Abstract

Objective: To characterize the knowledge that relates aging, work, ageism, and actions in worker health through a scope review. Method: Based on a guiding question and search criteria, a selection of papers was conducted between April and June 2023 in the Scientific Electronic Library Online (SCIELO), Web of Science, Scopus, Latin American and Caribbean Health Sciences Literature (LILACS), and PUBMED databases. Out of a total of 1,745 productions found, 26 papers met the eligibility criteria, all of which were published in the last 10 years. Results: From the analysis, two categories emerged for discussion: the impacts of ageism on worker health and actions for the health of elderly people in work environments. The main measures found to reduce ageism in work environments include the presence of a health team in workplaces that lead to illness and the promotion of education in gerontology for workers. Conclusion: The incipiency of studies on the aging of the worker was observed, as well as the recognition of the most common diseases among elderly people who work and the professions in which they are most vulnerable to ageism. Further investigations may provide insights for the promotion of policies attentive to elderly people in the workforce and the development of a generational organizational culture.

Keywords: Aging. Elderly People. Labor Market. Ageism. Public Policies.
INTRODUCTION

In the context of population aging, elderly people gain prominence, as they are not only more present in the workforce but also their income is necessary for families. In the study on the profile of elderly and income in Brazil, it was pointed out that out of 71.3 million households, 33.9% are composed of older adults. This group contributes approximately 70% of the total income, with 34.8% coming from work occupation and 56.3% from retirement. It is noteworthy that in the 21st century, this participation in the Brazilian labor market will increase due to the rise in the minimum retirement age with the new Social Security Reform.

Among the challenges of aging, we encounter ageism, a term developed by Butler in 1969, which refers to any prejudice related to age. This discrimination influences the formation of stereotypes, such as the representation of unproductivity. Ageism has been highlighted by political organizations, and in 2022, the World Health Organization (WHO) established a campaign to combat discrimination through the Global Report on Ageism. In it, ageism is recognized as detrimental to physical, mental, and economic health, being considered a barrier to healthy aging.

In the world of work, prejudice can occur throughout one’s working life, including during retirement. This represents a violation of human rights, with impacts on health. There are physical illnesses, mental disorders, social isolation, decreased cognition, all of which lead to a reduction in longevity. It is worth noting that for the maintenance of elderly people in the economically active population (EAP), the heterogeneity of aging must be considered, due to socioeconomic and political differences that produce different trajectories of old age marked by difficulties in accessing basic rights, such as health, housing, employment, among others.

Given the current significance of ageism and its association with the labor world, there is a quest to elucidate the relationship between old age, employment, and age discrimination in work environments, through outcomes presented in the international literature. Thus, it is expected to contribute to future national public policies in favor of the health of older working individuals.

METHOD

This is a scoping review following the Joanna Briggs Institute (JBI) methodology, conducted in the following stages: formulation of a guiding question; development of a search strategy and definition of inclusion and exclusion criteria for articles; search and selection according to established criteria; extraction, analysis, and organization of the literature; and discussion of the results. The Preferred Reporting Items for Systematic Reviews and Meta-Analysis - Extension for Scoping Reviews (PRISMA-ScR) protocol was followed. The review was registered on the Open Science Framework (OSF) platform under the following link: https://osf.io/4da3z/?view_only=174c5be60e834fa68ae75f0745104b77

For the guiding question, the Population/Participants, Concept, and Context (PCC) framework was utilized: "What has been discussed in the international scientific literature (context) regarding the relationship between ageism, work, and worker health (concept) in work environments with elderly people (population/participants)?"

The search was conducted from April to June 2023 in the following databases: Scientific Electronic Library Online (SCIELO), Web of Science, Lilacs, Scopus, and PubMed. The choice of databases was due to their extensive collection, enabling a broader retrieval of publications. The descriptors used in the search were identified based on the theme, using the Health Sciences Descriptors (DeSC/MeSH) portal. The adopted strategies are presented in chart 1.

Studies that addressed the theme of ageism/age discrimination related to the health of elderly people and worker health were included, encompassing scientific articles (quantitative, qualitative, or mixed methods), without language limitations, with a time frame of 10 years, and with free and full access. Those that did not meet the theme criteria and duplicates were excluded.

The selection process followed the stages of reading: title, abstracts, and full text. In each phase, two independent reviewers were responsible for screening, and any discrepancies were resolved through consensus, considering the inclusion criteria.
The reviewers compiled a table with the information: study characteristics (authors, year of publication, country, study design, and conclusions), resulting in chart 2 for the description of papers.

The results were inserted into the PRISMA flowchart (Figure 1). Finally, the information was discussed with the purpose of problematizing the literature findings.

The studies used are publicly available, requiring no submission to the Research Ethics Committee and repositories for research data deposition.

### AVAILABLE DATA

The entire dataset supporting the results of this study has been made available on the Figshare data repository and can be accessed at DOI: https://doi.org/10.6084/m9.figshare.25560492.v1

### RESULTS

A total of 1,745 articles were found, and after applying the eligibility criteria, 26 papers comprised the synthesis and discussion (Figure 1).

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**Chart 1.** Search strategies in the databases in the scoping review on elderly people, labor market, ageism, and worker health, 2023.

<table>
<thead>
<tr>
<th>Databases</th>
<th>Search strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCIELO</td>
<td>“ageism” AND &quot;demographic aging&quot; OR &quot;labor market&quot; OR &quot;workers age&quot; OR &quot;worker health&quot;</td>
</tr>
<tr>
<td>Web of Science</td>
<td>(((((((ALL=(ageism)) OR ALL=(stereotyping)) OR ALL=(discriminating)) AND ALL=(labor market)) AND ALL=(work)) AND ALL=(public health)) OR ALL=(occupational health)</td>
</tr>
<tr>
<td>Lilacs</td>
<td>(ageismo) OR (discriminação) OR (idadismo) AND (&quot;mercado de trabalho&quot;) OR (&quot;ambiente de trabalho&quot;) OR (trabalho) AND (&quot;saúde do trabalhador&quot;) OR (&quot;saúde ocupacional&quot;)</td>
</tr>
<tr>
<td>Scopus</td>
<td>(TITLE-ABS-KEY ( &quot;Elder work&quot; OR &quot;Older worker&quot; OR &quot;elderly health&quot; OR &quot;Force aging&quot;) AND TITLE-ABS-KEY ( &quot;ageism&quot; OR &quot;stereotyping&quot; OR &quot;discriminating&quot;)</td>
</tr>
<tr>
<td>Pubmed</td>
<td>(((ageism) AND (labor market)) OR (work market) AND (demographic aging)) OR (workers age)) AND (work health) OR (Occupational health) AND (Aging workforce)</td>
</tr>
</tbody>
</table>

Source: Authors, 2023.
**Figure 1.** Flowchart of the selection process of the scoping review on elderly people, labor market, ageism, and worker health, 2023, adapted from PRISMA 2020.

Source: Authors, 2023.
Chart 2. Characteristics of the studies included in the scoping review on elderly people, labor market, ageism, and worker health, 2023.

<table>
<thead>
<tr>
<th>Year and Country of Origin</th>
<th>Title</th>
<th>Journal</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020, England16</td>
<td>Population-based estimates of healthy working life expectancy in England at age 50 years: analysis of data from the English Longitudinal Study of Ageing</td>
<td>The Lancet Public health</td>
<td>To understand the life expectancy of older professionals in England, based on the ELSA study, as well as their health capacity to continue working.</td>
</tr>
<tr>
<td>2016, Brazil 17</td>
<td>Challenges of elderly participation in the labor market</td>
<td>Revista Brasileira de Medicina do Trabalho</td>
<td>A bibliographic and qualitative review assessing the participation of elderly people in the labor market in Brazil and public policies.</td>
</tr>
<tr>
<td>2020, Ecuador23</td>
<td>The choice of elderly labor: Evidence from Ecuador</td>
<td>RAE - Revista de análisis económico</td>
<td>To analyze the economic determinants of the decision to work among elderly people in Ecuador.</td>
</tr>
<tr>
<td>2021, Brazil 24</td>
<td>The labor market scenario for older people and the violence they suffer</td>
<td>Revista Brasileira de Geriatria e Gerontologia</td>
<td>Systematizing publications regarding the scenario of the labor market for elderly people and the situations of violence they face.</td>
</tr>
<tr>
<td>2017, Brazil 26</td>
<td>Ageism in the organizational context - the perception of Brazilian workers</td>
<td>Revista Brasileira de Geriatria e Gerontologia</td>
<td>Development and validation of an instrument to measure age prejudice in the organizational context. Its results carry practical implications, one of which is the necessity for organizations to outline actions to diminish the uncertainty and perception of insecurity surrounding age.</td>
</tr>
<tr>
<td>2022, United States 27</td>
<td>Experiences of Everyday Ageism and the Health of Older US Adults</td>
<td>JAMA Network Open</td>
<td>Examine the prevalence of age prejudice and indicators of poor physical and mental health.</td>
</tr>
<tr>
<td>2019, Italy32</td>
<td>Ageism in an aging society: The role of knowledge, anxiety about aging, and stereotypes in young people and adults</td>
<td>International Journal of Environmental Research and Public Health</td>
<td>To investigate the simultaneous relationships among knowledge, age, anxiety about aging, stereotypes regarding elderly people, as well as their relation to ageism.</td>
</tr>
</tbody>
</table>

*to be continued*
<table>
<thead>
<tr>
<th>Year and Country of Origin</th>
<th>Title</th>
<th>Journal</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023, Brazil</td>
<td>Ageism in the Academic Career: a study with professors</td>
<td>Educação &amp; Realidade</td>
<td>The application of the Ageism Scale in the Organizational Context indicated the presence of ageism at the Universidade Federal do Piauí, with negative and positive factors being dimensioned by age group.</td>
</tr>
<tr>
<td>2019, United States</td>
<td>When prejudice against you hurts others and me: The case of ageism at work</td>
<td>Journal of Applied Social Psychology</td>
<td>Through cross-sectional and longitudinal studies, age prejudice was examined regarding both young and old workers, and its relationship with intergroup contact, work behaviors, organizational identification, and well-being.</td>
</tr>
<tr>
<td>2022, United States</td>
<td>Understanding the aging workforce: defining a research agenda</td>
<td>National Academies Press (Book)</td>
<td>Shows evidence of discrimination against older workers at three levels: age-related interpersonal interactions in the workplace, age-aggregated performance profiles in the workplace, and manifestations in the labor market of productivity and age-related discrimination.</td>
</tr>
<tr>
<td>2022, Canada</td>
<td>Testing the shielding effect of intergenerational contact against ageism in the workplace: A Canadian study.</td>
<td>International Journal of Environmental Research and Public Health</td>
<td>Assessing how quality intergroup contacts between younger and older workers, as well as knowledge sharing practices, reduce discriminatory attitudes.</td>
</tr>
<tr>
<td>2016, Slovakia</td>
<td>Struggles of older workers at the labour market.</td>
<td>Economics &amp; Sociology</td>
<td>Empirical research to map the employability of older workers. The results suggest discrimination against older workers as well as the inadequacy of state employment policy in addressing older generations.</td>
</tr>
<tr>
<td>2019, United States</td>
<td>Generational differences and multigenerational teamwork</td>
<td>Critical Care Nurse</td>
<td>Understanding the importance of the multigenerational environment and its challenges, while also identifying opportunities for creativity and mutual learning among generations.</td>
</tr>
<tr>
<td>2019, Brazil</td>
<td>Ageism in Organizations: Issues for Discussion</td>
<td>Revista de Administração IMED</td>
<td>Theoretical essay aiming to discuss the ageism phenomenon in the organizational environment and its influences on the aging process.</td>
</tr>
<tr>
<td>2018, United States</td>
<td>The impact of an aging population in the workplace</td>
<td>Workplace Health &amp; Safety</td>
<td>Identifying the role of occupational health nurses in implementing best practices in the workplace conducive to the aging of workers.</td>
</tr>
<tr>
<td>2018, United States</td>
<td>Work environment and the origin of ageism</td>
<td>Springer (Book)</td>
<td>Bibliographic research based on theories and findings in scientific literature about the role of organizations/companies in fostering, preserving, or reducing age prejudice within them.</td>
</tr>
</tbody>
</table>

(to be continued)
Regarding the characteristics of the productions, a prevalence of qualitative studies in the English language is noted. In the research that employed interviews, there is a predominance of the use of questionnaires and scales in assessing age prejudice in work environments. The themes found in the articles were divided into categories discussed in the following section.

DISCUSSION

Ageism and its impacts on worker health

Longevity represents a social gain, and from this perspective, there is a need for elderly people to remain active as a means of enhancing quality of life. Work is identified as a means of inclusion and skill development\textsuperscript{16}. As the working life extends, the challenges for the worker also increase, with rights guarantees threatened by a series of factors, among them ageism\textsuperscript{17}.

Research in the field of psychology reveals that stereotypes promote a negative perception of old age. Consequently, the image of elderly people, associated with illness and unproductiveness, contributes to the devaluation of these workers\textsuperscript{18,19}. According to international guidelines, the elderly should have access to employment free from discrimination\textsuperscript{20,21}. Therefore, the advancement of ageism in the workplace is identified as a violation of the right to work\textsuperscript{8}. Due to age prejudice, the WHO\textsuperscript{10} presents proposals to structure actions for an aging society. These recommendations include intergenerationality, which refers to the interaction among people of different generations. Environments that foster generational relationships contribute to new learnings, experiences, diversity, and respect for all ages\textsuperscript{8,22}.

In countries with a significant aging population, elderly people are economically crucial, with the utilization of this workforce being a strategic measure for the economy\textsuperscript{23}. By emphasizing ageism-free employability, we must consider contributions to the health of elderly related to personal valorization and social interaction, which promote health, longevity, and well-being\textsuperscript{23}. The inadequacy of work contributes to health vulnerabilities, increasing government social expenditures, which becomes problematic in the economic and aging fields\textsuperscript{24}.

In Brazil, the Statute of the Elderly\textsuperscript{25} includes a chapter dedicated to the work of elderly people. In it, professional activities should take place in a healthy and safe environment, with attention to their physical, intellectual, and psychological specificities, with age discrimination being prohibited\textsuperscript{26}. The implications of prejudice were identified through the
ageism scale in the organizational context, applied to 600 elderly people in work activities in Brazil. In this investigation, insecurity was more relevant for older individuals, and ageist attitudes were associated with a decline in social skills. This study indicates that actions to minimize perceptions of exclusion should be included in work policies.

Research has been devoted to this topic, such as a study based on the context of the National Survey of Healthy Aging with Americans, identifying that about 93.4% of subjects aged 50 to 80 have experienced some form of age-related aggression. In this study, older individuals appeared vulnerable, leading to mental and physical health deterioration.

Daily discrimination was investigated with 2,152 American workers focusing on presenteeism. The term refers to the subject's staying at work even if there are limitations in their ability to perform their activities. Self-identified behaviors by workers included fatigue, anxiety, turnover, service quality, discriminatory acts, and labor conflicts, which were impactful on health perception and productivity.

Worker aging in Australia, as part of the Australian National Survey of Social Attitudes (AuSSA), utilized a questionnaire with 1,124 participants. This investigation contained questions about age discrimination from personal and social perspectives, daily experiences, and perceptions of discrimination in the workplace. Participants were divided into groups: 18-34 years; 35-49 years; 50-64 years; and 65 years or older. About 46% of participants of various ages indicated that ageism is common, becoming evident from the age of 50.

Furthermore, historical prejudiced constructions in the workplace are a barrier to employment opportunities and impact economic security.

In a study with 1,000 Polish participants aged 45 to 65, through a survey, ageism was classified into hard and soft forms. Hard prejudice was present in negative behaviors and in the difficulty of career development. Soft prejudice, on the other hand, was linked to personal and family contexts. In both environments, it was more frequent among women and urban residents. This article understands the demand for awareness of the role of elderly people and their potential contribution to society.

Donizzetti explores in his studies the relationships between knowledge, age, and anxiety in Italy. The sample, defined by convenience sampling and snowball method, included 886 Italians with a mean age of 35.8 years (Standard Deviation, SD = 14.2 years), predominantly female (64.8%). The age of the participants ranged from 18 to 65 years, with the following distribution among age groups: 18-25 (39.8%); 26-35 (8.1%); 36-55 (42.6%); 56-65 (9.4%). The Anxiety about Aging Scale (AAS), Fraboni Ageism Scale (FSA), Aging Semantic Differential (ASD), and Facts on Aging Quiz were used. It is concluded that negative stereotypes are formed throughout life. A similar conclusion was found in research on stereotypes among higher education teachers, where ignorance about aging was presented as a negative implication for the old age stage. These results reinforce the guideline of gerontology education in promoting positive attitudes towards the older population in the workplace.

The daily lives of workers were analyzed using an anxiety and aging questionnaire, with 647 employees aged 24 to 62. From this investigation, it emerged that prejudice is a detrimental factor to the quality of work and activities performed in groups. This condition also appears to be associated with a reduction in work life expectancy, even in countries with more advanced aging indices, as it is a decisive factor in the hiring of these professionals.

Remunerations and the reduction in career prospects are reasons associated with ageism, which not only elevate the level of workplace stress but also increase socio-economic and health risks, reduce opportunities for training, lead to morbidities, and create socio-psychological barriers among elderly people.

Regarding the differentiation in worker selection by age, a correspondence test study investigated age bias predominance in the hiring phase in the United Kingdom. It was observed that workers were penalized in terms of both quality and access to job opportunities. This situation is also noted by
Harris\textsuperscript{38}, whose analysis indicates that elderly people do not receive remuneration commensurate with their professional experience.

Concerning the hiring of elderly people and age prejudice\textsuperscript{39,40}, the need for a more structured and inclusive employment policy is evident as important measures for a workforce with an aging economically active population\textsuperscript{39,40}.

Of the 26 studies in this review, 25 focus on understanding the impacts of prejudice in the workplace from the perspective of workers. However, there is a body of literature that integrates the viewpoint of employers\textsuperscript{38}. For this group, the negative image of elderly people implies lower organizational commitment and group satisfaction, as well as an increase in counterproductive work behaviors\textsuperscript{38}. Thus, the employability of older generations was mapped with workers aged 50 and above in Slovakia\textsuperscript{39}. An attempt was made to identify the reasons why employers resist hiring older individuals, concluding that this condition is due to the inadequacy of the state’s employment incentive policy\textsuperscript{39}.

Actions for the health of elderly people in work environments

The continued presence of elderly in the workforce is not only due to the increasing older population but also to the scarcity of younger labor\textsuperscript{40}. As aging occurs in different ways in developed and developing countries, some nations are better prepared to absorb older labor force. Therefore, unsafe working conditions threaten the health of older workers, as the work may not be suitable for them\textsuperscript{41}.

A study, based on the experience of the Centers for Disease Control and Prevention with elderly people in the United States\textsuperscript{42}, considers the presence of a health team in work environments to be positive, as it facilitates the recognition of contemporary work-related issues. Furthermore, this understanding includes the impacts of discrimination on the relationship with chronic diseases and work activities\textsuperscript{42,43}.

Regarding workforce qualification, there is discussion\textsuperscript{44} about including gerontological knowledge for professionals to enable understanding of life stages with their health gains and losses. The relationship between work, aging, and worker health is considered insufficient for both gerontology and Public Health fields. Therefore, it is important to rethink concepts and policies of worker health in work contexts\textsuperscript{45}.

The perception of elderly people regarding the effectiveness of actions to enhance work capacity was highlighted through a study with employees in Germany\textsuperscript{46}. Highlighted were the exhaustive workloads, age stereotypes, deficiencies in work management, and persistent occupational insecurity, even in the face of health team interventions\textsuperscript{46}. It is considered that the protagonism of workers in the organization of health interventions may favor more effective actions for the health of professionals\textsuperscript{46}. This corroborates Brazilian legislation, as every action in the field of worker health, according to the Unified Health System (SUS), must be based on the participation of the workers themselves\textsuperscript{47,48}.

Finally, there is a need to observe the individual competencies of workers and their work demands (work environment, work organization, management) in seeking improvements for elderly people workers\textsuperscript{49}. This research considers it central to understand the differences regarding the individual capacities of older workers and their means of work as a way to enhance their participation in the labor market\textsuperscript{49}. As highlighted in the Global Report on Ageism, legislation is a structuring factor in combating prejudice. It is suggested to conduct studies to identify the effectiveness of existing national public policies in addressing prejudice in the workplace and to understand the strategies adopted by workers who deal with ageist work environments. This review may present as a limitation the temporal scope of the last 10 years and the exclusion of grey literature such as theses and dissertations that could address the topic.

CONCLUSION

In the face of a society with greater longevity and its impacts on the labor market, this review has discussed the relationship between aging, work,
ageism, and the health of the worker, positioning it as a novel challenge for labor policies targeting elderly people. In this trajectory, ageism has emerged as one of the factors leading to workplace conflict, exclusion, and both mental and physical health issues, thus representing a problem still largely unaddressed within work environments.

The findings indicate that even international scientific research on this topic is scarce, despite its significant social and economic relevance. Knowledge gaps can be addressed by incorporating social perspectives, variables such as race and gender, and educational background, considering the disparities in access to work and the prejudice faced by socially diverse individuals.

Through analysis, it is essential to consider the involvement of elderly in the labor market from an economic perspective, as well as understanding the types of work-related illnesses and the age groups most vulnerable to them, the impacts of ageism on health, and the professions that predominantly employ elderly people.

In summary, the research revealed data highlighting the importance of corporate and public practices in promoting intergenerationality in the labor market, including training programs and professional recognition initiatives. Future research endeavors are suggested to explore the correlation between occupational health policies and the health of elderly people, aiming to rethink the landscape in this field and develop public policies that specifically address the elderly who remains in the workforce.

AUTHORSHIP

- Priscila de Freitas Bastos Pazos - conception and design, data analysis and interpretation, paper writing and critical revision, approval of the version to be published, responsible for all aspects of the work, ensuring accuracy and integrity throughout.
- Aldo Pacheco Ferreira - critical revision and approval of the version to be published.

REFERENCES


8. Organização Pan-Americana da Saúde (OPAS). Relatório mundial sobre o idalismo. Washington: OPAS, 2022; Available at: https://doi.org/10.37774/9789287524453


36. National Academies of Sciences, Engineering, and Medicine; Division of Behavioral and Social Sciences and Education; Committee on National Statistics; Committee on Population; Committee on Understanding the Aging Workforce and Employment at Older Ages at Becker T, Fiske ST, editors. Understanding the Aging Workforce: Defining a Research Agenda. Washington (DC): National Academies Press (US); 2022;


