



Journal of Work and Organizational Psychology

<https://journals.copmadrid.org/jwop>



Ten Years of Research on Psychosocial Risks, Health, and Performance in Latin America: A comprehensive Systematic Review and Research Agenda

Lucas Pujol-Cols^a and Mariana Lazzaro-Salazar^b

^aConsejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Argentina; ^bUniversidad Católica del Maule, Chile

ARTICLE INFO

Article history:

Received 25 June 2021
Accepted 8 October 2021

Keywords:

Psychosocial risks
Job stress
Wellbeing
Effectiveness
Bibliometric analysis

ABSTRACT

Most systematic reviews of the relationships between work-related psychosocial risks, health, and performance have only considered papers in English, thus ignoring, to a considerable extent, studies conducted in Latin America. In addition, most systematic reviews that have indeed included Latin-American studies have focused on only one occupation and one kind of psychosocial risk, which contributes to producing scattered empirical evidence of this relationship. This paper reports the results of a comprehensive and critical systematic review of 85 studies that examined the relationships between psychosocial risks, health, and performance across a wide range of organizational contexts in Latin America over the last ten years. The paper contributes to the organizational psychology literature by critically reviewing and integrating the most recent studies on this topic in Latin America, identifying their main limitations, and proposing future lines of research that update the debate on this relationship and move this field of study forward.

Diez años de investigación sobre riesgos psicosociales, salud y desempeño en América Latina: una revisión sistemática integradora y agenda de investigación

RESUMEN

La mayoría de las revisiones sistemáticas sobre las relaciones entre los riesgos psicosociales en el trabajo, la salud y el desempeño solo han considerado artículos en inglés, ignorando así, en gran medida, los estudios realizados en América Latina. Además, la mayoría de las revisiones sistemáticas que efectivamente han incluido estudios latinoamericanos se han centrado en una sola ocupación y en un solo tipo de riesgo psicosocial, lo que ha contribuido a producir evidencia empírica dispersa y atomizada de esta relación. Este artículo reporta los resultados de una revisión sistemática integradora y crítica de 85 estudios que examinaron las relaciones entre los riesgos psicosociales, la salud y el desempeño en una amplia gama de contextos organizacionales en América Latina durante los últimos diez años. El artículo contribuye a la literatura de psicología organizacional dado que revisa críticamente e integra los estudios más recientes sobre este tema en América Latina, identifica sus principales limitaciones y propone líneas futuras de investigación que actualicen el debate sobre esta relación y promuevan el avance de este campo de estudio.

Palabras clave:

Riesgos psicosociales
Estrés laboral
Bienestar
Efectividad
Análisis bibliométrico

While globalization and technological advances have certainly opened up many opportunities for economic growth and development, they have also brought about considerable challenges in terms of managing new forms of work organization and employee relations (Perry-Jenkins & Wadsworth, 2017). In this light, jobs have become increasingly more complex and cognitively more demanding. Employees are thus required to not only devote high levels of energy to perform their work roles (Maslach & Leiter, 2016) but also invest significant resources in their own professional development by going through lengthy and expensive educational programs to be able to

increase (or even maintain) their employability and career prospects in a considerably more competitive labor market (Cappelli & Keller, 2017). Moreover, as employee-employer relations have become more transactional in nature (see Rousseau, 2008), there has been a surge of part-time contracts and short-term employment agreements, which have resulted in greater uncertainty and job insecurity for individuals (Gallie et al., 2017).

Technological advances also play a role in this changing workplace context. Thus, even when the emergence of smart phones, video calls, and many other technological advances has increased job flexibility

Cite this article as: Pujol-Cols, L. & Lazzaro-Salazar, M. (2021). Ten years of research on psychosocial risks, health, and performance in latin America: A comprehensive systematic review and research agenda. *Journal of Work and Organizational Psychology*, 37(3), 187-202. <https://doi.org/10.5093/jwop2021a18>

Funding: This study is supported by the National Scientific and Technical Research Council (Consejo Nacional de Investigaciones Científicas y Técnicas, CONICET, Argentina), Research project entitled "Differential responses towards emotional job demands: The role of career calling in the emotional labor process" (administrative resolution 2021-1693-APN-DIR#-CONICET). Correspondence: lucaspujolcols@gmail.com (L. Pujol-Cols).

ISSN: 1576-5962/© 2021 Colegio Oficial de la Psicología de Madrid. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

(in terms of both time and location) and has definitely opened a wider spectrum of job opportunities that transcend local and regional boundaries for highly skilled individuals, it has undoubtedly contributed to the blur of boundaries between work and personal life (Leung & Zhang, 2017). Indeed, organizations often expect (or even require) their employees to 'be available' and respond quickly to job-related issues outside working hours, which may increase the likelihood of conflicts (or interferences) between the demands of work and those of other spheres of life (International Labor Organization, 2016). All of these considerations become of heightened importance when considering the fact that for the past year and a half the COVID-19 pandemic has considerably increased the psychosocial risks to which employees are exposed, imposing unprecedented job demands on their work life (see Franklin & Gkiouleka, 2021).

The scenario described above and its multiple implications for employees' well-being and organizational effectiveness has led to a significant increase in scholarly and managerial attention devoted to the study of the factors and underlying dynamics that expose individuals to higher psychosocial risks at work, especially in disciplines like organizational psychology, human resource management, and public policy (Neffa, 2015). In this context, the term 'psychosocial risks' is an umbrella concept that reflects an aggregate of work-related factors (or psychosocial factors) that either by excess, absence, or combination pose a risk to the physical and/or psychological health of individuals (Meliá et al., 2006). It should be noted that psychosocial risks arise not only when job demands (or job stressors; e.g., emotional demands) are high but also when the resources provided by organizations are insufficient to cope with those demands (e.g., inadequate leadership style) (Pujol-Cols & Lazzaro-Salazar, 2018).

Some studies have shown that a high, sustained, and chronic exposure to psychosocial risks (such as the ones discussed above) is likely to lead to the experience of occupational distress, which, in turn, has been found to be associated with several symptoms indicating poor health status, including, for instance, psychiatric symptoms and cardiovascular diseases (e.g., Arial et al., 2010; Kivimäki & Kawachi, 2015). Moreover, past research has also demonstrated that psychosocial risks have many implications for organizational performance, as they may increase, for instance, absenteeism, medical costs, occupational disability, work-related accidents, and turnover (e.g., Bjerkan, 2010; Borritz et al., 2010; Fukui et al., 2019; Hinkka et al., 2013; Kuusio et al., 2013). Individuals experiencing occupational distress may also be more prone to engaging in counterproductive behaviors, service sabotage, and interpersonal conflicts with colleagues, subordinates, or supervisors, and become less innovative and creative, which altogether may affect organizational performance (e.g., Albort-Morant et al., 2020; Bowling & Eschleman, 2010; Chi et al., 2013; Meier & Spector, 2013; Rich, 2016).

In spite of the far-reaching effects of psychosocial risks on individuals' health and on organizational performance, most research on the relationship among these three aspects of organizational life has been conducted in Anglo-Saxon contexts, particularly in Europe and the United States (see García et al., 2016; Pujol-Cols & Lazzaro-Salazar, 2018). In this regard, contributions of studies examining this relationship in Latin-American contexts remain modest and scattered (consider Monroy-Castillo & Juárez-García, 2019), which raises the need to do a systematic and critical review of the research available to date in order to identify their contributions and limitations for the Latin American region. In this regard, it is worth noting that most systematic reviews of this relationship (e.g., Franklin & Gkiouleka, 2021; Lang et al., 2012) have considered only papers in English, indexed in international databases, such as the Web of Science, thus ignoring to a considerable extent studies conducted in Latin America. Furthermore, most systematic reviews of this relationship that do include Latin-American studies have focused on only one profession or occupation and one kind of psychosocial risk (see Monroy-Castillo &

Juárez-García, 2019; Tabares-Díaz et al., 2020), which also contributes to producing scattered empirical evidence of this relationship. In this sense, because psychosocial risks affect all positions and professions and, therefore, may be considered a global issue, a comprehensive systematic review of the studies involving all kinds of occupations and professions that examine the effects of a wide variety of psychosocial risks on individuals' health and organizational performance remains vital to, on the one hand, provide evidence of the cultural validity of the results of Anglo-Saxon research, and, on the other hand, design preventive strategies that consider the particularities of the Latin-American context (see considerations in Kortum & Leka, 2014; Kortum et al., 2010).

This paper then reports the results of a comprehensive and critical systematic review of studies that examined the relationships between work-related psychosocial risks, health, and performance in Latin America over the last ten years. The paper contributes to the literature on psychosocial risks, health and performance by (a) critically reviewing and integrating the most recent studies on this topic in Latin America, (b) identifying their main limitations at multiple levels of analysis, and (c) proposing future lines of research that update the debate on this relationship and move this field of study forward.

Theoretical Framework

Psychosocial Risks and Health Outcomes

Before delving into the methodology and analysis of this review, it is relevant to revise some of the theoretical constructs that underpin the field's core theories, models, and assumptions in the study of the relationship between psychosocial risks, health outcomes, and organizational performance. In this light, it is first important to reflect on the fact that individuals' work involves numerous psychosocial factors that reflect both the characteristics of the tasks or responsibilities associated with a particular position in an organization (that is, the intrinsic psychosocial factors of a job) and of the physical, organizational, and social context in which those tasks are performed (that is, the extrinsic psychosocial factors of a job). The way these aspects are planned, organized and structured by organizations may affect the chances that employees experience strain (that is, a physiological reaction to the feeling that their personal resources 'crumble') in response to work-related factors (Oldham & Fried, 2016; Parker et al., 2017). In this sense, these psychosocial factors may expose individuals to a varying degree of 'psychosocial risks' (also called 'psychosocial hazards'), which reflect an aggregate of work-related factors (or psychosocial factors) that either by excess, absence, or combination pose a risk to the physical and/or psychological health of individuals (Meliá et al., 2006). The term 'risk' is used here to indicate that a particular combination of psychosocial factors does not necessarily damage employees' health but, instead, may either increase or decrease the likelihood that they experience strain in the workplace and, therefore, exhibit a poor health status.

From a demand-resource theory perspective (Demerouti et al., 2001; also see Bakker & Demerouti, 2017), every job or profession requires individuals to invest different physical and/or psychological resources while performing their work roles, which are commonly known as job demands (or job stressors). Job demands are expected to negatively affect individuals' wellbeing through health impairment processes, as these tend to drain their personal resources over time and lead to, for instance, anxiety, exhaustion, burnout, psychiatric symptoms, cardiovascular diseases, and musculoskeletal disorders (e.g., Arial et al., 2010; Bailey et al., 2015; Cañadas-De la Fuente et al., 2015; Kivimäki & Kawachi, 2015; Murcia et al., 2013). To mitigate the psychological and physiological costs of job demands as much as

possible, organizations often provide their employees with various job resources, such as a clean working space, a fair compensation, access to relevant information, a supportive leadership style, and a healthy social environment, among others. Job resources not only help individuals to reach their goals but also lead to positive states, as they are likely to increase their motivation and personal fulfillment over time (Tadić et al., 2015; Xanthopoulos et al., 2007). With these considerations in mind, it follows that psychosocial risks may arise not only when job demands, such as emotional demands, are high but also when the resources provided by organizations, such as an inadequate leadership style, are insufficient to cope with those demands (Pujol-Cols & Lazzaro-Salazar, 2018; Schaufeli, 2017).

Regarding the operationalization of the psychosocial risks construct, it should be noted that numerous models and taxonomies have been proposed so far in the literature. First, Karasek's (1979; also see Karasek & Theorell, 1990) demand-control-social support model argues that occupational distress occurs when jobs pose high psychological demands on individuals but provide them with low levels of work control (that is, the extent to which an employee is able to participate or exert a meaningful influence on those decisions that affect their job and is offered enough chances to develop new capabilities or skills) and social support (that is, the extent to which an employee feels they can count on their supervisors or colleagues both instrumentally and emotionally when needed). In a similar vein, Siegrist's (1996) effort-reward imbalance model proposes that individuals experience distress when the rewards they receive (such as monetary compensations, opportunities for career advancement, job stability, and recognition) are insufficient when compared to the contributions (or efforts) they make. Finally, Moorman's (1991) organizational justice model argues that the deterioration in employees' health can be explained by their beliefs concerning what is fair or unfair in the organization regarding, for instance, their relationships with their supervisors or colleagues, the procedures followed in decision making, the extent to which relevant and reliable information is shared, and how resources are distributed and allocated. From this last perspective, occupational distress emerges as a consequence of a perceived violation of a set of shared, socially-constructed norms of organizational justice (see the concept of relational, informational, procedural, and distributional justice in Moorman, 1991).

The three models explained above have played a significant role in the literature on psychosocial risks, and their principles have been used as the rationale for many studies around the world (see Neffa, 2015). In the Ibero-American literature in particular, increasing attention has been given to the so-called ISTAS model (Moncada et al., 2014), which was developed by the Spanish Trade Union Institute of Work, Environment, and Health (in Spanish, *Instituto Sindical de Trabajo, Ambiente y Salud de España*) based on the early contributions of Karasek (1979), Siegrist (1996), and Moorman (1991). This model claims that individuals experience occupational distress when there is an imbalance between their personal resources and a set of psychosocial factors representing both job demands and job resources. More specifically, the ISTAS model identifies six work-related factors that expose individuals to higher psychosocial risks. "Psychological demands" reflect those aspects of the job that require a sustained cognitive or emotional effort, including, for instance, the volume and intensity of workload. "Double presence" (also known as 'work-family conflict') refers to the extent to which the individual struggles to balance the demands of work and those of their family, such as being unable to attend a school event as a consequence of having to work overtime. "Job insecurity" increases when the employee experiences a high level of uncertainty regarding the continuity of their current working conditions (e.g., the possibility of being fired or demoted). "Work control" (also called 'autonomy') reflects the degree to which the individual is provided with sufficient opportunities to participate in the decisions that affect their work and apply different skills and knowledge. "Social support" refers to the extent to which

the employee feels they can count on their supervisors or colleagues when needed. Finally, "esteem" increases when the individual feels that the compensations they receive are adequate and fair when compared with the efforts they make, including, for instance, monetary compensations, or symbolic rewards.

Most papers reviewed in this study draw on these four models and the different constructs revised here as they explore the relationship between psychosocial risks and health outcomes, which is why they will be made relevant at different stages of our exploration of the papers selected for this review.

Psychosocial Factors and Organizational Performance

In addition to the effects of psychosocial risks on individuals' health, past research has shown that they may also affect organizational performance in several ways. At the individual level, those employees who are exposed to an excessive and sustained level of psychosocial risks may suffer from a severe resource loss over time (i.e., they are likely to feel that their resources 'crumble' in their efforts to face and respond effectively to psychosocial risks) and experience high levels of strain and exhaustion, which may subsequently affect their productivity, creativity, and innovative potential (e.g., Albort-Morant et al., 2020; Liu et al., 2013; Rich, 2016). Moreover, individuals who feel organizations exert too much pressure on them or who believe their organizations do not do enough to help them cope with psychosocial risks may also be more likely to engage in counterproductive behaviors and service sabotage, all of which may impact on organizational performance (e.g., Bowling & Eschleman, 2010; Chi et al., 2013; Meier & Spector, 2013). At the group level, individuals experiencing occupational distress may be more irritable, impatient, negative, and 'on edge', which could make them more prone to engaging in interpersonal conflicts with colleagues, subordinates, or supervisors (Cox, 2003; Pross & Schweitzer, 2010). Altogether, at the organizational level, psychosocial risks may result in, for instance, absenteeism, high medical costs, occupational disability, work-related accidents, and turnover (e.g., Bjerkan, 2010; Borritz et al., 2010; Fukui et al., 2019; Hinkka et al., 2013; Kuusio et al., 2013). Thus, critically examining the Latin-American literature that investigates the relationship among a wide variety of psychosocial risks, individuals' health and organizational performance will allow us to propose new research avenues that help design preventive strategies that promote healthy organizational environments and employees' wellbeing considering the particularities of the Latin-American context.

Method

To maximize the chances of identifying all relevant research on psychosocial risks, health, and performance in Latin-American countries, we performed separate searches in five electronic databases, including the Web of Science (WoS), Scopus, ProQuest, LILACS (Latin American and Caribbean Health Sciences Literature), and SciELO (Scientific Electronic Library Online) following guidelines in Moher et al. (2009). We introduced different combinations of keywords in both English and Spanish in advanced searches limited to the title, abstract, and descriptors. This set of keywords was selected to reflect the different ways in which the constructs 'psychosocial risks', 'health', and 'performance' have appeared most commonly in the literature, such as 'stressors', 'well-being', and 'effectivity', respectively (see Table 1). It is worth mentioning that these keywords did not intend to reflect any theoretical model in particular, but rather were sufficiently wide in scope to enable the identification of a large number of studies on the topic. Moreover, to select the most recent developments in the field, we prioritized research conducted in the last ten years (2010-2021).

Table 1. Keywords Used in Database Searches

Language	Keywords
English	Psychosocial risks
	psychosocial risk OR psychosocial hazard OR stress- or OR demand OR resource
Spanish	Riesgos psicosociales
	riesgo psicosocial OR estresor OR demanda OR recurso
	AND
	Health OR Performance
	health OR symptom OR wellbeing OR strain OR stress OR illness OR disorder OR state OR effective- ness OR effectivity OR performance OR outcome
	AND
	Salud OR Desempeño
	salud OR síntoma OR bienestar OR tensión OR distrés OR estrés OR enfermedad OR trastorno OR estado OR efectividad OR desempeño OR resultado
	AND
	Organizational OR Work Context
	job OR work OR organization
	AND
	Contexto organizacional o de trabajo
	AND
	trabajo OR laboral OR organizacional OR organi- zación

Following [Lipsey and Wilson \(2001\)](#), to minimize publication bias, we did not limit our searches exclusively to journal articles but also included book chapters, dissertations, technical reports, and conference proceedings. Eligible studies had to (a) be published in either English or Spanish¹, (b) be conducted in a Latin-American country, (c) be published in the 2010-2021 period, (d) provide empirical evidence (for this reason other types of articles, such as editorial letters, were excluded), and (e) involve human participants who were active workers or were in some kind of an employment relationship (other types of human subjects, such as students, were excluded from the systematic review). This procedure resulted in the identification of 254 articles (234 after the elimination of duplicates; see [Figure 1](#)). Further, we proceeded to eliminate those articles that either (a) did not focus on a topic related to psychosocial risks, (b) were not conducted by following a quantitative approach, or (c) did not empirically examine a relationship or association between a measure of psychosocial risks and a measure of health or between a measure of psychosocial risks and a measure of performance. The aforementioned combination of strategies resulted in the identification of 85 papers for analysis. A reference list of studies included in the present analysis can be found in the References section.

statistical techniques used to examine the proposed relationships, the characteristics and size of the sample (or samples) collected to test the models, and their main findings and limitations (see [Tables 2 and 3](#)).

Results

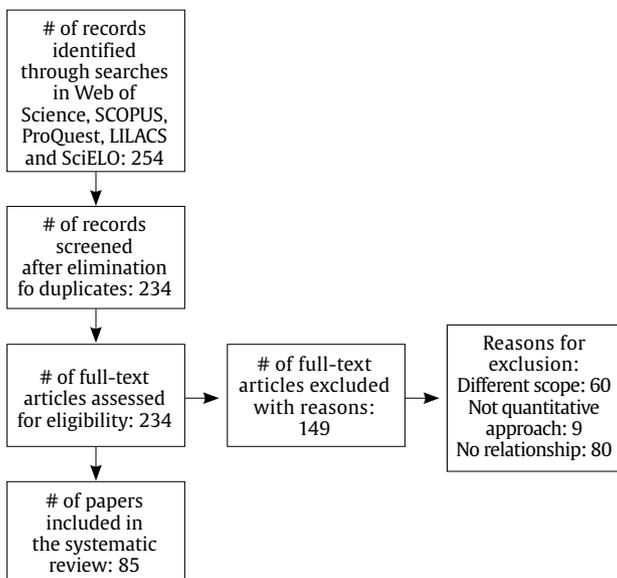
Overview

The combination of strategies described in the previous section resulted in the identification of 85 papers. [Table 4](#) provides an overall characterization of these studies in terms of the countries where they were conducted, their research design, the context and sample in which the data were collected, the kind of instruments that were used to measure the variables of interest, and the statistical techniques that were applied to test their hypotheses. These aspects are further discussed in the following sections.

Theoretical background and operationalization. As shown in [Tables 2 and 3](#), most of the studies have drawn on [Karasek and Theorell's \(1990\)](#) model and, to a comparatively lesser extent, [Siegrist's \(1996\)](#) model. Some of this research has taken a more comprehensive and holistic approach to the study of the relationship among psychosocial risks, health, and organizational performance, as scholars such as [Griep et al. \(2011\)](#) have demonstrated that the predictive power may increase when both theoretical perspectives are simultaneously considered in the measurement models. A minor proportion of studies have drawn on less validated models, such as the ISTAS model (e.g., [Rojas et al., 2019](#)), or did not provide a clear theoretical rationale for their study (e.g., [Silva Henaó et al., 2014](#)).

As a consequence, variables such as job demands (or more specific constructs such as 'psychological demands', 'physical demands' or 'emotional demands'), autonomy (also labeled as 'job control', 'work control', 'decision latitude' or 'decision authority'), social support (or some more specific constructs such as 'supervisory support', 'coworker support' or 'social support from colleagues and leaders'), effort-reward imbalance, and overcommitment represent the most widely used taxonomies to measure psychosocial risks. A significantly lower percentage of studies have considered more specific categories of work-related characteristics that may represent psychosocial risks, including, for instance, work-family conflict (e.g., [de Oliveira & Carlotto, 2020](#)), verbal violence (e.g., [Alcantara et al., 2019](#)) or exposure to night work (e.g., [Silva-Costa et al., 2018](#)). An even smaller proportion of studies have included more context-specific measures, such as the characteristics of the nurse-physician relationship, when studying psychosocial risks in healthcare institutions (e.g., [dos Santos Alves et al., 2017](#)).

Regarding the health construct, most studies have focused on the physical domain of health and examined, for instance, the implications of psychosocial risks in the experience of musculoskeletal disorders, that is, the different conditions that affect muscles, bones, and joints and include, for example, neck, shoulder, or back pain (e.g., [da Silva et al., 2017](#)). Some other studies

**Figure 1.** Flow Chart of the Systematic Review.

We then conducted a critical analysis of the papers that were included in the systematic review in order to evaluate the most recent advances in the literature on psychosocial risks, health, and performance in Latin America to identify the main limitations of the field and to propose relevant and attractive avenues for future research. Each article was analyzed separately and then described in terms of how the constructs of interest were operationalized, the

Table 2. Psychosocial Risks and Health

Year	First Author	Variables	Sample and context	Analysis	Main findings	Main limitations
2010	Ansoleaga	Psychological demands, control, social support from managers, effort-reward balance, stress, substance abuse, depression	303 workers from a mining deposit in Chile	Association tests	Psychological demands, distress, effort-reward imbalance, and social support from managers were found to be associated with depressive symptoms.	Specific sample, bi-variate analyses, cross-sectional and self-reported data.
2010	de Souza	Demand-control relationships (low strain, active work, passive work, high strain), common mental disorders (CMDs)	158 maintenance workers in Brazil	Logistic regressions	The prevalence of CMDs was associated with psychosocial aspects, especially high-strain jobs. Psychosocial were important determinants of mental health.	Small and specific sample, cross-sectional and self-reported data, the SRQ-20 is not an instrument for diagnosis.
2010	de Souza Melzer	Physical demands, psychosocial demands, musculoskeletal and psychological disorders	235 blue-collar workers in Brazil	Correlational analysis	Repetition, tool use, lack of work control, workload, and conflicts with supervisors were associated with musculoskeletal pain.	Small and homogeneous sample, bi-variate analyses, cross-sectional and self-reported data.
2010	Fernandes	Musculoskeletal disorders, physical demands with manual handling and repetitiveness, psychosocial demands	577 workers from manufacturing companies in Brazil	Logistic regressions	Neck, shoulders and upper back musculoskeletal disorders were related to both physical and psychosocial demands.	Cross-sectional and self-reported data
2010	Fonseca	Physical demands and poor posture, psychosocial demand, poor physical conditions, musculoskeletal disorders	308 nurses in Brazil	Logistic regressions	Neck, shoulder, upper back and lower back musculoskeletal disorders were associated with physical demands, psychosocial demands and poor conditions.	Specific sample, cross-sectional and self-reported data.
2010	García	Self-rated health, substance abuse, obesity, musculoskeletal disorders, workloads, working conditions, accidents	1,249 workers from healthcare centers in Brazil	Poisson regressions	Higher workload scores were positively associated with poorer self-rated health.	Specific sample, cross-sectional and self-reported data, use of ad-hoc scales to measure some of the variables.
2010	Magnago	Demand-control relationships (low strain, active work, passive work, high strain), musculoskeletal disorders	491 nurses in Brazil	Logistic regressions	The likelihood of suffering from neck, shoulder, thoracic spine and leg musculoskeletal disorders are particularly higher under active work and high strain conditions.	Specific sample, cross-sectional and self-reported data.
2010	Aparecida Silva	Working conditions, health-related quality of life	696 registered nurses in Brazil	Logistic regressions	Effort-reward imbalance was more strongly associated with health than high-strain conditions.	Homogeneous sample, cross-sectional and self-reported data.
2011	Griep	Demand-control relationships (low strain, active work, passive work, high strain), effort-reward imbalance, self-rated health	1,307 healthcare workers in Brazil	Logistic regressions	The dimensions of both models were independently associated with self-rated health. The partial effort-reward imbalance model was more strongly associated to health status.	Homogeneous sample, cross-sectional and self-reported data, includes only subjective measures of health, gender imbalance in sample.
2012	Carugno	Hours worked per week, physical effort, musculoskeletal disorders	193 nurses in Brazil	Logistic regressions	Physical efforts were significantly related to the experience of neck pain.	Small and specific sample, cross-sectional and self-reported data.
2012	de Souza	Psychosocial risk factors (effort-reward imbalance), mental health (depression, alcohol abuse)	158 workers in high voltage power lines in Brazil	Logistic regressions	The prevalence of depression was strongly associated with psychosocial factors present in the work of electricity workers.	Small and homogenous sample, cross-sectional and self-reported data.
2012	Ebling	Burnout syndrome, working variables, psychosocial variables, job satisfaction, common mental disorders (CMDs)	234 health professionals in Brazil	Association tests and correlational analysis	Significant associations were identified between burnout and variables related to work, psychosocial variables, hardy personality traits, and CMDs.	Small and homogeneous sample, bi-variate analyses, cross-sectional and self-reported data, subjective measure of CMDs.
2012	Greco	Demand-control relationships (low strain, active work, passive work, high strain), social support, psychiatric disorders	381 social/educational workers in Brazil	Logistic regressions	The likelihood of reporting psychiatric disorders was higher in workers under active work and high strain conditions.	Specific sample, cross-sectional and self-reported data.
2012	Silva	Psychological demands, social support, work control, effort, rewards, overcommitment, and health-related quality of life (physical and mental health)	2,054 workers in Brazil	Logistic regressions	Low control, lack of social support and overcommitment were associated with poor physical quality of life, while increasing effort-reward imbalance and overcommitment were associated with poor mental quality of life.	Cross-sectional and self-reported data, includes only subjective measures of health-related quality of life.
2013	Scalco	Demand-control relationships (low strain, active work, passive work, high strain), oral health	3,253 administrative employees from a university in Brazil	Logistic regressions	Individuals exposed to high strain and passive work contexts reported worse indicators of oral health, which may be partly explained by behavior patterns.	Cross-sectional and self-reported data, use of ad-hoc scales or adapted instruments, includes only subjective measures of health.
2014	Alsoleaga	Job latitude, psychological demands, social support, job strain, isostrain, efforts, rewards, effort-reward imbalance	3010 workers from different occupations in Chile	Logistic regressions	High psychological demands, low social support, job strain, isostrain, and effort-reward imbalance were found to be related to higher depressive symptoms.	Cross-sectional and self-reported data, includes only a few depressive symptoms.
2014	Kogien	Psychological demands, social support, work control, physical quality of life	189 nurses in Brazil	Logistic regressions	Low social support, low intellectual discernment and high work demands were associated with higher chances of a poor quality of life.	Small and specific sample, cross-sectional and self-reported data.
2014	Pataro	Low-back pain (LBP), physical demand at work, psychological demands	624 urban cleaning workers in Brazil	Logistic regressions	LBP was associated with longer working hours, flexion and trunk rotation and psychosocial demands. Dynamic work (running) served as a protective factor.	Small and specific sample, cross-sectional and self-reported data.
2014	Rocha	Mental health, general health, psychological demands, physical demands, autonomy, social support, double presence, opportunities for skill development	9503 workers in Chile	Logistic regressions	Double presence, physical demands, insufficient social support and lack of leadership are associated with a poorer self-perceived health status.	Cross-sectional and self-reported data, use of ad-hoc scales or adapted instruments, includes only subjective measures of health.

Table 2. Psychosocial Risks and Health (continued)

Year	First Author	Variables	Sample and context	Analysis	Main findings	Main limitations
2014	Silva Henao	Working conditions, workload, task characteristics, job demands, social interactions and organizational aspects, work role, salary, burnout	300 health professionals in Colombia	Association tests	Workload, job demands and work role exhibited a significant association with exhaustion and depersonalization. Social interaction and salary was only related to exhaustion.	Homogenous sample, cross-sectional and self-reported data, not based on a theoretical model, uses ad-hoc scales, bivariate analysis.
2015	Ansoleaga	Job latitude, psychological demands, social support, job strain, isostrain, efforts, rewards, effort-reward imbalance, overcommitment	782 workers from a healthcare center in Chile	Logistic regressions	Job strain, isostrain, and effort-reward imbalance were significant predictors of depressive symptoms and distress. Substance abuse was explained by job strain.	Specific sample, cross-sectional and self-reported data, includes only a few depressive symptoms.
2015	da Silva	Psychological demands, control over activities, social support, burnout, common mental disorders (CMDs)	130 nursing professionals in Brazil	Logistic regressions	Active work and passive work were protective factors for burnout syndrome. Suspected cases of common mental disorders were associated with burnout.	Small and homogenous sample, cross-sectional and self-reported data.
2015	Ferracciu	Voice disorder (VD), violent situations in teaching, loss of ability to work, and psychosocial stress at work.	110 school teachers in Brazil	Association tests and correlations	Significant correlation between VD and work data in relation to the time that teaches, the amount of schools that teaches and to the situations of violence.	Homogenous sample, cross-sectional and self-reported data.
2015	García-Rojas	Job control, job demands, social support, job insecurity, cardiovascular risk factors (e.g., blood pressure, glucose, cholesterol levels)	2,330 workers in Mexico	Logistic regressions	Psychosocial factors displayed significant associations with indicators of cardiovascular risk. Some inconclusive results indicate further research is needed.	Cross-sectional data, convenience sample, self-reported measures of job strain.
2015	Silva-Junior	Psychosocial factors at work (active work, passive work, low strain, high strain, effort-reward imbalance), mental disorders	131 applicants for sickness benefit in Brazil	Association tests	There was no statistical association between the work-related mental disorders, sickness benefits and independent variables.	Small and homogenous sample, cross-sectional and self-reported data, bivariate analysis.
2016	Araújo	Demand-control relationships (low strain, active work, passive work, high strain), effort-reward imbalance, common mental disorders (CMDs)	2,532 health workers in Brazil	Poisson regression analysis	The prevalence of CMDs was 21.0% and was associated with high strain and high effort-reward imbalance.	Homogenous sample, cross-sectional and self-reported data, subjective measures of mental disorders.
2016	Bassi	Physical demands, psychosocial demands, job control, social support, sick absence	1,808 workers in Brazil	Poisson regression analysis	Higher rates of sickness absence were associated with higher levels exposure to psychosocial demands.	Cross-sectional and self-reported data
2016	dos Santos Alves	Autonomy, control, nursing-physician relationships, organizational support, emotional exhaustion, intention to leave	267 nurses in Brazil	Structural equation modeling analysis	Nurses with greater autonomy, better working relationships and higher work control reported lower emotional exhaustion and lower intention to leave the job.	Small and homogenous sample, cross-sectional and self-reported data, use of ad-hoc scales, do not considers control variables.
2016	Márquez Gómez	Psychosocial risk factors (e.g., posture, repetitiveness, physical demands), musculoskeletal disorders (e.g., shoulder pain, neck pain, back pain)	174 blue-collar workers in Venezuela	Data mining methods	Shoulder and neck disorders were associated with bad posture, work repetitiveness and psychological demands. Back disorders were associated with poor posture and physical demands.	Small and specific sample, cross-sectional and self-reported data.
2016	da Silva & Guimarães	Occupational stress (control, psychological demands and social support), quality of life	227 nurses in Brazil	Multiple linear regressions	The domain with the highest score was pain, in workers carrying out the function of nurse and other functions.	Small and homogenous sample, cross-sectional and self-reported data.
2016	da Silva & Dutra	Psychosocial job factors (demand-control model), chronic pain	23 school teachers in Brazil	Association tests	A significant association between chronic pain and sleep hours was found.	Small and homogenous sample, cross-sectional and self-reported data.
2016	Millán	Mobbing, occupational psychological health (burnout and psychological well-being)	1,681 workers in Venezuela	Multivariate correlations	The instrument is accurate to make a diagnosis, since it better predicts the various indicators of psychological health at work.	Homogenous sample, cross-sectional and self-reported data, subjective measures of health.
2016	Valente	Psychological demands, social support, work control, effort, rewards, overcommitment, and depressive symptoms	1,046 employees from the banking sector in Brazil	Logistic regressions	High strain, low support, high effort-reward imbalance, and overcommitment were associated with depressive symptoms.	Homogenous sample, cross-sectional and self-reported data, subjective measures of depressive symptoms.
2017	da Silva	Psychosocial factors, musculoskeletal disorders (MD), physical demands and effort, psychosocial factors, bullying, sexual harassment, discrimination, physical violence and monotony.	267 footwear industry workers in Brazil	Logistic regressions	Greater psychosocial factors influenced the development of MD in male workers. In women, less psychosocial factors were related to MD; however, its influence is very significant.	Small and homogenous sample, cross-sectional and self-reported data.
2017	Lopes Juvanhol	Demand-control relationships (low strain, active work, passive work, high strain), blood pressure,	12,038 education workers in Brazil	Association tests	The greatest differences in the distributions of casual blood pressure by job strain category were found among hypertensive participants.	Cross-sectional data, convenience sample, the models were not adjusted for potential confounders.
2017	Mattos	Psychological demands, decision latitude, social support, common mental disorders (depressive, somatic, and anxiety symptoms)	2,532 workers from healthcare institutions in Brazil	Association tests	There was an association between the exposure to high demands and the presence of common mental disorders.	Cross-sectional and self-reported data, includes only subjective measures of mental disorders.
2017	Ordóñez-Hernández	Work quality of life (e.g., institutional support), catastrophizing, and acceptance of pain	88 workers with chronic pain in Mexico	Correlational analysis	Most dimensions of work quality of life were negatively related to catastrophizing and positively related to acceptance of pain.	Small and homogenous sample, cross-sectional and self-reported data, bivariate analysis.
2017	Rocco	Psychological demands, skill discretion, decision authority, social support, cardiovascular health (e.g., body mass index, blood pressure, cholesterol)	11,351 workers in Brazil	Poisson and multinomial regression analysis	Individuals with low skill discretion, decision authority and social support reported lower cardiovascular health. Subjects with low skill discretion had worse diet, physical activity, and smoking profiles.	Cross-sectional data, convenience sample

Table 2. Psychosocial Risks and Health (continued)

Year	First Author	Variables	Sample and context	Analysis	Main findings	Main limitations
2017	Rodríguez	Burnout, psychosocial risks, coping, emotional labor, sociodemographics, and labor-related variables	518 psychologists in Brazil	Multiple linear regression analysis	The predictors with the greatest explanatory power of burnout were overwork and emotion-focused coping strategies.	Homogenous sample, cross-sectional and self-reported data.
2017	Tavares	Salivary cortisol, reward, effort impairment, anthropometric and cardiovascular measurements	134 military police officers in Brazil	Linear regressions	Effort impairment influenced the variation of cortisol levels at night.	Small and homogenous sample, cross-sectional data, only direct effects.
2018	Astorquiza Bustos	job stressors, health (problems and chronic diseases)	10,158 workers in Colombia	Ordered multinomial logit regression model	Working more than 48 hours a week, not having a work premium, among other factors were associated with a high probability of job stress.	Absence of quantitative variables of medical and psychological nature.
2018	Medrano	Psychological, job resources (e.g., autonomy), work-family conflict, burnout, life satisfaction	1,060 workers who lived in different cities in Argentina	Structural equation modeling analysis	When individuals are able to detach themselves from work, they are less likely to experience work-family conflict and in turn burnout.	Cross-sectional and self-reported data, focuses exclusively on the negative side of work-family interface.
2018	Nascimento	Working conditions, facilities, access to materials and equipment, dimensions of burnout	72 professors from a dental school in Brazil	Association tests	Levels of burnout were significantly different based on individuals' access to materials and equipment.	Small and homogenous sample, cross-sectional and self-reported data, use of ad-hoc scales, bivariate analysis.
2018	Nogueira	Autonomy, control over the environment, physician-nurse relationship, organizational support, dimensions of burnout	745 nurses in Brazil	Association tests	Autonomy and organizational support were significantly related to all burnout dimensions. Control was associated only with exhaustion.	Homogenous sample, cross-sectional and self-reported data, bivariate analysis.
2018	Pinhatti	Demand-control relationships (low strain, active work, passive work, high strain), support, effort-reward imbalance, overcommitment, minor psychiatric disorders (MPDs)	285 nurses in Brazil	Logistic regressions	Higher prevalence rates of MPDs were found among nurses facing high-demand work with low social support, high effort-reward imbalance, and over-commitment.	Small and homogenous sample, cross-sectional and self-reported data, subjective measures of MPDs.
2018	Silva-Costa	Exposure variable (night work), Cardiovascular risk (carotid intima-media thickness, CIMT)	9,785 civil servants in Brazil	Structural equation modeling	Among men, the increase in exposure to night work was significantly associated with an increase in body mass and CIMT.	Convenience sample, cross-sectional data
2018	Vidotti	Psychological demands, work control, social support, burnout dimensions	502 nurses in Brazil	Logistic regressions	Low social support increased the likelihood of experiencing burnout.	Homogenous sample, cross-sectional and self-reported data.
2019	Alvites-Huamani	Stress, psychosocial risks (e.g., work load, interpersonal relations and organizational aspects, pay)	81 teachers from Latin America, North America and Europe	Association tests	Significant correlations between teacher stress due to anxiety, depression, maladaptive behaviour and psychosocial factors.	Small and homogenous sample, cross-sectional and self-reported data, bivariate analysis, uses ad-hoc scales.
2019	Ansoleaga	Workplace vulnerability, psychological distress, workplace bullying, effort-rewards imbalance, isostrain, authoritarian leadership	1,995 salaried workers in Chile	Logistic regressions	Workers who perceived high workplace vulnerability or were exposed to workplace violence had a greater chance of psychological distress.	Cross-sectional and self-reported data, not generalizable to rural populations.
2019	Brito-Ortiz	Psychological demands, work control, social support, psychological distress, exhaustion	357 nurses in México	Correlational analysis and structural equations	Individuals exposed to high demands, low work control and insufficient social support experienced higher psychological distress and in turn exhaustion.	Specific sample, cross-sectional and self-reported data.
2019	Carlotto	Psychological exhaustion, enthusiasm, work content, social environment, work hours, physical conditions, relationships with supervisors	358 public servants from a court of justice office in Brazil	Multiple linear regression analysis	Psychological exhaustion was significantly explained by work content, social environment, work hours, physical conditions and relationships with supervisors.	Specific sample, cross-sectional and self-reported data.
2019	Luna-Chávez	Psychosocial risk factors, mental exhaustion (symptoms and subjective changes in behavioural, cognitive and physiological response)	199 workers in Mexico	Correlational analysis	It is shown that work context and work content are risk factors for emotional exhaustion and individual factors serve as a protective factor.	Small and homogenous sample, cross-sectional and self-reported data, bivariate analysis.
2019a	Martinez	Job strain, psychosocial factors (PSF, demand-control imbalance, effort-reward imbalance, support and overcommitment)	1,180 healthcare workers in Brazil	Logistic regressions	High prevalence rates of moderate or intense exposure to PSF, which poses risks for stress and strain at work.	Specific sample, cross-sectional and self-reported data, subjective measures of strain, low participation.
2019	Muniz	Demand-control relationships (low strain, active work, passive work, high strain), social support, cardiovascular health	478 employees from a university in Brazil	Logistic regressions	High strain, active work and passive work were not associated with having a poor cardiovascular health. High job strain was related to obesity and poor diet.	Specific sample, cross-sectional and self-reported data.
2019	Oenning	Workplace violence, exposure to chemical/physical/biological risks, hours worked per week,	36,442 workers in Brazil	Logistic regressions	Stressful work, intense physical activity, and sun exposure were associated with self-rated health.	Cross-sectional and self-reported data, ad hoc scales, includes subjective measures of health.
2019	Rojas	Occupational psychosocial risks (e.g., psychological demands, compensations), quality of life related to health	110 health workers in Chile	Correlational analysis	Significant associations between the dimensions of psychosocial risks and most dimensions of quality of life.	Small and homogenous sample, cross-sectional and self-reported data, bivariate analysis.
2020	Saldaña Orozco	Distress, working environment, workload, insufficient work control, work-family conflict, leadership style, relationships, violence	40 workers in Mexico	Correlational analysis	Working environment, hours worked per week, work-family conflict and violence were significantly associated with distress.	Small and homogenous sample, cross-sectional and self-reported data, bivariate analysis, includes subjective measures of distress.
2020	Garzón-Duque	Work conditions (e.g., hours worked per day, relationships with coworkers and supervisors) extra work, depression	84 healthcare workers in Colombia	Association tests	A significant association was found between a higher prevalence of moderate/severe depressive symptoms and job comfort.	Small and homogenous sample, cross-sectional and self-reported data, bivariate analysis, ad-hoc scales.

Table 2. Psychosocial Risks and Health (continued)

Year	First Author	Variables	Sample and context	Analysis	Main findings	Main limitations
2020	Gómez-García	Self-perceived health, social support from colleagues, social support from bosses, job insecurity, emotional demands, cognitive demands, quantitative demands	1,049 salaried workers in Ecuador	Logistic regressions	A significant relationship was found between exposure to psychosocial risk factors and the probability of presenting poor self-perceived health	Convenience sample, cross-sectional and self-reported data, subjective measure of self-perceived health
2020	Gómez Ortiz	Psychological demands, job control, stress symptoms, general health, mental health, vitality, job satisfaction	168,496 workers in Colombia	Hierarchical and logistic regression analysis	High strain exhibited a significant effect on stress symptoms (positive), general health (negative), mental health (negative) and vitality (negative)	Cross-sectional and self-reported data, includes only subjective measures of health and stress symptoms
2020	Montero-Yaya	Burnout (emotional exhaustion, cynicism, professional efficiency), the benefits and incentives system (which includes performance)	1,817 police agents in Colombia	Correlational analysis	The only benefit that reduces the levels of emotional exhaustion and cynicism are recreational activities. Being congratulated in public seems to mitigate exhaustion	Homogenous sample, cross-sectional and self-reported data, bivariate analysis
2020	Moreira	Psychological demands, work control, social support, emotional exhaustion, depersonalization, low personal fulfillment	293 workers from mental healthcare centers in Brazil	Logistic regressions	Psychological demands were associated with exhaustion, depersonalization and low personal fulfillment	Specific sample, cross-sectional and self-reported data
2020	Oliveira	Psychosocial risks, occupational stressors, common mental disorders (CMDs) (depressive/anxious mood, somatic symptoms, decreased vital energy, depressive thoughts)	565 truck drivers in Brazil	Logistic regressions	Working hours and road conditions were strongly associated with CMDs. Role conflict, role overload, lack of autonomy, work-family conflict and responsibilities presented significant associations.	Homogenous sample, cross-sectional and self-reported data, subjective measures of CMDs
2020	Palma-Contreras	Psychological demands, decision latitude, social support, isostrain, effort-reward imbalance, workplace violence, organizational culture, leadership, psychological distress, depressive symptoms, drug abuse	1,023 healthcare workers in Chile	Logistic regressions	Significant association between isostrain, effort-reward imbalance, workplace violence and distress. Effort-reward imbalance was associated with depressive symptoms and drug abuse	Homogenous sample, cross-sectional and self-reported data
2020	Pujol-Cols	Quantitative demands, emotional demands, core self-evaluations, coping strategies, mental health, physical health	112 managers from different organizations in Argentina	Hierarchical regression analysis	Both demands were significant predictors of mental and physical health. The negative effects of emotional demands on physical health were greater for individuals with less positive CSEs.	Small sample, cross-sectional and self-reported data, includes only subjective measures of physical and mental health
2020	Solari Montenegro	Psychosocial demands, active work and skill development, social support and leadership, compensations, double presence, musculoskeletal disorders	45 workers in Chile	Association tests	There were no statistical differences in the experiences of musculoskeletal disorders based on the level of exposure to psychosocial risks	Small and homogenous sample, cross-sectional and self-reported data, not based on a theoretical model, bivariate analysis
2021	Pujol-Cols	Emotional demands, emotional dissonance, core self-evaluations, depersonalization	423 teachers in Argentina	Structural equation modeling analysis	Individuals exposed to high emotional demands tend to experience emotional dissonance and in turn depersonalization	Specific sample, cross-sectional and self-reported data

have followed a more psychological approach and investigated various illnesses or disorders mostly associated with the mind such as depersonalization (e.g., Pujol-Cols et al., 2021), burnout (e.g., Nogueira et al., 2018), common mental disorders (e.g., Mattos et al., 2017), psychiatric disorders (e.g., Pinhatti et al., 2018), and depressive symptoms (e.g., Palma-Contreras & Ansoleaga, 2020). At this point, it should be noted that even when this research stream has mostly studied negative phenomena, a few other studies have taken a more positive stance and examined the effects of work-related factors on positive health-related states such as health-related quality of life (e.g., Ordóñez-Hernández et al., 2017).

Finally, as shown in Table 3, the relationships between psychosocial risk factors and performance have been rather scarcely explored in the literature. Indeed, only a small amount of studies have shed light on the effects of work-related factors on variables associated with performance including, for instance, work ability (that is, a worker's capacity to perform their work as a result of the influence of work demands and their mental and physical health status; e.g., de Alcántara et al., 2019), productivity (e.g., Umann et al., 2014), individual performance (e.g., Perugini et al., 2018), turnover intentions (e.g., de Oliveira & Rocha, 2017), absenteeism (e.g., Guerrero et al., 2020), and work accidents (e.g., Useche et al., 2018). Very interestingly, this research focuses exclusively on the individual aspects of performance and none of the selected studies examined these effects at the group (such as group effectiveness) or at organizational level (such as profitability).

Context of study and sample. As shown in Table 4, research in this field in the Latin-American context seems to be mainly led by Brazil, as the majority of selected studies (62.35%) were conducted

in this country. A significantly lower proportion of studies included participants from other countries, like Argentina (e.g., Pujol-Cols & Lazzaro-Salazar, 2020), Chile (e.g., Ansoleaga et al., 2019), Mexico (e.g., García-Rojas et al., 2015), or Colombia (e.g., Astorquiza Bustos et al., 2018). Moreover, and though some of these studies (27.06%) have included numerous participants from diverse occupational backgrounds (e.g., Gómez Ortiz et al., 2020), most studies involved smaller and more homogeneous samples of employees from a single context of study or organizational setting. In fact, our review shows that the highest proportion of studies have drawn on evidence collected in the healthcare sector (e.g., Martínez & Fischer, 2019a) or in educational institutions (e.g., Pujol-Cols et al., 2021).

Data collection and analytical techniques. Table 4 shows that the majority of the selected studies (97.65%) have used cross-sectional designs, a significantly smaller number of studies (2.35%) have relied on longitudinal designs (e.g., Martínez & Fischer, 2019b) and, surprisingly, none of the selected papers collected data through diary studies. Regarding data collection techniques, most research has relied on self-report scales whose reliability and validity is well established in the literature. Examples of these instruments are the Job Content Questionnaire (JCQ), the Effort-Reward Imbalance (ERI) questionnaire, and the SUSESO-ISTAS questionnaire to measure psychosocial risks; the Nordic Musculoskeletal Questionnaire to examine musculoskeletal disorders; the Maslach Burnout Inventory (MBI) to measure emotional exhaustion, depersonalization, and professional inefficacy; and the Work Ability Index (WAI) to measure self-performance. Nonetheless, it is worth highlighting the fact that a significant amount of articles analyzed here reported using ad-hoc scales, that is, an instrument specifically designed for the purposes of

Table 3. Psychosocial Risks and Performance

Year	Author	Variables	Sample and Context	Analysis	Main Findings	Main Limitations
2013	Fischer	Violence at work, work injuries, demands, control, social support, efforts, rewards, overcommitment, risk of pain/ injuries, work ability	514 nurses in Brazil	Linear regression analysis	Effort-reward imbalance, violence at work, risk of pain /injury, past work injuries and social support were significantly related to work ability.	Homogenous sample, cross-sectional and self-reported data.
2013	Prochnow	Demand-control relationships (low strain, active work, passive work, high strain), work ability	498 nurses in Brazil	Logistic regressions	The likelihood of experiencing a reduced work ability is higher under the high strain condition.	Homogenous sample, cross-sectional and self-reported data.
2014	Umann	Stress in nurses (interpersonal relations, role stressors, intrinsic work factors), lost productivity	129 nurses in Brazil	Correlational analysis	All job stressors (and a global measure of stress) were positively related to lost productivity.	Small and homogenous sample, cross-sectional and self-reported data, subjective measure of lost productivity.
2015	Martinez	Impaired work ability, psychological demands, control, social support, efforts, rewards, overcommitment, physical work stressors	423 employees from a private hospital in Brazil	Logistic regressions	High effort-reward imbalance and high job strain were significantly associated with work ability impairment.	Homogenous sample, cross-sectional and self-reported data.
2015	Ferracciu	Already described in Table 1. There was no significant association between effort-reward			imbalance and work ability, and voice disorder	
2016	Ferreira	Work-related psychosocial factors, health, work ability	118 municipal transit agents in Brazil	Association tests	Psychosocial factors were important determinants of quality of life. Better physical and mental health are associated with greater work ability.	Small and homogenous sample, cross-sectional and self-reported data, bivariate analysis.
2017	Cendales Ayala	Experimental manipulation of demands and control levels, driving performance, physiological outcomes (e.g., breathing rate), psychological well-being (e.g., tension)	80 male bus drivers in Colombia	Two-by-two ANCOVA tests	Job latitude moderated the negative effect of job demands on different psychological and physiological outcomes. Participants' responses were more negative when control levels were low.	Small and homogenous sample, cross-sectional data, experimental designs may have low ecological validity.
2017	de Oliveira, Griep, et al.	Psychological demands, emotional demands, job control, supervisor support, co-worker support, efforts, rewards, intention to leave the profession	3,229 nurses in Brazil	Logistic regressions	Highly demanding work, passive work, effort-reward imbalance, poor self-rated health, over-commitment, and poor supervisor support were associated with higher intentions to leave the profession.	Homogenous sample, cross-sectional and self-reported data, includes only subjective measures of health.
2017	de Oliveira and Rocha	HR management practices, work engagement, leader-member exchange (LMX), turnover intentions	299 professionals in Brazil	Hierarchical regression analysis	Work engagement was positively related to human resource management practices and LMX quality. Engagement was negatively related to turnover.	Homogenous sample, cross-sectional and self-reported data.
2017	Vidal Gamboa	Work quality of life (intrinsic motivation, work load, supervisory support, absenteeism	352 employees from a healthcare institution in Chile	Logistic regressions	High workload and low supervisory support were associated with higher rates of absenteeism.	Homogenous and convenience sample, cross-sectional and self-reported data.
2018	Perugini	Positive practices (e.g., respect, support, inspiration), organizational commitment, job satisfaction, organizational and individual performance	569 employees in Argentina	Structural equation modeling analysis	Positive practices exhibited a positive, direct effect on individuals' satisfaction, commitment and performance.	Convenience sample, cross-sectional and self-reported data, uses ad hoc scales, includes subjective measures of performance.
2018	Shimabuku	Psychological demands, work control, social support, presenteeism (completed work and avoided distraction)	204 administrative employees from a university in Brazil	Hierarchical regression analysis	Demands were positively related to presenteeism, while control and support were negatively related to presenteeism. Control moderated the relationship between demand and presenteeism.	Small and homogenous sample, cross-sectional and self-reported data, includes only subjective measures of presenteeism.
2018	Useche	Support from supervisors, peer support, skill discretion, decision authority, psychological demands, job insecurity, job strain ratio, accidents, fines	780 professional drivers from public transport companies in Colombia	Correlational analysis and hierarchical regression analysis	All job factors displayed significant correlations with job strain. Work control, psychological demands and job insecurity predicted accidents.	Homogenous sample, cross-sectional and self-reported data, includes subjective measures of accidents at work.
2019	Alcantara	High demands, social support, noise at work, verbal violence, substance abuse, illnesses, sleep problems, work absence, functional limitations	6,510 teachers in Brazil	Structural equation modeling analysis	Work characteristics exhibited not only a direct effect on work ability but also an indirect effect through health status (a poorer health status was associated with lower work ability).	Cross-sectional and self-reported data, not based on a theoretical model, correlation matrix not shown.
2019	Jiménez-Figueroa	Culture work-family, work-family balance, perceived performance	262 workers in Chile	Linear regression analyses	Positive significant and interdependent relationship among the variables, however, low values were reported for the variable perceived performance.	Small and homogenous sample, cross-sectional and self-reported data, includes only subjective measures of performance.
2019b	Martinez	Work ability, demand-control relationships (low strain, active work, passive work, high strain), social support, termination of employment	Four-year cohort study with 1,060 hospital workers in Brazil	Multinomial regression analysis	Dismissal was more likely among employees under high strain conditions. No association was found between psychosocial environment and resignation.	Non-random sampling method
2019	Ramos	Occupational stress, teachers' performance	47 teachers in Colombia	Association and correlational analysis	Results indicate there is no significant association between the studied variables.	Small and homogenous sample, cross-sectional and self-reported data, includes only subjective measures of performance, ad hoc scales, bivariate analysis.
2020	de Souza-Talarico	Demand-control relationships (low strain, active work, passive work, high strain), social support, cognitive performance	9,969 workers in Brazil	Regression analysis and structural equations	High strain jobs were associated with lower cognitive performance scores (e.g., global fluency).	Cross-sectional and self-reported data
2020	Pulido Guerrero	Psychosocial risks, distress, absenteeism	252 workers from agricultural companies in Colombia	Path analysis	Work demands, leadership and social relationships affect individuals' experiences of distress which in turn affects absenteeism.	Small and homogenous sample, cross-sectional data.

the study, and only a small proportion of them conducted a proper assessment of their psychometric properties.

Although, as discussed above, most studies on the relationships among psychosocial risks and health, particularly among psychosocial risks and performance, have relied on cross-sectional and self-reported data (97.65% and 90.59% of the selected papers, respectively), some of them have gone one step further in terms of methodological sophistication and considered more objective measures of the constructs of interest. To provide an example, [Cendales-Ayala et al. \(2017\)](#) examined the effects of job demands and decision latitude (or work control) on the performance and well-being of a sample of bus drivers by adopting an experimental approach and manipulating the level of exposure to psychosocial risk factors. In addition, [Lopes Juvanhol et al. \(2017\)](#) measured participants' casual blood pressure by using a validated oscillometric device to produce a more objective health status of the employees in their study. Similarly, [Tavares et al. \(2017\)](#) examined individuals' salivary cortisol by collecting, centrifuging, freezing, and analyzing samples of saliva in their study of the role of effort impairment in the health status of military police officers in Brazil. More recently, [Silva-Costa et al. \(2018\)](#) examined carotid intima-media thickness through image analysis and also included other objective indices and measures that are relevant in examining cardiovascular health, such as body mass, waist circumference, hypertension, cholesterol level, and blood glucose.

Table 4. Characterization of the Studies Included in the Systematic Review

	Aspect	Frequency	Percentage
Country of origin	Brazil	53	62.35%
	Chile	10	11.76%
	Colombia	9	10.59%
	Mexico	5	5.88%
	Argentina	4	4.71%
	Other countries	4	4.71%
Research design	Cross-sectional designs	83	97.65%
	Longitudinal designs	2	2.35%
	Multi-occupational sample	23	27.06%
Context of study	Healthcare industry	31	36.47%
	Educational industry	11	12.94%
	Manufacture industry	6	7.06%
	Other contexts of study	14	16.47%
Sample size	Small ($N < 300$)	34	40.00%
	Moderate ($300 \leq N < 1,000$)	23	27.06%
	Large ($N \geq 1,000$)	28	32.94%
Data collection instruments	Self-reported scales	77	90.59%
	Combines self-report scales with other measures	8	9.41%
Statistical analysis	Bi-variate analysis	22	25.88%
	Multi-variate analysis	63	74.12%

Regarding the analytical strategies and techniques used in the studies reviewed here, [Table 4](#) shows that only a relatively small percentage of papers (25.88%) performed only bivariate analysis to test their hypotheses, such as the estimation of chi-square statistics, t -test statistics, or correlation coefficients (e.g., [Nogueira et al., 2018](#)). The majority of the selected studies (74.12%) conducted multivariate analysis, such as logistic regressions (e.g., [Palma-Contreras et al., 2020](#)), hierarchical regressions (e.g., [Pujol-Cols & Lazzaro-Salazar, 2020](#)), multinomial regressions (e.g., [Martinez & Fischer, 2019b](#)), Poisson regressions (e.g., [Rocco et al., 2017](#)), and structural equation modeling (e.g., [Pujol-Cols et al., 2021](#)). This approach allowed researchers to test the relative influence of several predictors simultaneously and to control their results for the effects of numerous covariates or control variables.

Bibliometric impact. [Table 5](#) provides an assessment of the bibliometric impact of the 52 journals in which the 85 selected

papers of the review were published. Most of these journals are from Latin-American countries (63.46%), and the remaining ones from European countries (19.2%), the USA (9.6%), and Asian countries (5.7%). Of the Latin-American journals, Brazil concentrates 63.6% of the scholarly productivity in the field, followed by Colombia with 18.1%. Moreover, while a few journals are only indexed in either Scielo (25%) or Scopus (30.8%), most journals are indexed in both Scopus and WoS (44.2%). Sixty-one point five percent of those papers found in journals indexed in WoS and/or Scopus were published in the highest two quartiles according to the 2019 H-Index of the Scimago Ranking, and 38.5% were published in Q3 and Q4 journals. Finally, only 28 papers were published in Q2 Latin-American journals, while none of the Q1 journals belong to Latin-American countries (USA = 3, UK = 3, and South Korea = 1).

Exploration of the Effects of Psychosocial Risks on Health and Performance

Psychosocial risks and health. Overall, research has shown that an increasing exposure to psychosocial risks is associated with a poorer health status (e.g., [Gómez-García et al., 2020](#); [Gómez Ortiz et al., 2020](#)). In this regard, previous studies have reported significant correlations between, for instance, high strain (a situation in which the individual faces high job demands and is provided with insufficient job control) or effort-reward imbalance, and common mental disorders (e.g., [Araújo et al., 2016](#); [Mattos et al., 2017](#)). In this context, common mental disorders consist of various symptoms associated with mental health problems that affect an important part of the population by causing them suffering and functional impairment. These include, for instance, anxiety, decreased vitality, depressive thoughts, fatigue, and insomnia (see [de Oliveira & Carlotto, 2020](#)). More specifically, [Valente et al. \(2016\)](#) found that high strain, effort-reward imbalance, and overcommitment were related to depressive symptoms (also see [Ansoleaga & Toro, 2010](#); [Ansoleaga et al., 2014](#)). Similarly, [Ansoleaga \(2015\)](#) demonstrated that isostrain (a situation in which the employee is exposed to high job demands but receives insufficient social support from their coworkers or leaders) was associated with depression in a sample of 782 workers from a healthcare center in Chile.

In addition to the implications of work-related factors on mental health, previous studies have also reported significant associations between psychosocial risks and physical health symptoms ([Pujol-Cols & Lazzaro-Salazar, 2020](#)). For instance, [Rocco et al. \(2017\)](#) found that individuals with low skill discretion, decision authority, and social support tended to report lower cardiovascular health in a large sample of 11,351 workers in Brazil. Some other studies, however, have obtained inconclusive results regarding the relationship between psychosocial risks and cardiovascular health. For instance, [García-Rojas et al. \(2015\)](#) and, more recently, [Muniz et al. \(2019\)](#) reported mixed findings regarding the impact of psychosocial risk factors and cardiovascular risks, which suggests that these effects may not be so straightforward and may be, in fact, affected by other third variables. In this sense, personal lifestyle might assume a relevant mediating role in these relationships, since workers who are exposed to more stressful working conditions (such as high strain) tend to have a worse diet, reduced physical activity, and smoking profiles (e.g., [Muniz et al., 2019](#); [Rocco et al., 2017](#)), which may increase their body mass index and chances of suffering from, for instance, diabetes (see [Silva-Costa et al., 2018](#)). In a similar vein, [Ansoleaga et al. \(2015\)](#) and, more recently, [Palma-Contreras et al. \(2020\)](#) found that job strain due to an excessive exposure to psychosocial risks was associated with substance abuse, which may subsequently affect individuals' health status in the long term.

Musculoskeletal disorders represent, perhaps, the most widely studied phenomena in the literature on psychosocial risks and health.

Table 5. Bibliometric Impact of the Journals in which the Articles of the Systematic Review Were Published

Name of journal	ISSN	Country	# of papers	Scopus				SSCI - WoS		Observations
				Status	h-index	SJR	BQ	Status	IF	
Salud de los Trabajadores	2665-0215	Venezuela	3	-	-	-	-	-	-	Indexed in Scielo
Cadernos de Saude Publica	0102-311X	Brazil	7	Active	77	0.63	Q2	Active	1.40	
Revista Médica de Chile	0034-9887	Chile	1	Active	38	0.22	Q4	Active	0.53	
Enfermería Universitaria	2395-8421	Mexico	1	-	-	-	-	-	-	Indexed in Scielo
Psico-USF, Bragança Paulista	1413-8271	Brazil	1	-	-	-	-	-	-	Indexed in Scielo
Revista Brasileira de Epidemiologia	1415-790X	Brazil	5	Active	32	0.69	Q2	-	-	
Revista Latino-Americana de Enfermagem	0104-1169	Brazil	8	Active	36	0.39	Q2	Active	1.29	
Arquivos brasileiros de cardiologia	0066-782X	Brazil	1	Active	53	0.40	Q3	Active	1.45	
Revista da ABENO	2595-0274	Brazil	1	-	-	-	-	-	-	Indexed in Scielo
Revista Brasileira de Enfermagem	0034-7167	Brazil	3	Active	21	0.27	Q3	-	-	
Ciencia & Trabajo	0718-2449	Chile	2	-	-	-	-	-	-	Indexed in Scielo
Revista de Saude Publica	0034-8910	Brazil	4	Active	77	0.86	Q2	Active	1.70	
Psychological Studies	0033-2968	India	1	Active	9	0.22	Q3	-	-	
Journal of Management and Organization	1833-3672	UK	1	Active	33	0.63	Q2	Active	2.79	
Salud Uninorte	0120-5552	Colombia	2	Active	11	0.13	Q4	-	-	
Ciência & Saúde Coletiva	1413-8123	Brazil	1	Active	46	0.70	Q2	-	-	
Revista de Salud Pública	0124-0064	Colombia	-	-	-	-	-	-	-	Indexed in Scielo
Journal of Occupational Health	1341-9145	Japan	2	Active	59	0.66	Q2	Active	2.28	
Journal of Occupational and Environmental Medicine	1076-2752	USA	1	Active	110	0.71	Q2	Active	1.64	
Journal of Occup. Health Psychology	1076-8998	USA	1	Active	119	4.73	Q1	Active	7.36	
BMC Health Services Research	1472-6963	UK	1	Active	110	1.10	Q1	Active	1.99	
Stress and Health	1532-2998	USA	1	Active	61	1.01	Q1	Active	2.34	
Journal of Nursing Management	0966-0429	UK	1	Active	76	0.93	Q1	Active	2.24	
Work	1051-9815	Netherlands	1	Active	50	0.5	Q2	Active	1.13	
American Journal of Industrial Medicine	0271-3586	USA	3	Active	104	0.70	Q2	Active	1.74	
International Journal of Environmental Research and Public Health	1660-4601	Switzerland	3	Active	113	0.75	Q2	Active	2.84	
Journal of Work and Organizational Psychology	1576-5962	Spain	1	Active	17	0.48	Q2	Active	1.57	
BMC Public Health	1471-2458	UK	1	Active	143	1.23	Q1	Active	2.52	
Interdisciplinaria	0325-8203	Argentina	2	Active	10	0.29	Q3	-	-	
The American Journal of Cardiology	00029149	USA	1	Active	219	1.39	Q1	Active	2.57	
Paidéia	0103-863X	Brazil	2	Active	12	0.18	Q4	-	-	
International Archives of Occupational and Environmental Health	0340-0131	Germany	1	Active	88	0.80	Q2	Active	1.94	
Revista da Escola de Enfermagem	0080-6234	Brazil	1	Active	28	0.28	Q3	Active	0.80	
Safety and Health at Work	20937911	South Korea	1	Active	30	0.58	Q1	Active	1.95	
Occupational Medicine	0962-7480	UK	1	Active	85	0.51	Q2	Active	1.56	
Propósitos y Representaciones	2310-4635	Perú	1	-	-	-	-	-	-	Indexed in Scielo
Revista de Métodos Cuantitativos para la Economía y la Empresa	1886516X	Spain	1	Active	9	0.16	Q3	-	-	
Production (indexed as Produção)	01036513	Brazil	1	Active	17	0.34	Q2	-	-	
Revista Brasileira de Terapia Intensiva	0103507X	Brazil	1	Active	19	0.43	Q2	-	-	
Revista Dor	1806-0013	Brazil	1	-	-	-	-	-	-	Indexed in Scielo
Trends in Psychiatry and Psychotherapy	22376089	Brazil	1	Active	16	0.59	Q2	-	-	
Revista CEFAC	1982-0216	Brazil	1	-	-	-	-	-	-	Indexed in Scielo
Revista Brasileira em Promoção da Saúde	1806-1230	Brazil	1	Active	1	0.00	Q4	-	-	
Revista de la Asociación Española de Especialistas en Medicina del Trabajo	11326255	Spain	1	Active	4	0.16	Q4	-	-	
Dimensión Empresarial	2322-956X	Colombia	1	-	-	-	-	-	-	Indexed in Scielo
Estudos de Psicologia	1413294X	Brazil	2	Active	13	0.11	Q4	-	-	
Revista Brasileira de Saúde Ocupacional	2317-6369	Brazil	1	-	-	-	-	-	-	Indexed in Scielo
Revista CES Psicología	20113080	Colombia	1	Active	2	0.13	Q4	-	-	
Psicología: Teoría e Pesquisa	01023772	Brazil	1	Active	21	0.16	Q4	-	-	
Revista Logos, Ciencia & Tecnología	2422-4200	Colombia	1	-	-	-	-	-	-	Indexed in Scielo
Revista Brasileira de Gestão De Negócios	1806-4892	Brazil	1	Active	11	0.25	Q3	Active	0.87	
Revista Encuentros	1692-5858	Colombia	1	-	-	-	-	-	-	Indexed in Scielo

Overall, research has shown that the presence of high physical and psychosocial demands is related to neck, shoulder, leg, and back musculoskeletal disorders (e.g., [Fernandes et al., 2010](#); [García et](#)

[al., 2010](#); [Magnago et al., 2010](#)). More specifically, [Márquez Gómez and Márquez Robledo \(2016\)](#) reported that shoulder and neck disorders were more strongly associated with bad posture, work

repetitiveness, and psychological demands, whereas back disorders were more strongly associated with poor posture and physical demands. Regarding the influence of job resources (or, in this case, insufficient job resources) in particular, [Melzer and Iguti \(2010\)](#) provided evidence that lack of work control and poor relationships with supervisors were associated with musculoskeletal pain.

Psychosocial risks and performance. As mentioned in previous sections of this article, the relationship between psychosocial risks and performance remains largely understudied, especially when compared to the effects of work-related factors on individuals' health and wellbeing. In this light, this systematic review resulted in the identification of only 19 papers that examined the relationship between psychosocial risks and performance-related phenomena. As shown in [Table 3](#), the most widely studied construct in this research stream is work ability, that is, a worker's capacity to perform their work as a result of the influence of work demands and their mental and physical health status. In this regard, studies have shown that an increasing exposure to high strain conditions, effort-reward imbalance, and workplace violence is significantly related to lower work ability (e.g., [Fischer & Martinez, 2013](#); [Martinez et al., 2015](#); [Prochnow et al., 2013](#)).

The findings and implications discussed above are in line with studies that examined the effects of psychosocial risks on other performance-related variables at the individual level. To provide an example, [Umann et al. \(2014\)](#) found that job stressors, such as interpersonal relations, role stressors, and intrinsic work factors, were positively related to lost productivity. More recently, [de Souza-Talarico et al. \(2020\)](#) demonstrated that high strain jobs were associated with lower cognitive performance scores.

Most of the studies included in this systematic review have focused on the direct effects of psychosocial risks on performance, but the mechanisms and dynamics through which an increasing exposure to psychosocial risk factors is related to lower performance levels remain unclear in the Latin-American literature. In this regard, [Alcantara et al. \(2019\)](#) shed some light on this matter by showing that work characteristics (e.g., high demands, social support, noise at work, verbal violence) exhibited not only a direct effect on work ability but also an indirect, mediating effect via health status, revealing that a poorer health status was associated with lower work ability (also see [Ferreira & Carvalho, 2016](#)). In addition to the effects of individuals' health on individual performance, it should be noted that some studies have demonstrated that employees' health status and strain levels due to their exposure to psychosocial risks may affect performance at the organizational level by increasing sickness leaves and medical costs (e.g., [Guerrero et al., 2020](#)).

Furthermore, research has shown that psychosocial risks may have a negative impact on employees' job attitudes, particularly on their organizational commitment, and intentions to leave a particular profession or job (e.g., [de Oliveira et al., 2017](#); [de Oliveira & Rocha, 2017](#)). Although these individual-level variables may not exert a direct effect on organizational performance, they may affect it indirectly by increasing the costs associated with absenteeism, turnover, and dismissal rates (e.g., [Guerrero et al., 2020](#); [Martinez & Fischer, 2019b](#); [Vidal Gamboa et al., 2017](#)). Similarly, [Shimabuku and Mendonça \(2018\)](#) found that an excessive exposure to job demands is negatively related to presenteeism, although these negative effects seem to be moderated (or mitigated) by work control levels.

A final set of studies have highlighted the fact that psychosocial risks may damage individual and organizational performance by affecting employees' personal styles and behavior. Indeed, there is evidence to suggest that excessive exposure to highly stressful working conditions may lead to substance abuse. This increases consumption levels of alcohol, medication, or drugs (e.g., [Palma-Contreras et al., 2018](#)), which may not only reduce individuals' cognitive performance in the short term but also make them more prone to work accidents and injuries (e.g., [Useche et al., 2018](#)).

Discussion

As jobs have become increasingly more complex and demanding, and organizations strive to remain competitive, innovative, and sustainable in an often hostile and fast-changing market, a great deal of attention has been given to the effects and implications of work-related psychosocial risks on individuals' health and organizational performance ([Maslach & Leiter, 2016](#)). A vast number of studies around the world have shown that this is true not only in regions like Europe or the United States, where the study of psychosocial risks certainly has a long-standing tradition, but also in the Latin American context, where a growing amount of studies have been conducted in the last ten years. Despite these valuable efforts, most systematic reviews have either ignored research produced in Latin America completely or focused only on one occupation and a few categories of psychosocial risks (e.g., [Monroy-Castillo & Juárez-García, 2019](#); [Tabares-Díaz et al., 2020](#)), all of which has contributed to produce biased and scattered evidence of this relationship. Thus, the present article contributed to the field of organizational psychology by critically examining the Latin-American literature that investigates the relationship among a wide variety of psychosocial risks, individuals' health, and organizational performance. In what follows, we provide an overview of the findings of this systematic review and propose new research avenues that, ultimately, will help design preventive strategies that promote healthy organizational environments and employees' wellbeing considering the particularities of the Latin-American context.

Regarding the specific contexts in which this research has been conducted, the systematic review showed that most empirical contributions came from Brazil and, to a comparatively lesser extent, from other countries like Chile, Colombia, Mexico, and Argentina. Moreover, the majority of studies have been done in the healthcare contexts, educational institutions, and manufacturing industries. Only very few of them have examined the constructs of interest and their relationships in more novel occupational contexts, such as the managerial profession (e.g., [Pujol-Cols & Lazzaro-Salazar, 2020](#)), or have collected their data in diverse samples of workers with different backgrounds and occupations (e.g., [Gómez-Ortiz et al., 2020](#)). We believe that future research should not only involve other regions of Latin America but also include individuals who are expected to be exposed to the highest levels of work-related psychosocial risks, such as police officers, firefighters, social workers, surgeons in ER or trauma units, crisis counselors, hospice caregivers, and emergency dispatchers, among many others.

In regards to the research designs, most studies have relied on cross-sectional and self-report data, which may be susceptible to common method bias (see [Podsakoff et al., 2003](#)) and social desirability bias (see [Piedmont et al., 2000](#)). Though we believe future research should adopt more complex, longitudinal designs that involve the collection of systematic and/or diary data, studies could also minimize the limitations and optimize the advantages of cross-sectional designs by using a number of strategies (see considerations in [Spector, 2019](#)). On the one hand, they could measure the constructs of interest at different points of time or, in other words, collect data at different stages. On the other hand, they could combine both self-reports and other independent measures that examine the variables of interest more objectively, for instance, by conducting a thorough and detailed analysis of job descriptions to measure psychosocial risks, using information from clinical records to assess physical and mental health symptoms, or evaluating various indicators or ratios to examine performance levels. In addition to overcoming some of the limitations involved in cross-sectional research, such mixed and transdisciplinary approach may offer a valuable opportunity for advancing our understanding of the dynamics involved in the relationships among psychosocial risks, health, and performance in a more holistic and, thus, comprehensive way (see [Pujol-Cols & Lazzaro-Salazar, 2020](#)).

Furthermore, this systematic review showed that constructs like psychological demands, job control, social support, and effort-reward imbalance have been studied rather exhaustively in the literature on psychosocial risks in Latin America by using large and diverse samples of employees and internationally validated instruments. However, a still large number of the selected studies measured similar (or the same) constructs using different variable labels, or drew on data collected through ad-hoc scales that offered little or no evidence of psychometric validity. This hinders the possibility of integrating and analyzing an important amount of the empirical evidence coming from Latin-American research in meta-analyses of these relationships. Thus, it is fundamental that future research is more consistent in labeling phenomena and rely on the use of instruments whose reliability and validity has been properly and systematically demonstrated across studies.

From a conceptual standpoint, the present systematic review revealed that the majority of studies have focused on the direct effects of various psychosocial risk factors on different variables related to individuals' health and organizational performance, but the mechanisms and processes underlying these relationships remain largely understudied in this literature. Future research in Latin America should address the potential moderating or mediating effects of third variables in these dynamics. In this sense, since this systematic review indicated that personal factors have been particularly neglected in the proposed models, future studies could examine the role of, for instance, individuals' personality traits in the processes through which they cope with psychosocial risks in order to experience positive states, maintain their health status, and improve their performance levels. Future research could also examine the positive and negative spillover of these processes on other spheres of individuals' life (outside the organizational context), such as their social and/or family relationships. It would also be interesting to understand how the level of other resources not related to the job (e.g., family support) may (or not) help employees cope with the most stressful aspects of their job. Furthermore, since this review showed that this body of research has concentrated almost exclusively on the effects of psychosocial risks on performance at the individual level (e.g., productivity), future studies should examine performance at the organizational level by including measures of, for instance, market share, profitability, medical costs, or turnover rates.

Moreover, this paper revealed that psychosocial risks, such as psychological demands, job control, social support, effort-reward imbalance, workplace violence, and work-family conflict, among others, were indeed found to be significant predictors of individuals' health status and organizational performance across a large body of studies. This, naturally, has strong implications for professional practice, and, thus, we recommend that future research involves an impact evaluation of different strategies, policies, and programs that becomes vital for providing organizations with valuable information that can be used to design preventive strategies that promote healthy organizational environments and employees' wellbeing in Latin America (see guidelines in Khandker et al., 2009).

Last but not least, it is important to discuss the limitations of this systematic review. Firstly, since it only included papers published in either English or Spanish, some relevant contributions written in other languages (e.g. Portuguese) may have been excluded from this review. Nonetheless, we believe this study is still comprehensive enough as it was able to include a significant amount of studies (over 60%) that were conducted in Latin American countries where neither English nor Spanish is their first language. Secondly, this article provided a qualitative assessment of the relationships among psychosocial risks, health, and performance and, therefore, its conclusions should be interpreted with caution. However, and though the present review did not result in the estimation of a quantitative effect or relationship among the variables of study,

it allowed us to critically analyze each of the 85 selected papers, identify their main contributions and limitations, and propose avenues for future research. Finally, since our searches included terms that intended to be sufficiently wide in scope to enable the identification of a large number of studies on the topic, they did not consider other specific categories of psychosocial risks, such as 'telework'. Although this procedure may have resulted in the exclusion of some pertinent studies, it is worth highlighting the fact that the combination of search strategies used in this paper was still effective and comprehensive enough to identify a significant number of recent and relevant contributions in the field.

Conflict of Interest

The authors of this article declare no conflict of interest.

Note

¹It should be noted that even when articles written entirely in Portuguese were excluded from this study due to language proficiency matters (consider language criterion in review studies such as Awa et al., 2010 or Ricci et al., 2016), this decision did not exclude studies conducted in Brazil to a significant extent since well over half of the studies included in our paper came from this country. This point is further addressed when considering the limitations of this study.

References

- References marked with * refer to those included in the review.
- Albert-Morant, G., Ariza-Montes, A., Leal-Rodríguez, A., & Giorgi, G. (2020). How does positive work-related stress affect the degree of innovation development? *International Journal of Environmental Research and Public Health*, 17(2), 520-535. <https://doi.org/10.3390/ijerph17020520>
- *Alcantara, M. A. D., Medeiros, A. M. D., Claro, R. M., & Vieira, M. D. T. (2019). Determinants of teachers' work ability in basic education in Brazil: Educatel study, 2016. *Cadernos de Saude Publica*, 35(Suppl 1), e00179617. <https://doi.org/10.1590/0102-311X00179617>
- *Alves, D. F., de Souza Melzer, A. C., & Iguti, A. M. (2010). Working conditions and musculoskeletal pain among Brazilian pottery workers. *Cadernos de Saude Publica*, 26(3), 492-502. <https://doi.org/10.1590/S0102-311X2010000300007>
- *Alvites-Huamani, C. G. (2019). Estrés docente y factores psicosociales en docentes de Latinoamérica, Norteamérica y Europa. *Propósitos y Representaciones*, 7(3), 141-159. <https://doi.org/10.20511/pyr2019.v7n3.393>
- *Ansoleaga, E. (2015). Indicadores de salud mental asociados a riesgo psicosocial laboral en un hospital público. *Revista Médica de Chile*, 143(1), 47-55. <https://doi.org/10.4067/S0034-98872015000100006>
- *Ansoleaga, E., Ahumada, M., & Cruz, G. S. (2019). Association of workplace bullying and workplace vulnerability in the psychological distress of Chilean workers. *International Journal of Environmental Research and Public Health*, 16(20), 4039. <https://doi.org/10.3390/ijerph16204039>
- *Ansoleaga Moreno, E., & Toro, J. P. (2010). Factores psicosociales laborales asociados a riesgo de sintomatología depresiva en trabajadores de una empresa minera. *Salud de los Trabajadores*, 18(1), 7-16.
- *Ansoleaga, E., Vézina, M., & Montañón, R. (2014). Síntomas depresivos y distrés laboral en trabajadores chilenos: condiciones diferenciales para hombres y mujeres. *Cadernos de Saude Publica*, 30, 107-118. <https://doi.org/10.1590/0102-311X00176912>
- *Aparecida Silva, A. A., Souza, J. M. P. D., Borges, F. N. D. S., & Fischer, F. M. (2010). Health-related quality of life and working conditions among nursing providers. *Revista de Saude Publica*, 44(4), 718-725. <https://doi.org/10.1590/S0034-89102010000400016>
- *Araújo, T. M. D., Mattos, A. I. S., Almeida, M. M. G. D., & Santos, K. O. B. (2016). Psychosocial aspects of work and common mental disorders among health workers: Contributions of combined models. *Revista Brasileira de Epidemiologia*, 19(3), 645-657. <https://doi.org/10.1590/1980-5497201600030014>
- Arial, M., Gonik, V., Wild, P., & Danuser, B. (2010). Association of work related chronic stressors and psychiatric symptoms in a Swiss sample of police officers: A cross sectional questionnaire study. *International Archives of Occupational and Environmental Health*, 83(3), 323-331. <https://doi.org/10.1007/s00420-009-0500-z>
- *Astorquiza Bustos, B. A., Castillo Caicedo, M., & Gomez Mejia, A. (2018). Measuring the job stress of the employed population: The case of labor market in Cali-Colombia. *Revista de Métodos Cuantitativos para la Economía y la Empresa*, 25, 272-294.

- Awa, W. L., Plaumann, M., & Walter, U. (2010). Burnout prevention: A review of intervention programs. *Patient Education and Counseling*, 78(2), 184-190. <https://doi.org/10.1016/j.pec.2009.04.008>
- Bailey, T. S., Dollard, M. F., McLinton, S. S., & Richards, P. A. (2015). Psychosocial safety climate, psychosocial and physical factors in the aetiology of musculoskeletal disorder symptoms and workplace injury compensation claims. *Work & Stress*, 29(2), 190-211. <https://doi.org/10.1080/02678373.2015.1031855>
- Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273-285. <https://doi.org/10.1037/ocp0000056>
- *Bassi, I., Assunção, A. Á., Pimenta, A. M., Benavides, F. G., & Ubalde-Lopez, M. (2016). Sickness absence among health workers in Belo Horizonte, Brazil. *Journal of Occupational Health*, 58(2), 179-185. <https://doi.org/10.1539/joh.15-0121-OA>
- Bjerkan, A. M. (2010). Health, environment, safety culture and climate-analysing the relationships to occupational accidents. *Journal of Risk Research*, 13(4), 445-477. <https://doi.org/10.1080/13669870903346386>
- Borritz, M., Christensen, K. B., Bültmann, U., Rugulies, R., Lund, T., Andersen, I., Viladsen, E., Diderichsen, F., & Kristensen, T. S. (2010). Impact of burnout and psychosocial work characteristics on future long-term sickness absence. Prospective results of the Danish PUMA Study among human service workers. *Journal of Occupational and Environmental Medicine*, 52(10), 964-970. <https://doi.org/10.1097/JOM.0b013e3181f12f95>
- Bowling, N. A., & Eschleman, K. J. (2010). Employee personality as a moderator of the relationships between work stressors and counterproductive work behavior. *Journal of Occupational Health Psychology*, 15(1), 91-103. <https://doi.org/10.1037/a0017326>
- *Brito-Ortiz, J. F., Juárez-García, A., Nava-Gómez, M. E., Castillo-Pérez, J. J., & Brito-Nava, E. (2019). Factores psicosociales, estrés psicológico y burnout en enfermería: un modelo de trayectorias. *Enfermería Universitaria*, 16(2), 138-148. <https://doi.org/10.22201/eneo.23958421e.2019.2.634>
- Cañadas-De la Fuente, G. A., Vargas, C., San Luis, C., García, I., Cañadas, G. R., & Emilia, I. (2015). Risk factors and prevalence of burnout syndrome in the nursing profession. *International Journal of Nursing Studies*, 52(1), 240-249. <https://doi.org/10.1016/j.ijnurstu.2014.07.001>
- Cappelli, P., & Keller, J. R. (2017). The historical context of talent management. In D. Collings, K. Mellahi, & W. Cascio (Eds.), *The Oxford handbook of talent management* (pp. 23-42). Oxford University Press.
- *Carlotto, M. S., & Câmara, S. G. (2019). Burnout syndrome in public servants: Prevalence and association with occupational stressors. *Psico-USF*, 24(3), 425-435. <https://doi.org/10.1590/1413-82712019240302>
- *Carugno, M., Pesatori, A. C., Ferrario, M. M., Ferrari, A. L., Silva, F. J. D., Martins, A. C., Felli, V. E., Coggon, D., & Bonzini, M. (2012). Physical and psychosocial risk factors for musculoskeletal disorders in Brazilian and Italian nurses. *Cadernos de Saude Publica*, 28(9), 1632-1642. <https://doi.org/10.1590/S0102-311X2012000900003>
- *Cendales-Ayala, B., Useche, S. A., Gómez-Ortiz, V., & Bocarejo, J. P. (2017). Bus operators' responses to job strain: An experimental test of the job demand-control model. *Journal of Occupational Health Psychology*, 22(4), 1-10. <https://doi.org/10.1037/ocp0000040>
- Chi, N. W., Tsai, W. C., & Tseng, S. M. (2013). Customer negative events and employee service sabotage: The roles of employee hostility, personality and group affective tone. *Work & Stress*, 27(3), 298-319. <https://doi.org/10.1080/02678373.2013.819046>
- Cox, K. B. (2003). The effects of intrapersonal, intragroup, and intergroup conflict on team performance effectiveness and work satisfaction. *Nursing Administration Quarterly*, 27(2), 153-163. <https://doi.org/10.1097/00006216-200304000-00009>
- *da Silva, A. M., & Guimarães, L. A. M. (2016). Occupational stress and quality of life in nursing. *Paidéia (Ribeirão Preto)*, 26(63), 63-70. <https://doi.org/10.1590/1982-43272663201608>
- *da Silva, J. L. L., da Silva Soares, R., dos Santos Costa, F., de Souza Ramos, D., Lima, F. B., & Teixeira, L. R. (2013). Psychosocial factors and prevalence of burnout syndrome among nursing workers in intensive care units. *Revista Brasileira de Terapia Intensiva*, 27(2), 125-133. <https://doi.org/10.5935/0103-507X.20150023>
- *da Silva, J. M. N. D., Silva, L. B. D., & Gontijo, L. A. (2017). Relationship between psychosocial factors and musculoskeletal disorders in footwear industry workers. *Production*, 27, e20162315. <https://doi.org/10.1590/0103-6513.231516>
- *da Silva, K. N. D., & Dutra, F. C. M. S. (2016). Psychosocial job factors and chronic pain: Analysis in two municipal schools in Serra/RS. *Revista Dor*, 17(3), 164-170. <https://doi.org/10.5935/1806-0013.20160064>
- *de Oliveira, D. R., Griep, R. H., Portela, L. F., & Rotenberg, L. (2017). Intention to leave profession, psychosocial environment and self-rated health among registered nurses from large hospitals in Brazil: A cross-sectional study. *BMC Health Services Research*, 17(1), 1-10. <https://doi.org/10.1186/s12913-016-1949-6>
- *de Oliveira, L. B. D., & Rocha, J. D. C. (2017). Work engagement: Individual and situational antecedents and its relationship with turnover intention. *Revista Brasileira de Gestão de Negócios*, 19(65), 415-431. <https://doi.org/10.7819/rbgvn.v19i64.3373>
- *de Souza, S. F. D., Carvalho, F. M., Araújo, T. M. D., Koifman, S., & Porto, L. A. (2012). Depression in high voltage power line workers. *Revista Brasileira de Epidemiologia*, 12(5), 235-245. <https://doi.org/10.1590/s1415-790x2012000200001>
- *de Souza, S. F. D., Carvalho, F. M., Araújo, T. M. D., & Porto, L. A. (2010). Psychosocial factors of work and mental disorders in electricians. *Revista de Saude Publica*, 44(4), 710-717. <https://doi.org/10.1590/S0034-89102010000400015>
- *de Souza Melzer, A. C., & Iguti, A. M. (2010). Working conditions and musculoskeletal pain among Brazilian pottery workers. *Cadernos de Saude Publica*, 26(3), 492-502. <https://doi.org/10.1590/S0102-311X2010000300007>
- *de Souza-Talarico, J. N., Suemoto, C. K., Santos, I. S., Griep, R. H., Yamaguti, S. T. F., Lotufo, P. A., & Bensenõr, I. J. (2020). Work-related stress and cognitive performance among middle-aged adults: The Brazilian longitudinal study of adult health (ELSA-Brasil). *Stress and Health*, 36(1), 19-30. <https://doi.org/10.1002/smi.2906>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512. <https://doi.org/10.1037/0021-9010.86.3.499>
- *dos Santos Alves, D. F., da Silva, D., & de Brito Guirardello, E. (2017). Nursing practice environment, job outcomes and safety climate: A structural equation modelling analysis. *Journal of Nursing Management*, 25(1), 46-55. <https://doi.org/10.1111/jonm.12427>
- *Ebling, M., & Carlotto, M. S. (2012). Burnout syndrome and associated factors among health professionals of a public hospital. *Trends in Psychiatry and Psychotherapy*, 34(2), 93-100. <https://doi.org/10.1590/S2237-60892012000200008>
- *Fernandes, R. D. C. P., Assunção, A. Á., Silvano Neto, A. M., & Carvalho, F. M. (2010). Musculoskeletal disorders among workers in plastic manufacturing plants. *Revista Brasileira de Epidemiologia*, 13(1), 11-20. <https://doi.org/10.1590/S1415-790X2010000100002>
- *Ferraciu, C. C. S., Santos, D. M. T. D., Barros, P. X. D., Teixeira, L. R., & Almeida, M. S. D. (2015). Índice de capacidade para o trabalho e desequilíbrio esforço-recompensa relacionado ao distúrbio de voz em professoras da rede estadual de Alagoas. *Revista CEFAC*, 17(5), 1580-1589. <https://doi.org/10.1590/1982-0216201517517414>
- *Ferreira, A. P., & Carvalho, A. P. C. (2016). The impact of work-related psychosocial factors on the health and work ability of municipal transit agents. *Revista Brasileira em Promoção da Saude*, 29(4), 471-479. <https://doi.org/10.4067/S0718-24492015000100014>
- *Fischer, F. M., & Martínez, M. C. (2013). Individual features, working conditions and work injuries are associated with work ability among nursing professionals. *Work*, 45(4), 509-517. <https://doi.org/10.3233/WOR-131637>
- *Fonseca, N. D. R., & Fernandes, R. D. C. P. (2010). Factors related to musculoskeletal disorders in nursing workers. *Revista Latino-Americana de Enfermagem*, 18(6), 1076-1083. <https://doi.org/10.1590/S0104-11692010000600006>
- Franklin, P., & Gkiouleka, A. (2021). A scoping review of psychosocial risks to health workers during the Covid-19 pandemic. *International Journal of Environmental Research and Public Health*, 18(5), 2453-2473. <https://doi.org/10.3390/ijerph18052453>
- Fukui, S., Wu, W., & Salyers, M. P. (2019). Impact of supervisory support on turnover intention: The mediating role of burnout and job satisfaction in a longitudinal study. *Administration and Policy in Mental Health and Mental Health Services Research*, 46(4), 488-497. <https://doi.org/10.1007/s10488-019-00927-0>
- Gallie, D., Felstead, A., Green, F., & Inanc, H. (2017). The hidden face of job insecurity. *Work, Employment and Society*, 31(1), 36-53. <https://doi.org/10.1177/0950017015624399>
- *Garcia, L. P., Höfelmann, D. A., & Facchini, L. A. (2010). Self-rated health and working conditions among workers from primary health care centers in Brazil. *Cadernos de Saude Publica*, 26(5), 971-980. <https://doi.org/10.1590/S0102-311X2010000500019>
- García, M., Iglesias, S., Saleta, M., & Romay, J. (2016). Riesgos psicosociales en el profesorado de enseñanza universitaria: diagnóstico y prevención. *Journal of Work and Organizational Psychology*, 32(3), 173-182. <https://doi.org/10.1016/j.rpto.2016.07.001>
- *García-Rojas, I. J., Choi, B., & Krause, N. (2015). Psychosocial job factors and biological cardiovascular risk factors in Mexican workers. *American Journal of Industrial Medicine*, 58(3), 331-351. <https://doi.org/10.1002/ajim.22410>
- *Garzón-Duque, M. O., Espinal-Palacio, M. I., Álvarez-Herrera, E. A., Guzmán-Jiménez, K., & Macayza-Zarza, M. A. (2020). Condiciones intralaborales y extralaborales relacionados con síntomas depresivos en médicos que laboran en la región Oriente del departamento de Antioquia, Colombia, en el primer semestre del año 2020. *Revista de la Asociación Española de Especialistas en Medicina del Trabajo*, 29(4), 306-322.
- *Gómez-García, A. R., Portalanza-Chavarría, C. A., Arias-Ulloa, C. A., & Espinoza-Samaniego, C. E. (2020). Salaried workers' self-perceived health and psychosocial risk in Guayaquil, Ecuador. *International Journal of Environmental Research and Public Health*, 17(23), 9099. <https://doi.org/10.3390/ijerph17239099>
- *Gómez Ortiz, V., González, A., & Segura, S. (2020). Associations of alternative operationalizations of job strain with health and well-being outcomes in the same multioccupational worker sample. *American Journal of Industrial Medicine*, 63(6), 550-559. <https://doi.org/10.1002/ajim.23087>

- *Greco, P. B. T., Magnago, T. S. B. D. S., Lopes, L. F. D., Prochnow, A., Tavares, J. P., & Viero, N. C. (2012). Psychosocial stress and minor psychiatric disorders among Agentes Socioeducadores. *Revista Latino-Americana de Enfermagem*, 20(5), 971-979. <https://doi.org/10.1590/S0104-11692012000500020>
- *Griep, R. H., Rotenberg, L., Landsbergis, P., & Vasconcellos-Silva, P. R. (2011). Combined use of job stress models and self-rated health in nursing. *Revista de Saúde Pública*, 45(1), 145-152. <https://doi.org/10.1590/s0034-89102011000100017>
- Hinkka, K., Kuoppala, J., Väänänen-Tomppo, I., & Lamminpää, A. (2013). Psychosocial work factors and sick leave, occupational accident, and disability pension: A cohort study of civil servants. *Journal of Occupational and Environmental Medicine*, 55(2), 191-197. <https://doi.org/10.1097/JOM.0b013e31827943fe>
- International Labor Organization. (2016). *Workplace stress: A collective challenge*. International Training Centre of the ILO. Turin.
- *Jiménez-Figueroa, A., León-González, B., & Poblete-Gajardo, M. (2019). Work-family culture, work-family balance and perceived performance. *Dimensión Empresarial*, 17(2), 33-45. <https://doi.org/10.15665/dem.v17i2.1601>
- Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24(2), 285-308. <https://doi.org/10.2307/2392498>
- Karasek, R., & Theorell, T. (1990). *Healthy work: stress, productivity, and the reconstruction of working life*. Basic books.
- Khandker, S., B. Koolwal, G., & Samad, H. (2009). *Handbook on impact evaluation: quantitative methods and practices*. The World Bank. Washington D. C.
- Kivimäki, M., & Kawachi, I. (2015). Work stress as a risk factor for cardiovascular disease. *Current Cardiology Reports*, 17(9), 1-9. <https://doi.org/10.1007/s11886-015-0630-8>
- *Kogien, M., & Cedaro, J. J. (2014). Public emergency department: The psychosocial impact on the physical domain of quality of life of nursing professionals. *Revista Latino-Americana de Enfermagem*, 22(1), 51-58. <https://doi.org/10.1590/0104-1169.3171.2387>
- Kortum, E., & Leka, S. (2014). Tackling psychosocial risks and work-related stress in developing countries: The need for a multilevel intervention framework. *International Journal of Stress Management*, 21(1), 7-26. <https://doi.org/10.1037/a0035033>
- Kortum, E., Leka, S., & Cox, T. (2010). Psychosocial risks and work-related stress in developing countries: Health impact, priorities, barriers and solutions. *International Journal of Occupational Medicine and Environmental Health*, 23(3), 225-238. <https://doi.org/10.2478/v10001-010-0024-5>
- Kuusio, H., Heponiemi, T., Vänskä, J., Aalto, A. M., Ruskoaho, J., & Elovainio, M. (2013). Psychosocial stress factors and intention to leave job: differences between foreign-born and Finnish-born general practitioners. *Scandinavian Journal of Public Health*, 41(4), 405-411. <https://doi.org/10.1177/1403494813477248>
- Lang, J., Ochsmann, E., Kraus, T., & Lang, J. W. (2012). Psychosocial work stressors as antecedents of musculoskeletal problems: A systematic review and meta-analysis of stability-adjusted longitudinal studies. *Social Science & Medicine*, 75(7), 1163-1174. <https://doi.org/10.1016/j.socscimed.2012.04.015>
- Leung, L., & Zhang, R. (2017). Mapping ICT use at home and telecommuting practices: A perspective from work/family border theory. *Telematics and Informatics*, 34(1), 385-396. <https://doi.org/10.1016/j.tele.2016.06.001>
- Lipsey, M., & Wilson, D. (2001). *Practical meta-analysis*. Sage.
- Liu, C., Liu, Y., Mills, M. J., & Fan, J. (2013). Job stressors, job performance, job dedication, and the moderating effect of conscientiousness: A mixed-method approach. *International Journal of Stress Management*, 20(4), 336-363. <https://doi.org/10.1037/a0034841>
- Lopes Juvanhol, L., Melo, E. C. P., Carvalho, M. S., Chor, D., Mill, J. G., & Griep, R. H. (2017). Job strain and casual blood pressure distribution: Looking beyond the adjusted mean and taking gender, age, and use of antihypertensives into account. Results from ELSA-Brasil. *International Journal of Environmental Research and Public Health*, 14(4), 451. <https://doi.org/10.3390/ijerph14040451>
- *Luna-Chávez, E. A., Anaya-Velasco, A., & Ramírez-Lira, E. (2019). Diagnóstico de las percepciones de los factores de riesgo psicosociales en el trabajo del personal de una industria manufacturera. *Estudios de Psicología (Campinas)*, 36, e180148. <https://doi.org/10.1590/1982-0275201936e180148>
- *Magnago, T. S. B. D. S., Lisboa, M. T. L., Griep, R. H., Kirchoff, A. L. C., & Guido, L. D. A. (2010). Psychosocial aspects of work and musculoskeletal disorders in nursing workers. *Revista Latino-Americana de Enfermagem*, 18(3), 429-435. <https://doi.org/10.1590/S0104-11692010000300019>
- *Márquez Gómez, M., & Márquez Robledo, M. (2016). Factores de riesgo relevantes vinculados a molestias musculoesqueléticas en trabajadores industriales. *Salud de los Trabajadores*, 24(2), 67-78.
- *Martinez, M. C., do Rosário Dias de Oliveira Latorre, M., & Fischer, F. M. (2015). A cohort study of psychosocial work stressors on work ability among Brazilian hospital workers. *American Journal of Industrial Medicine*, 58(7), 795-806. <https://doi.org/10.1002/ajim.22476>
- *Martinez, M. C., & Fischer, F. M. (2019a). Psychosocial factors at hospital work: Experienced conditions related to job strain and effort-reward imbalance. *Revista Brasileira de Saúde Ocupacional*, 44, e12. <https://doi.org/10.1590/2317-6369000025918>
- *Martinez, M. C., & Fischer, F. M. (2019b). Work ability as determinant of termination of employment: To resign or be dismissed? *Journal of Occupational and Environmental Medicine*, 61(6), e272-e281. <https://doi.org/10.1097/JOM.0000000000001599>
- Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry*, 15(2), 103-111. <https://doi.org/10.1002/wps.20311>
- *Mattos, A. I. S., Araújo, T. M. D., & Almeida, M. M. G. D. (2017). Interaction between demand-control and social support in the occurrence of common mental disorders. *Revista de Saúde Pública*, 51, 48. <https://doi.org/10.1590/S1518-8787.2017051006446>
- *Medrano, L. A., & Trógolo, M. A. (2018). Employee well-being and life satisfaction in Argentina: The contribution of psychological detachment from work. *Journal of Work and Organizational Psychology*, 34(2), 69-81. <https://doi.org/10.5093/jwop2018a9>
- Meier, L. L., & Spector, P. E. (2013). Reciprocal effects of work stressors and counterproductive work behavior: A five-wave longitudinal study. *Journal of Applied Psychology*, 98(3), 529-539. <https://doi.org/10.1037/a0031732>
- Meliá, J., Nogareda, C., Lahera, M., Duro, A., Peiró, J., Salanova, M., & Gracia, D. (2006). Principios comunes para la evaluación de los riesgos psicosociales en la empresa. In J. L. Meliá, C. Nogareda, M. Lahera, A. Duro, J. M. Peiró, R. Pou, M. Salanova, D. Gracia, J. C. de Bona, & F. Martínez-Losa (Eds.), *Perspectivas de intervención en riesgos psicosociales. Evaluación de riesgos* (pp. 13-36). Foment del Treball Nacional. Barcelona.
- *Millán, A., Diaferia, L., Acosta, M., & D'Aubeterre, M. E. (2016). Comparativo de las propiedades psicométricas del NAQ-R y del LIPT-60 en trabajadores venezolanos. *CES Psicología*, 9(2), 40-67. <https://doi.org/10.21615/cesp.9.2.4>
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *Plos Medicine*, 6(7), e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Moncada, S., Utzet, M., Molinero, E., Llorens, C., Moreno, N., Galtés, A., & Navarro, A. (2014). The Copenhagen psychosocial questionnaire II (COPSOQ II) in Spain—a tool for psychosocial risk assessment at the workplace. *American Journal of Industrial Medicine*, 57(1), 97-107. <https://doi.org/10.1002/ajim.22238>
- Monroy-Castillo, A., & Juárez-García, A. (2019). Factores de riesgo psicosocial laboral en académicos de instituciones de educación superior en Latinoamérica: una revisión sistemática. *Propósitos y Representaciones*, 7(3), 248-260. <https://doi.org/10.20511/pyr2019.v7n3.361>
- *Montero-Yaya, K. L., Cortés-Olarte, G. A., & Hernández-González, Á. U. (2020). Síndrome del burnout en policías de Colombia y su relación con el sistema de beneficios e incentivos. *Logos Ciencia & Tecnología*, 12(2), 32-43. <https://doi.org/10.22335/rict.v12i2.1161>
- Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship? *Journal of Applied Psychology*, 76(6), 845-855. <https://doi.org/10.1037/0021-9010.76.6.845>
- *Moreira, A. S., & Lucca, S. R. D. (2020). Psychosocial factors and burnout syndrome among mental health professionals. *Revista Latino-Americana de Enfermagem*, 28, e3336. <https://doi.org/10.1590/1518-8345.4175.3336>
- *Muniz, D. D., Siqueira, K. S., Cornell, C. T., Fernandes-Silva, M. M., Muniz, P. T., & Silvestre, O. M. (2019). Ideal cardiovascular health and job strain: A cross-sectional study from the Amazon Basin. *Arquivos Brasileiros de Cardiologia (AHEAD)*, 112(3), 260-268. <https://doi.org/10.5935/abc.20190005>
- Murcia, M., Chastang, J. F., & Niedhammer, I. (2013). Psychosocial work factors, major depressive and generalised anxiety disorders: Results from the French national SIP study. *Journal of Affective Disorders*, 146(3), 319-327. <https://doi.org/10.1016/j.jad.2012.09.014>
- *Nascimento, V. L., Revorêdo, S. F., Nascimento, E. H. L., Brasil, D. M., Freitas, D. Q., & Lima, G. A. (2018). Burnout syndrome among dental professors: A cross-sectional study. *Revista da ABENO*, 18(2), 62-71. <https://doi.org/10.30979/rev.abeno.v18i2.557>
- Neffa, J. (2015). *Los riesgos psicosociales en el trabajo: contribución a su estudio*. Buenos Aires: Universidad Metropolitana para la Educación y el Trabajo. Centro de Innovación para los Trabajadores.
- *Nogueira, L. D. S., Sousa, R. M. C. D., Guedes, E. D. S., Santos, M. A. D., Turrini, R. N. T., & Cruz, D. D. A. L. M. D. (2018). Burnout and nursing work environment in public health institutions. *Revista Brasileira de Enfermagem*, 71(2), 336-342. <https://doi.org/10.1590/0034-7167-2016-0524>
- *Oenning, N. S. X., de Goulart, B. N. G., Ziegelmann, P. K., Chastang, J. F., & Niedhammer, I. (2019). Associations between occupational factors and self-rated health in the national Brazilian working population. *BMC Public Health*, 19(1), 1-9. <https://doi.org/10.1186/s12889-019-7746-5>
- *Oenning, N. S. X., Gelmini, S., Brandao, S. S., & Silva, J. (2018). Workplace accidents in Brazil: Analysis of physical and psychosocial stress and health-related factors. *RAM. Revista de Administração Mackenzie*, 19(3). <https://doi.org/10.1590/1678-6971/eRAMG170131>
- Oldham, G. R., & Fried, Y. (2016). Job design research and theory: Past, present and future. *Organizational Behavior and Human Decision Processes*, 136, 20-35. <https://doi.org/10.1016/j.obhdp.2016.05.002>

- *Oliveira, M. E. T. D., & Carlotto, M. S. (2020). Factors associated with common mental disorders in truck drivers. *Psicologia: Teoria e Pesquisa*, 36, e3653. <https://doi.org/10.1590/0102.3772e3653>
- *Ordóñez-Hernández, C. A., Contreras-Estrada, M. I., & González-Baltazar, R. (2017). Calidad de vida laboral, catastrofismo y aceptación del dolor crónico osteomuscular en mujeres trabajadoras. *Ciencia & Trabajo*, 19(58), 26-30. <https://doi.org/10.4067/S0718-24492017000100026>
- *Palma-Contreras, A., & Ansoleaga, E. (2020). Asociaciones entre factores de riesgos psicosociales, dimensiones organizacionales y problemas de salud mental, relacionados con la violencia laboral, en trabajadores de tres hospitales chilenos de alta complejidad. *Cadernos de Saúde Pública*, 36(3), e00084219. <https://doi.org/10.1590/0102-311X00084219>
- Parker, S. K., Morgeson, F. P., & Johns, G. (2017). One hundred years of work design research: Looking back and looking forward. *Journal of Applied Psychology*, 102(3), 403-420. <https://doi.org/10.1037/apl0000106>
- *Pataro, S. M. S., & Fernandes, R. D. C. P. (2014). Heavy physical work and low back pain: The reality in urban cleaning. *Revista Brasileira de Epidemiologia*, 17(1), 17-30. <https://doi.org/10.1590/1809-4503201400010003ENG>
- *Perugini, M. L. L., & Solano, A. C. (2018). Influencia de virtudes organizacionales sobre satisfacción, compromiso y performance laboral en organizaciones argentinas. *Interdisciplinaria*, 35(1), 171-188. <https://doi.org/10.16888/interd.2018.35.1.9>
- Perry-Jenkins, M., & Wadsworth, S. M. (2017). Work and family research and theory: Review and analysis from an ecological perspective. *Journal of Family Theory & Review*, 9(2), 219-237. <https://doi.org/10.1111/jftr.12188>
- Piedmont, R. L., McCrae, R. R., Riemann, R., & Angleitner, A. (2000). On the invalidity of validity scales: Evidence from self-reports and observer ratings in volunteer samples. *Journal of Personality and Social Psychology*, 78(3), 582-593. <https://doi.org/10.1037/0022-3514.78.3.582>
- *Pinhatti, E. D. G., Ribeiro, R. P., Soares, M. H., Martins, J. T., & Lacerda, M. R. (2018). Minor psychiatric disorders in nursing: Prevalence and associated factors. *Revista Brasileira de Enfermagem*, 71(Suppl 5), 2176-2183. <https://doi.org/10.1590/0034-7167-2018-0028>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- *Prochnow, A., Magnago, T. S. B. D. S., Urbanetto, J. D. S., Beck, C. L. C., Lima, S. B. S. D., & Greco, P. B. T. (2013). Work ability in nursing: Relationship with psychological demands and control over the work. *Revista Latino-Americana de Enfermagem*, 21(6), 1298-1305. <https://doi.org/10.1590/0104-1169.3072.2367>
- Pross, C., & Schweitzer, S. (2010). The culture of organizations dealing with trauma: Sources of work-related stress and conflict. *Traumatology*, 16(4), 97-108. <https://doi.org/10.1177/1534765610388301>
- *Pujol-Cols, L., Dabos, G. E., & Lazzaro-Salazar, M. (2021). Individual differences and emotional labor: The effects of core self-evaluations on depersonalization. *Journal of Management & Organization*, 1-20. <https://doi.org/10.1017/jmo.2021.2>
- Pujol-Cols, L., & Lazzaro-Salazar, M. (2018). Psychosocial risks and job satisfaction in Argentinian scholars: Exploring the moderating role of work engagement. *Journal of Work and Organizational Psychology*, 34(3), 145-156. <https://doi.org/10.5093/jwop2018a17>
- *Pujol-Cols, L., & Lazzaro-Salazar, M. (2020). Psychological demands and health: An examination of the role of core self-evaluations in the stress-coping process. *Psychological Studies*, 65, 408-419. <https://doi.org/10.1007/s12646-020-00569-5>
- *Pulido Guerrero, E. G., Carrillo, L. J. L., & Ruiz, L. K. J. (2020). Factores psicosociales que influyen en el ausentismo: evaluación de un modelo explicativo. *Interdisciplinaria. Revista de Psicología y Ciencias Afines*, 38(1), 149-162. <https://doi.org/10.16888/interd.2021.38.1.10>
- *Ramos, A. C. A., Ruiz, L. K. J., Pulido, E. G., & Marín, M. P. R. (2019). Estrés ocupacional y evaluación de desempeño en docentes universitarios del departamento del Cesar, Colombia. *Encuentros*, 17(1), 24-33. <https://doi.org/10.15665/encuent.v17i01.1595>
- Ricci, F., Chiesi, A., Bisio, C., Panari, C., & Pelosi, A. (2016). Effectiveness of occupational health and safety training: A systematic review with meta-analysis. *Journal of Workplace Learning*, 28(6), 355-377. <https://doi.org/10.1108/JWL-11-2015-0087>
- Rich, S. (2016). A brief examination of the effects of occupational stress on creativity and innovation. *The Psychologist-Manager Journal*, 19(2), 107-121. <https://doi.org/10.1037/mgr0000042>
- *Rocco, P. T., Bensenor, I. M., Griep, R. H., Moreno, A. B., Alencar, A. P., Lotufo, P. A., & Santos, I. S. (2017). Job strain and cardiovascular health score (from the Brazilian Longitudinal Study of Adult Health [ELSA-Brasil] baseline). *The American Journal of Cardiology*, 120(2), 207-212. <https://doi.org/10.1016/j.amjcard.2017.04.008>
- *Rocha, K. B., Muntaner, C., Solar, O., Borrell, C., Bernales, P., González, M. J., Ibañez, C., Benach, J., & Vallebuona, C. (2014). Clase social, factores de riesgo psicosocial en el trabajo y su asociación con la salud autopercebida y mental en Chile. *Cadernos de Saúde Pública*, 30(10), 2219-2234. <https://doi.org/10.1590/0102-311X00176213>
- *Rodríguez, S. Y. S., & Carlotto, M. S. (2017). Predictors of burnout syndrome in psychologists. *Estudos de Psicologia (Campinas)*, 34(1), 141-150. <https://doi.org/10.1590/1982-02752017000100014>
- *Rojas, F. R., Vásquez, P. C., Barboza, V. V., López, A. L. S., & Zavala, M. O. Q. (2019). Psycho social risks noted by oncology workers related to their quality of life. *Revista Brasileira de Enfermagem*, 72(4), 854-860. <https://doi.org/10.1590/0034-7167-2017-0833>
- Rousseau, D. (2008). *Psychological contracts in organizations: Understanding written and unwritten agreements* (2nd edition). Sage.
- *Saldaña-Orozco, C., Polo-Vargas, J. D., Gutiérrez-Carvajal, O. I., Ibarra-Rentería, G. M., & Anaya Velazco, A. (2020). Liderazgo, factores de riesgo psicosocial y estrés en la Dirección de Tránsito y Movilidad en Zapotlán el Grande, Jalisco. *Revista Científica Salud Uninorte*, 35(3), 343-359. <https://doi.org/10.14482/sun.35.3.613.621>
- *Scalco, G. P. D. C., Abegg, C., Celeste, R. K., Hökerberg, Y. H. M., & Faerstein, E. (2013). Occupational stress and self-perceived oral health in Brazilian adults: A pro-saude study. *Ciência & Saúde Coletiva*, 18(7), 2069-2074. <https://doi.org/10.1590/S1413-81232013000700022>
- Schaufeli, W. B. (2017). Applying the job demands-resources model. *Organizational Dynamics*, 2(46), 120-132. <https://doi.org/10.1016/j.orgdyn.2017.04.008>
- *Shimabuku, R. H., & Mendonça, H. (2018). Moderating role of social support on the relationship between job demand and presenteeism. *Paidéia (Ribeirão Preto)*, 28, e2830. <https://doi.org/10.1590/1982-4327e2830>
- Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology*, 1(1), 27-41. <https://doi.org/10.1037/1076-8998.1.1.27>
- *Silva, L. S., & Barreto, S. M. (2012). Adverse psychosocial working conditions and poor quality of life among financial service employees in Brazil. *Journal of Occupational Health*, 54(2), 88-95. <https://doi.org/10.1539/joh.11-0072-OA>
- *Silva-Costa, A., Guimaraes, J., Chor, D., da Fonseca, M. D. J. M., Bensenor, I., Santos, I., Barreto, S. M., & Griep, R. H. (2018). Time of exposure to night work and carotid atherosclerosis: A structural equation modeling approach using baseline data from ELSA-Brasil. *International Archives of Occupational and Environmental Health*, 91(5), 591-600. <https://doi.org/10.1007/s00420-018-1305-8>
- *Silva Henao, D. C., Strauss, A. M. G., Moreno, M. P., & Molina, R. T. (2014). Relación entre factores psicosociales negativos y el síndrome de burnout en el personal sanitario de Florencia (Cauquetá, Colombia). *Salud Uninorte*, 30(1), 52-62. <https://doi.org/10.14482/sun.30.1.4314>
- *Silva-Junior, J. S., & Fischer, F. M. (2015). Sickness absence due to mental disorders and psychosocial stressors at work. *Revista Brasileira de Epidemiologia*, 18(4), 735-744. <https://doi.org/10.1590/1980-54972015000400005>
- *Solari Montenegro, G. S., Guerra, B. A., & Iratchet, M. R. (2020). Prevalencia de síntomas de extremidades superiores según riesgos del puesto de trabajo, psicosociales y personales. *Salud de los Trabajadores*, 28(1), 35-45.
- Spector, P. E. (2019). Do not cross me: Optimizing the use of cross-sectional designs. *Journal of Business and Psychology*, 34(2), 125-137. <https://doi.org/10.1007/s10869-018-09613-8>
- Tabares-Díaz, Y. A., Martínez-Daza, V. A., & Matabanchoy-Tulcán, S. M. (2020). Síndrome de burnout en docentes de Latinoamérica: Una revisión sistemática. *Universidad y Salud*, 22(3), 265-279. <https://doi.org/10.22267/rus.202203.199>
- Tadić, M., Bakker, A. B., & Oerlemans, W. G. (2015). Challenge versus hindrance job demands and well-being: A diary study on the moderating role of job resources. *Journal of Occupational and Organizational Psychology*, 88(4), 702-725. <https://doi.org/10.1111/joop.12094>
- *Tavares, J. P., Lautert, L., Magnago, T. S. B. D. S., Consiglio, A. R., & Pai, D. D. (2017). Relationship between psychosocial stress dimensions and salivary cortisol in military police officers. *Revista Latino-Americana de Enfermagem*, 25, e2873. <https://doi.org/10.1590/1518-8345.1199.2873>
- *Umann, J., Guido, L. D. A., & Silva, R. M. D. (2014). Stress, coping and presenteeism in nurses assisting critical and potentially critical patients. *Revista da Escola de Enfermagem da USP*, 48(5), 891-898. <https://doi.org/10.1590/S0080-623420140000500016>
- *Useche, S. A., Gómez, V., Cendales, B., & Alonso, F. (2018). Working conditions, job strain, and traffic safety among three groups of public transport drivers. *Safety and Health at Work*, 9(4), 454-461. <https://doi.org/10.1016/j.shaw.2018.01.003>
- *Valente, M. S. S., Menezes, P. R., Pastor-Valero, M., & Lopes, C. S. (2016). Depressive symptoms and psychosocial aspects of work in bank employees. *Occupational Medicine*, 66(1), 54-61. <https://doi.org/10.1093/occmed/kqv124>
- *Vidal Gamboa, C., Palavecino Sáez, I., MoyaRivera, P., Toro Huerta, C., & Hoffmeister Arce, L. (2017). Calidad de vida del personal de salud y su relación con el ausentismo. *Ciencia & Trabajo*, 19(60), 188-193. <https://doi.org/10.4067/S0718-24492017000300188>
- *Vidotti, V., Ribeiro, R. P., Galdino, M. J. Q., & Martins, J. T. (2018). Burnout syndrome and shift work among the nursing staff. *Revista Latino-Americana de Enfermagem*, 26, e3022. <https://doi.org/10.1590/1518-8345.2550.3022>
- Xanthopoulos, D., Bakker, A. B., Dollard, M. F., Demerouti, E., Schaufeli, W. B., Taris, T. W., & Schreurs, P. J. G. (2007). When do job demands particularly predict burnout? The moderating role of job resources. *Journal of Managerial Psychology*, 22(8), 766-786. <https://doi.org/10.1108/02683940710837714>