## Methodological considerations in the study of perceived discrimination at work: a scoping review protocol

Gonzalo Bravo<sup>a</sup>\*, Alejandra Fuentes-Garcia , María Arriagada , Hector Ignacio Castellucci ,

### \* Corresponding author gbravorojas@gmail.com

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#### Postal address

7 Norte 1348, Viña del Mar, Chile

#### **Abstract**

#### Introduction

Perceived discrimination is a complex phenomenon of study and has significant repercussions on people's health. Many studies confirm the negative effects of stress on workers' health in the workplace, affecting both their physical and mental health. However, there is no consensus when investigating the construct of "perceived work discrimination".

#### Objective

To examine how perceived workplace discrimination has been investigated, considering its association with health and occupational outcomes.

#### Methods

A scoping review will be performed according to the PRISMA guidelines for scoping reviews and the Joanna Briggs Institute. We will search for published articles in english and spanish between 2000 and 2022 in the Scopus, MEDLINE/PubMed, and PsycInfo databases. Through the Rayyan application, two reviewers will independently select titles and abstracts. Then, they will review the full texts. Subsequently, relevant information about the selected articles will be extracted, and their methodological quality will be evaluated. Finally, a narrative synthesis of the main results found will be made.

#### Discussion

We expect the findings to improve methodological aspects when investigating perceived workplace discrimination, facilitating decision-making for those researchers who wish to address perceived work discrimination.

<sup>&</sup>lt;sup>a</sup> Facultad de Salud y Ciencias Sociales, Universidad de Las Américas, Viña del Mar, Chile

<sup>&</sup>lt;sup>b</sup> Escuela de Salud Pública, Facultad de Medicina, Universidad de Chile, Santiago, Chile

<sup>&</sup>lt;sup>c</sup> Facultad de Medicina, Universidad Andrés Bello, Viña del Mar, Chile

d Centro de Estudio del Trabajo y Factores Humanos, Facultad de Medicina, Universidad de Valparaíso, Valparaíso, Chile

#### MAIN MESSAGES

- ♦ Lack of consensus on how to investigate perceived work discrimination needs the development of ascope review.
- This study design is key to exploring how research on perceived discrimination in the workplace is conducted, as it allows us to summarize the available evidence in a transparent and replicable way.
- Limitations of this protocol are the restriction of the search to only english and spanish, the selection of only three databases, and the inclusion of published articles, excluding gray literature.

#### INTRODUCTION

Discrimination is a challenging concept to address during research due to the multiple characteristics that can be considered when exploring it. Discrimination can occur in different aspects of life (school, work, or others), it can be perpetrated by different actors (individuals and institutions), it can involve different forms of expression (verbal, mental, and physical), and it can occur at different levels (individual, institutional, regional, national, others). Moreover, discrimination can vary according to its intensity (mild to severe), frequency (chronic, acute, or sporadic), and duration (time interval in which discrimination is suffered) [1].

In reviewing some definitions of perceived discrimination by different authors, the common denominator is unfair treatment. Ensher et al. use as a definition "an individual's perception that he or she is treated differently or unfairly because of group membership" [2]. Similarly, Pascoe and Richman consider perceived discrimination as "a behavioral manifestation of a negative attitude, judgment, or unfair treatment toward members of a group" [3]. Meanwhile, in his review on perceived discrimination and health, Eric Allen also highlights that it is generally defined as unfair treatment based on a person's social status, which can occur from institutional structures and policies or individual behaviors [4].

In the workplace, one of the most widely used definitions in the scientific literature corresponds to that provided by Chung (2001), who defines it as the unfair and negative treatment of employees based on individual characteristics unrelated to job performance [5]. The literature is consistent regarding the effects of perceived workplace discrimination on workers' health and occupational outcomes. This is seen in the meta-analysis developed by Dhanani and Beus (2018), which confirms that at higher perceived workplace discrimination, there is higher job stress, lower perceived fairness, job satisfaction, and physical and mental health [6]. These authors also state that perceived workplace discrimination also influences the health of workers who observe discrimination [6].

One of the major difficulties when investigating perceived discrimination is how it is measured or asked about since there is no single objective way of measuring it. It also depends on whether it is studied as a dependent or independent variable. In

the latter case, from an epidemiological perspective, there are two types of measurements to quantify the effects of discrimination on health at the individual level [7]. The first corresponds to an indirect measurement. This is the case of studies that compare a traditionally discriminated group versus a non-discriminated group and then analyze the differences in a given outcome. For example, one could compare differences in mental health between migrant workers and non-migrant workers, but neither group is asked about discrimination. The second corresponds to a direct measurement, in which people are "measured" or asked about discrimination using a self-report questionnaire [7].

Of these two types of measurement, only the second case makes it possible to estimate perceived discrimination. However, self-report questionnaires are associated with several difficulties since there is no consensus on using a given questionnaire or how the perceived discrimination inquiry should be approached. Some of the challenges concerning the measurement of perceived discrimination are [4]: biases attributable to self-report (minimization and vigilance), the scarcity of studies and inconclusive results on psychometric properties, uncertainty regarding the number of questions needed for a good approach, and the way of asking questions impede comparison between studies. Added to this is the difference in approaches between the social sciences (emphasis on discrimination based on social group membership) and health sciences (focus on unfair treatment based on individual characteristics).

Based on our knowledge, there is no comprehensive review that addresses the research question: How has perceived job discrimination and its association with health and occupational outcomes been studied? Therefore, this review aims to explore how perceived workplace discrimination has been investigated, considering its association with health and occupational outcomes.

#### **METHODS**

The scoping review will be developed following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA-ScR) [8] in conjunction with the methodology proposed by the Joanna Briggs Institute [9]. This protocol was registered in an international database for recording systematic

reviews, aiming to improve research transparency and reduce the risk of bias.

#### **ELIGIBILITY CRITERIA**

Participants: this review will consider articles that have investigated perceived workplace discrimination by workers and its association with health or occupational outcomes.

Concept: the concept guiding this review is "perceived workplace discrimination". Therefore, we will include studies where the term "perceived work discrimination" is explicitly stated and those in which the term is not explicitly stated, yet, through the reading of their methodology, it is possible to confirm that workers were asked if they have felt discriminated.

Eligibility and exclusion criteria: only studies in occupational settings will be included. Therefore, studies on patients, students, or the general population will be excluded. The location of the sample will not limit the included studies.

In addition, studies that are not original articles (reviews, conference presentations, books, etc.) and in languages other than english or spanish will be excluded.

#### INFORMATION SOURCES AND SEARCH STRATEGY

Primary studies will be identified by searching the MEDLINE/PubMed, Scopus, and PsycInfo databases published between 2000 and 2022. These databases will be used, as MEDLINE/PubMed provides access to most of the biomedical scientific literature, Scopus is a multidisciplinary database containing a body of occupationally important literature, and PsycInfo is the main database covering the social sciences and psychology. The search strategy to be used includes the following terms ("employment discrimination" OR "workplace perceived discrimination" OR "perceived discrimination" OR "workplace discrimination" OR "work discrimination at work"). This strategy was developed based on identifying relevant terms in previous research.

#### SOURCES OF EVIDENCE SELECTION

After searching the databases, all identified records will be uploaded to the Rayyan web application [10], removing duplicate articles [11] and reviewing titles and abstracts will be performed. Before the two investigators begin reviewing titles and abstracts, a pilot test of the proposed eligibility criteria will be performed using three articles to resolve any disagreements prior to selection. After this, the two investigators will independently review the titles and abstracts against the eligibility criteria, determining which article will enter the review. In case of discrepancies between reviewers during the review of the title and abstract or the review of the complete text, it will be resolved by discussion with a third reviewer. The search results and the reasons for excluding full-text articles that do not meet the eligibility criteria will be recorded and reported in a PRISMA-ScR flowchart.

#### **DATA EXTRACTION PROCESS**

Two independent reviewers will extract data from the articles selected for the scoping review into a predefined template. The predefined template considers registration based on the Joanna Briggs Institute recommendation [9]: author, year of publication, country of origin, objectives, study population and sample size, methods, results, details of these results, and those key findings that relate to the question of this review.

However, before data extraction, an extraction trial will be performed, in which two investigators will obtain data from the first three articles. The results will then be compared, and changes will be made to the data extraction template if necessary. Once the data extraction sheet is obtained, two investigators will generate the corresponding records for all articles and compare them once they are complete. In case of discrepancies, a third researcher will participate in this process.

#### **BIAS RISK ASSESSMENT**

Two researchers will independently review the methodological quality of each article using the Mixed Methods Appraisal Tool [12]. This tool will be used to assess different types of methodologies, such as quantitative and qualitative.

#### RESULTS

The project started in March 2022. After formalizing the study methods and before the title and abstract selection, the protocol was registered with the International Platform of Registered Systematic Review and Meta-analysis Protocols (INPLASY) in August 2022. Data collection began in August 2022 and is ongoing at the time of submission. Data collection is expected to be completed in October 2022. Data analysis and manuscript writing will take place between November and December, with publication expected in 2023.

#### **DISCUSSION**

To the authors' knowledge, this is the first scoping review to explore and describe how research associated with perceived discrimination in the workplace has been carried out. It is important to note that there are precedents in the literature that have addressed to some extent the objective of this review, although they have different characteristics. Burkard et al. developed a review of five instruments designed to measure discrimination, prejudice, and attitudes toward diversity in the workplace [13]. Shen and Dhanani reviewed the literature on workplace discrimination between 2000 and 2014 to identify common trends regarding how discrimination is commonly studied and assessed [5]. However, none of these matches a scoping review design.

We hope that, through a broad exploration of the literature, different study designs can be included to map how research associated with perceived employment discrimination is conducted and, thus, provide recommendations for improving certain methodological aspects such as:

- Identifying which instrument should be used to estimate the prevalence of perceived workplace discrimination.
- Summarize the information to estimate the prevalence of perceived workplace discrimination.
- Summarize the information to guide researchers' decision-making.
- Establishing the psychometric characteristics of the most used instruments.

Therefore, the results of this review will be of great interest to those interested in investigating workplace discrimination and those interested in occupational and/or public health.

The strengths of this review are based on methodological aspects. First, it corresponds to the appropriate design of reviews to answer a broad question about how research is conducted in a field [14]. Second, prior to the title and abstract assessment, the protocol was registered, which translates into a lower risk of bias and ensures the transparency of the research [15]. Third, the Joanna Briggs Institute proposals and PRISMA guidelines will be used to report the results. Finally, a tool for the critical appraisal of evidence will be used.

Three limitations can be mentioned. The first corresponds to the language since only studies in english and spanish will be considered, restricting the scope of examining research associated with employment discrimination in other languages. The second is to consider only three databases. Although we believe that most of the literature is contained in these databases, literature of interest may be lost. The third corresponds to the document type since only published articles will be considered, and a search of the gray literature will not be conducted.

#### CONCLUSIONS

This study will improve our understanding of perceived workplace discrimination, which translates into better research and in turn, has the potential to improve people's working conditions. This is because better interventions can be designed if assessment techniques are improved.

#### **Notes**

#### Contributor roles

All authors contributed to the study's development and design, the drafting or critical revision of the manuscript, and the final approval of the version to be published.

#### Competing interests

The authors completed the conflict of interest declaration form of the International Committee of Medical Journal Editors (ICMJE). They declare not to receive any funding for this research, not to have financial relationships with organizations

interested in the publication of this article in the last three years, and not to have other relationships or activities that could influence the published article. The forms can be requested by contacting the corresponding author or the Journal's editorial office.

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#### Protocol registry

This protocol was registered in the international database for recording systematic reviews INPLASY (registration number: INPLASY202280009; doi:10.37766/inplasy2022.8.0009).

#### **Ethics**

This study does not require review by an ethics committee since it is an analysis based on previously published articles.

#### Origin and refereeing

Not commissioned. Externally peer-reviewed by three reviewers, double-blind.

#### Language of submission

Spanish.

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# Consideraciones metodológicas en el estudio de la discriminación laboral percibida: protocolo de una revisión panorámica

#### Resumen

#### Introducción

La discriminación percibida es un fenómeno complejo de estudiar y que tiene grandes repercusiones en la salud de las personas. En el ámbito laboral, existe un gran número de estudios que confirma los efectos negativos en la salud de los trabajadores, afectando la salud física y psicológica de estos. Sin embargo, no existe un consenso al momento de investigar el constructo "discriminación laboral percibida".

#### Objetivo

Explorar como se ha investigado la discriminación laboral percibida, considerando su asociación con salud y resultados ocupacionales.

#### Métodos

Se realizará una revisión panorámica de acuerdo con las guías PRISMA para revisiones panorámicas y del Instituto Joanna Briggs. Se efectuará la búsqueda de los artículos publicados en idioma inglés y español entre los años 2000 y 2022 en las bases de datos Scopus, MEDLINE/PubMed y PsycInfo. A través de la aplicación Rayyan, dos revisores realizarán de manera independiente la selección de títulos y resúmenes. Luego, los mismos revisarán los textos completos. Posteriormente, se extraerá la información relevante sobre los artículos seleccionados y se evaluará la calidad metodológica de estos. Finalmente, se hará una síntesis narrativa de los principales resultados encontrados.

#### Discusión

Se espera que los hallazgos contribuyan a mejorar los aspectos metodológicos al momento de investigar la discriminación laboral percibida y facilitar la toma de decisiones de aquellos investigadores que deseen abordar la discriminación laboral percibida.



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