et al., 2021; Flores et al., 2024; Herrera-Sánchez et al., 2024; Riyadi, 2019; Siswadi et al., 2024).

The study by Deng et al. (2019) presents, among its limitations, the application of a cross-sectional survey, so they recommend longitudinal studies. This is because the relationship between challenge stress, impairment stress, public service motivation, and job performance cannot be assumed to be causal; this is supported by Meunier et al. (2022), Almazan et al. (2019), Nisar & Rasheed (2019), and Capone et al. (2024). The authors sampled only Chinese healthcare workers from public hospitals and did not consider healthcare workers from private hospitals, which restricted in one way or another the generalizability and robustness of the conclusions drawn.

The same was true for the research by Wushe & Shenje (2019), which only focused on public health care in hospitals in a specific geographical setting, such as Harare in Zimbabwe. The authors recommended conducting such studies in other provinces of the country and in other sectors such as education, government departments, tourism, or banking to test the causes and effects of job stress on employee productivity and performance.

Regarding the use of data collection instruments, the study by Safarpour et al. (2018) only took into account the self-reports of the participants. From there, they suggested using other assessment methods to obtain objective results and data, such as the

use of physiological measures to assess stress. In turn, they consider that job performance should be assessed by observation, using a predetermined checklist completed by the researcher.

Another of the limitations that allowed the opening of a range of research possibilities was the application of the convenient sampling technique, as in the case of Nisar & Rasheed (2019), who recommended the use of other sampling techniques.

3.2. Practical implications and organizational interventions to reduce the impact of stress

The review demonstrated how stress affects the job performance of healthcare personnel, which can have negative implications for patient safety and the quality of care. These personnel experience extreme conditions, as their many responsibilities include providing care, ensuring safety, and preventing loss of life.

This work has a profound impact on their mental and physical health, which is why organizational interventions have been implemented to enable healthcare workers to manage stress effectively. Stress management interventions in highly demanding environments like healthcare should be designed to support professionals in managing stress and job requirements.

In the words of Deng et al. (2019), these interventions should aim to improve working conditions and maintain a high level of motivation for public service. Similarly, hospitals should promote personal and professional development. Finally, the design and implementation of any type of intervention should include conducting and reporting specific assessments of the various workplace risks that affect the job performance of healthcare workers (Enshassi et al., 2015; Safarpour et al., 2018; Behzadi et al., 2021).

CONCLUSION

This study used a bibliometric analysis to quantify the development of the literature on stress and job performance from a health sciences perspective, specifically using the Scopus database. Articles on the impact of stress on workers' job performance were subjected to bibliometric analysis. The analysis showed the current trends found in the literature on stress and work performance by year, type of document, and thematic area, as well as the co-occurrence of keywords and the co-authorship network (author's country) present in all the documents, the result of which was made possible thanks to the VOSviewer tool. It is worth noting that the initial report of the documents yielded a total of 1724 studies, of which 34.9% were published in the area of medicine and 11.4% in the area of psychology, both belonging to the field of health sciences.

In addition, a systematic review of 24 studies was conducted, which showed the impact of stress on workers' job performance. Severe physical and psychological symptoms, as well as stress, were linked to organizational problems, increasing workload, and inflexible schedules. However, organizational support and flexible work arrangements were presented as alternative solutions, as they increased performance effectiveness.

The study's findings, derived from the examined documents, demonstrate that stress affects employees' ability to adapt and is considered a major factor contributing to a weaker patient safety culture. The study concludes that stress directly impacts employee performance in the healthcare sector.

AUTHORS' CONTRIBUTION

Conceptualization, R.C., J.C., C.F., and R.M.; data curation, R.C.; formal analysis, R.C. and J.C.; funding acquisition, J.C.; investigation, R.C., J.C., C.F., and R.M.; methodology, R.C. and J.C.; project administration, R.C.; resources, C.F.; software, R.M.; supervision, R.C.; validation, R.C., J.C., C.F., and R.M.; visualization, R.C., J.C., C.F., and R.M.; writing -original draft, R.C., J.C., C.F., and R.M.; writing -review and editing, R.C., J.C., C.F., and R.M.

CONFLICT OF INTERESTS

The authors declare no conflict of interests.

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