



Universidade de Évora - Instituto de Investigação e Formação Avançada

Programa de Doutoramento em Gestão

Tese de Doutoramento

Work-related ageism: management challenges

Maria Manuela Jacob Cebola Luzia Reis

Orientador(es) | Andreia Teixeira Basílio
Nuno Rebelo dos Santos

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Abstract

The present investigation aims to identify management challenges regarding work-related ageism, especially concerning a hiring process or the recognition and award of professional merit, and to propose strategic measures to prevent and manage ageism that are useful for organizations and people management. A SLR was carried out to obtain a comprehensive and accurate picture of the empirical research on worker-related ageism. Then we conducted a study on the relationships between ageism and decent work and the workplace relationships intergenerational climates in workplaces. Simultaneously, we conducted the necessary procedures to develop and validate the Nordic Age Discrimination Scale (NADS) and the Workplace Intergenerational Climate Scale (WICS). Two other gaps we sought to respond to, contributing to the field of research and management, were the scarcity of experimental studies and studies on the public recognition of professional merit. To this end, we conducted an experimental design study to evaluate how peers discriminate by age against candidates for a job and a professional merit award. The complementarity of this study contributes significantly to the area of research and management and provides a valuable resource for future research in this area. It highlights how the negative and positive correlations between ageism, decent work, and intergenerational relationships at work are interrelated and how they influence each other. The study proposes strategies designed to help minimize ageism in selecting candidates from CVs, maximizing the added value that each individual can bring to the organization and the economy by avoiding denying opportunities to skilled and talented individuals based solely on age. Furthermore, these strategies help minimize adverse mental health outcomes associated with ageism in the workplace, which also benefits companies and organizations due to the lower rate of absenteeism among their workers due to mental illness associated with ageism.

Keywords: Ageism, Ageing, Ages, Workplace, Decent Work.

Resumo

Idadismo relacionado com o trabalho: Desafios de gestão

A presente investigação tem como objetivo identificar os desafios de gestão relativos à relação idadismo e trabalho, especialmente no que diz respeito ao processo de contratação ou ao reconhecimento e atribuição do mérito profissional, e propor medidas estratégicas de prevenção e gestão do idadismo que sejam úteis para as organizações e para a gestão de pessoas. Foi realizada uma RSL para obter uma imagem abrangente e precisa da investigação empírica sobre o idadismo relacionado com os trabalhadores. Realizámos um estudo sobre as relações entre o idadismo e o trabalho digno, e as relações intergeracionais nos locais de trabalho e, simultaneamente, efetuámos os procedimentos necessários para desenvolver e validar dois instrumentos de medição do idadismo. Empreendemos um estudo de desenho experimental para avaliar como os pares discriminam por idade os candidatos a um emprego e a um prémio de mérito profissional. A complementaridade deste estudo destaca como as correlações negativas e positivas entre o idadismo, o trabalho digno e as relações intergeracionais no trabalho estão inter-relacionadas e como se influenciam mutuamente. A abordagem única de desenho experimental do estudo permite uma melhor compreensão do idadismo implícito e explícito na força de trabalho. O estudo propõe estratégias concebidas para ajudar a minimizar o idadismo na seleção de candidatos a partir de currículos, maximizando o valor acrescentado que cada indivíduo pode trazer para a organização e para a economia, evitando negar oportunidades a indivíduos qualificados e talentosos com base apenas na idade. Além disso, estas estratégias podem ajudar a minimizar os resultados adversos para a saúde mental associados ao idadismo no local de trabalho, o que beneficia também as empresas e organizações pelo menor índice de absentismo dos seus trabalhadores por doença mental a ele associados.

Palavras-Chave: Ageism, Ageing, Ages, Workplace, Decent Work.

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Abbreviations

AI – Artificial Intelligence

(CRD) – Center for Reviews and Dissemination

CV – *Curriculum Vitae*

DWQ – Decent Work Questionnaire

EUROSTAT - Statistical Office of the European Union

Gen X – Generation X

Gen Y – Generation Y or Millennials

Gen Z – Generation Z or Digital Generation

HR – Human Resources

HRM – Human Resources Management

IC – Intergenerational Contact

ILO – International Labour Office

LGS - Lack of Generational Stereotypes

NADS – Nordic Age Discrimination Scale

PIA – Positive Intergenerational Affect

PRISMA – Preferred Reporting Items for Systematic Reviews and Meta-Analyses

SLR – Systematic Literature Review

UK – United Kingdom

UN – United Nations

USA – United States of America

UNECE – United Nations Economic Commission for Europe

WGI – Workplace Generational Inclusiveness

WICS – Workplace Intergenerational Climate Scale

WIR – Workplace Intergenerational Retention

WoS – Web of Science

1 Introduction

The shift from an industrial economy to a knowledge economy brought a significant change in the market paradigm of the 20th century, which has led to a shift in the sources of competitive advantage from labor and natural resources to knowledge (Drucker, 1999). In critical sectors of an economy, qualified human resources or a differentiated scientific base are decisive (Porter, 1998). In current times of change, human resources are multigenerational, bringing new management challenges.

The changing demographics due to an aging global population, especially in Europe and North America, along with increased mobility of people and the rising number of older workers in the job market, coupled with technological and digital advancements, are forcing organizations to adapt and alter their workforce management strategies. Besides, people live longer and have a stronger desire to continue working even after the age of 60, which, combined with economic insecurity, means that people aged 60 and over have the potential to work productively for many years.

In today's knowledge-based economy, businesses and organizations face immense pressure to remain competitive. To succeed, they must be agile, speedy, and innovative. They must leave their comfort zones, be innovative and strategic, and identify new ways of positioning themselves, managing, and communicating externally and internally. Furthermore, they must be able to manage their workforce effectively and focus on their human capital without any prejudice, given that knowledge, the essential raw material, is held by people. However, it is important to note that the prolonged presence of older workers in the job market and the entry of new generations can create workplace climates conducive to ageism, especially if there is no attentive and efficient management on the part of companies and people's management.

It should be noted that ageism is prejudice or age discrimination of one age group against other age groups, based on systematic stereotyping (Butler, 1969; Palmore, 1999). It is based on prejudice regarding age, like others regarding skin color, sex, or race (Butler, 1980; Palmore, 2001), which leads to explicit or implicit discriminatory behaviors in how someone looks or perceives others (Palmore, 2001). Researchers began by accepting that ageism only concerned older people, with the first studies focusing only on these workers (Butler, 1980; North & Fiske, 2013b; Palmore, 2001, 2004). Additionally, North & Fiske (2013b) considered that ageism

about the older should be subdivided into old-old and young-old. A few years later, other researchers start looking at ageism in younger people, and some studies appeared, although much smaller in number (Bratt, Abrams, Swift, Vauclair, & Marques, 2018; Loretto, Duncan, & White, 2000; Macdonald & Levy, 2016).

On the one hand, ageism takes a subtle form in attitudes; on the other hand, it has the unique characteristic that anyone can be subject to it (Butler, 1969; Palmore, 2001), as age is something inherent to life. It is also essential to keep in mind that ageism is not perceived in the same way by all individuals, given that the combination of age with race, gender or territory of origin, to name just a few, can in itself accentuate or exacerbate this prejudice. Its complexity includes cognitive (perceptions and images of others based on age), affective (prejudice), and behavioral (discrimination) components, is expressed positively and negatively and is present at the micro (intrapersonal), meso (social networks), and macro (institutional/organizational) levels. As for the workplace, ageism acts in various aspects, such as obstacles in the hiring process, employability, and performance evaluation.

Today's workforce is more diverse than ever, with individuals from various ages, cultures, races, and genders. Factors such as longevity, intergenerationality, diversity of work methods, and workers' ways of being require organizations to be more attentive, creative, and flexible to retain experienced workers while at the same time attracting and capturing young, and talented workers regardless of their age. Managing people within organizations can be challenging, influenced by various factors, including demographic, economic, business, environmental, social, and cultural considerations. Managers must thoroughly understand these factors and their impact on workers to manage and lead their teams effectively. However, intergenerationality, in its different characteristics and skills, can be a driver of conflicts in the workplace that can be, in many cases, a cause or consequence of ageism.

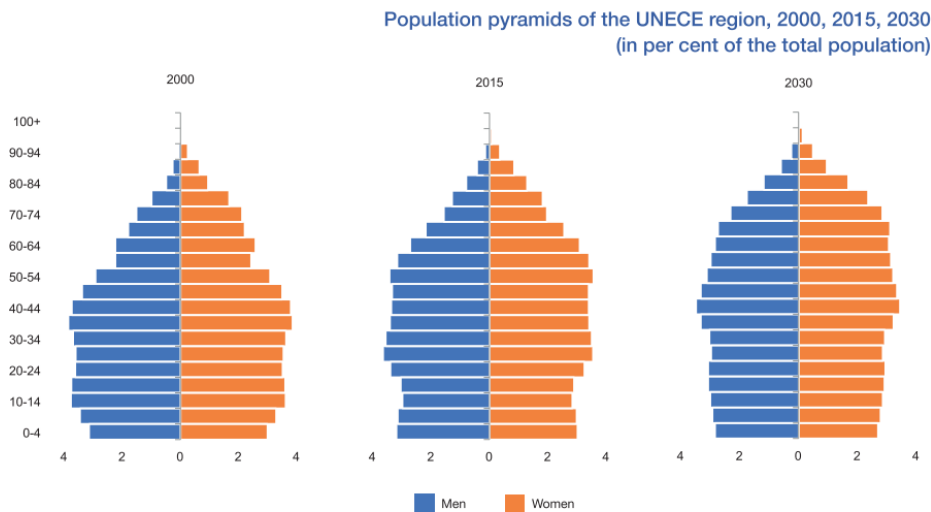
People are the most important source of a company's sustainable competitive advantage due to their ability to create and use knowledge (Nonaka, 1991; Nonaka & Toyama, 2003); they are an organization's most important resource in the new knowledge economy. It is essential to prioritize talent and invest in the development of workers if the companies and organizations want to ensure long-term sustainability. In an increasingly competitive and demanding market, the most qualified and sought-after workers have the power to determine their professional paths, and businesses and organizations must adapt to this new reality to attract and retain the best talent, regardless of their age. Organizations must also be strategic in their HR management, which implies knowing well and managing their workforce, often

multigenerational, to minimize conflicts and increase cooperation to capture and transfer critical knowledge for their success.

Furthermore, the job market is constantly evolving, and keeping up with the skills required in today's workforce is crucial. According to the Future Work Skills 2020 report (Davies, Fidler, & Gorbis, 2011), several new skills are becoming increasingly important. These include critical thinking, social intelligence, interculturality, and the ability to filter and understand information. These skills are crucial when working with a multigenerational workforce with varied educational and cultural backgrounds. In addition, other essential skills are required in today's workforce, such as emotional intelligence, social skills, adaptive and creative thinking, transdisciplinarity, computational thinking, digital literacy, media literacy, the ability to design and develop tasks and processes, virtual collaboration, and the ability to use artificial intelligence and automation (Bernard Marr, 2023; Davies et al., 2011; OECD, 2019). While some of these skills may be more pronounced in younger generations, they are not exclusive to them. Assuming otherwise is already a form of ageism. Nevertheless, understanding and managing these differences is vital to creating a productive, collaborative work environment that leverages all team members' strengths and the human capital of companies and organizations. In this way, organizations foster their intellectual capital, allowing them to reflect and use the thinking, knowledge, creativity, and decision-making their workers possess and share, offering them voluntarily (Kaplan & Norton, 2004).

It is concerning that the world's population is aging at such a rapid pace. According to recent estimates (United Nations (UN), 2019a), the number of older adults aged 60 years or older is expected to double by 2050 in Europe and Northern America. It is concerning that Europe and Northern America currently have the second highest percentage of the population aged 60 and over (28.5%). It is even more alarming that every region of the world except Africa will have nearly a quarter or more of the respective populations aged 65 and over by 2050. Sustained low fertility levels (below two births per woman since the mid-1970s), low mortality and high emigration rates contribute to this trend. It is crucial to start thinking about addressing these demographic changes and adapting organizations to an aging population.

The following figure shows us the changes in the population pyramid, which have repercussions throughout society, including the job market.



Source: Based on the United Nations, Department of Economic and Social Affairs, Population Division (2017). *World Population Prospects: The 2017 Revision, DVD Edition*.

Source: United Nations Economic Commission for Europe (UNECE), (2019)

Figure 1.1

Aging and the changes in the population pyramids

While the share of working-age adults (25 to 64 years old) is expected to increase from 42 percent in 1990 to 49 percent in 2050, the proportion of young people (15 to 24 years old) is likely to fall from 19 to 14 percent in the same period (United Nations (UN), 2019a). The growing disproportion between the population over 65 and younger has social, economic, financial, and labor market consequences. To address this issue, governments have implemented policies encouraging people to work longer, which has positive and negative effects. On the one hand, it has led to the coexistence of four generations in the workforce that can even work together in the same organization, which is unprecedented. However, it is not uncommon to see conflicts arising between different age groups in the workplace, often due to ageism (ADP, 2015; Djabi & Shimada, 2013; Posthuma & Campion, 2009; Vendramin, 2009). Each generation brings unique, specific characteristics to the workplace, shaped by their environments and historical and social experiences. These differences can sometimes lead to misunderstandings and conflicts, which can be challenging to overcome.

The current workforce comprises four generations, with Baby Boomers being one of them. Born between 1946 and 1964, they are known to be individualistic, driven by personal achievement, and workaholics (Kupperschmidt, 2000), sometimes leading to difficulty balancing their work and family life (Berkup, 2014). Despite being raised to respect authority, this generation is often skeptical of it (Berkup, 2014). They expect feedback and recognition for their hard work. Baby Boomers value teamwork to achieve their personal goals, although

they are competitive in their professional lives. They have high expectations for themselves and are often willing to work long hours to achieve their goals (Clark, 2017). Baby Boomers prefer being appreciated through monetary incentives, bonuses, and status symbols such as titles and parking spots (Berkup, 2014; Kupperschmidt, 2000). With the advent of technology, some Boomers have learned to work more efficiently, leading to a more balanced lifestyle and free time (Favero & Heath, 2012).

Generation X was the first to think globally and was significantly influenced by globalization (Berkup, 2014). They are more self-reliant and skilled and prioritize personal career growth over organizational loyalty (Kupperschmidt, 2000). For the Generation X, feedback, career security, and improvement are important motivators. They prefer the freedom to do things their way and prioritize their personal career growth instead of organizational loyalty (Srinivasan, 2012). They value skill development and productivity and do not want to work in a company where they cannot progress in their career (Berkup, 2014). This generation value their quality of life and consider their work just a part of their lives (Favero & Heath, 2012), expecting flexible working hours, a pleasant work environment, and skills-based promotion (Berkup, 2014).

Millennials, also known as Generation Y, were born between 1978 and 1990. They are the world's first technological and global generation (Srinivasan, 2012) and have grown up in a rapidly changing world, making them well aware of the pace of change. Education is the key to success in their business life, and they consider the workplace an opportunity to learn as they believe in the importance of lifelong learning. They can concentrate on more than one job at a time and prefer individual work supported by coaching. They are not impressed by the title and position and do not like orders and hierarchy. Instead, they need a manager who believes in and supports them (Berkup, 2014), and they prioritize social responsibility. Millennials often seek organizations that align with their values, value volunteering, and look for opportunities to make a positive impact (Clark, 2017). Work-life balance is a priority for this generation, and they seek jobs that offer flexibility, telecommuting options, and the ability to continue their education or volunteer while maintaining their careers. Personal life is valued, and they strive to balance work and other activities (Krywulak & Roberts, 2009).

The Z generation is the first to be born into a technologically advanced and globally connected world. They are often called technology addicts who use the internet to communicate with people worldwide, share information, and play internet-based games. They enjoy being online and getting their information from the internet. They have a short attention span and are

often interested in multiple subjects simultaneously (Berkup, 2014). This generation is accustomed to quick and instant results due to the impact of technology, making them impatient like Generation Y (Parker & Igielnik, 2020). They believe that anything is possible in the world and can do everything with their equipment. They are self-reliant, collaborative, efficient, and innovative (Katz, 2022).

Population aging had and still has varied impacts in different regions and countries. Forward-looking policies and programs are crucial to achieving the sustainable development goals outlined in the 2030 Agenda for Sustainable Development. Many businesses and organizations are already aware of this reality. However, with an intergenerational workforce and increasingly older workers, it is necessary to expand this awareness so that companies and organizations can strategically manage their Human Resources allied to their commercial strategy, brand, market positioning, social responsibility, and sustainability.

The dynamics and volatility of the present lead to the need to think about the future for better preparation and anticipation, and HRM and decision makers must envision the future they want for their organizations, anticipating multiple scenarios, hypotheses, or possible events simultaneously relevant, coherent, plausible, meaningful and transparent (Godet, 1976, 2000; Godet & Durance, 2006; Godet & Roubelat, 1996) allowing human resources management to be managed effectively and aligned with companies' objectives and strategies. Intergenerational relationships in the workplace, ageism, and aging are inseparable factors in these scenarios.

And because ageism is a form of prejudice and discrimination that materializes in a deficit of decent work, this study aims to answer the research question "How does ageism relate to decent work, and what consequences does it have on access to job opportunities and recognition of excellence at work?"

To answer this question, we set out a path in which we first sought to obtain a comprehensive and accurate picture of empirical research on worker-related ageism and which gaps and directions we could open for further studies. For this, we carried out a Systematic Literature Review (SLR). This systematic review followed the guidelines of the Center for Reviews and Dissemination (CRD) at the University of York (CDR 2009) and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Moher, Liberati, Tetzlaff and Altman 2009). This review, *Worker-related ageism: A systematic review of empirical research*, was published online by Cambridge University Press: 25 October 2021, in the journal *Ageing & Society* (Cebola, dos Santos, & Dionísio, 2021).

In the second phase, to answer the first part of our research question, "How does ageism relate to decent work" we seek to analyze the relationships between age discrimination, intergenerational work relations, and decent work. One of the gaps verified in the SLR was the scarcity of instruments to measure ageism, particularly in Portugal. For this purpose, we undertook the procedures required to develop and validate the Nordic Age Discrimination Scale (NADS) and the Workplace Intergenerational Climate Scale (WICS).

The Nordic Age Discrimination Scale (NADS) is a tool that was created to assess age discrimination in the workplace. It comprises six items, each corresponding to a potential age-related workplace discrimination area. These areas include promotion, training, development, appraisal, wage increases, and change processes. These are the most common areas where age discrimination occurs in the workplace. By using the NADS, we can identify and address any instances of age discrimination that may be present in the workplace. The Workplace Intergenerational Climate Scale (WICS) is a tool that measures the attitudes and perceptions of employees about workers of different ages in the workplace. These dimensions are linked to workplace orientation, opinions about older workers, and job satisfaction. Preliminary evidence from the Portuguese versions of the Nordic Age Discrimination Scale (NADS) and the Workplace Intergenerational Climate Scale (WICS) showed good reliability, of the NADS (Cronbach's alpha = .85) and the WICS (Cronbach's alpha = .80). The validity of the two instruments is given by conceptual opposition, with the NADS being negatively correlated with the WICS.

Given these results, we were able to move on to the next step. We aim to verify how ageism correlates with intergenerationality and decent work and what correlations exist between decent work and intergenerationality. For this, we used the Decent Work Questionnaire (DWQ). The Decent Work Questionnaire (DWQ) is an important tool in identifying factors contributing to a worker's perception of decent work, which consists of seven factors. These factors are all important in shaping an employee's perception of their work and occupational context, and they can provide valuable insights into how to improve working conditions and promote job satisfaction. This chapter, *Ageism, Intergenerational Work Relations, and Decent Work* is an article to submit.

In the third phase, we carried out an experimental study, with two samples, to assess how peers, that is, how workers, recently unemployed or recently retired, discriminate candidates by age for a job and a professional merit award. The study was carried out in two parts, one for job applications and one for professional merit awards. The participants were

presented with the requirements for each task and asked to select the curriculum that best suited the selection criteria. Then, we analyzed the data collected to determine the role of age in the decision-making process. As the chapter before, we are to submit this chapter, *Age Discrimination in Work-Related Decisions: An Experimental Design Study*, as an article.

When studying a phenomenon, it is important to approach it from different angles and methods. It helps to ensure that we have a more well-rounded understanding of the topic and that our findings are more reliable and credible. By integrating different study methods, we can gain a deeper insight into the reality of the situation and ensure that our conclusions are grounded in solid evidence. Choosing different study methods is a valuable strategy for anyone who wants to understand a topic more thoroughly.

Our main objective is to identify management challenges regarding work-related ageism, especially concerning a hiring process or the recognition and award of professional merit, and to propose strategic measures to prevent and manage ageism that are useful for organizations and people management. To this end, we fulfilled the specific goals outlined in the studies submitted and to be submitted, which are chapters of this dissertation. We hope these measures will help combat ageism and promote inclusion in the workplace.

So, this thesis is organized as follows: In the next chapter, we analyze previous empirical research on ageism related to workers, presenting our RSL, which has already been published. In Chapter 3, we present the correlations between ageism, decent work, and the intergenerational climate in the workplace. It is an article that is already under submission despite having yet to be published. In Chapter 4, we present the experimental design study on age discrimination in work-related decisions, our second article in submission. In Chapter 5, we present the conclusions drawn from our research and provide guidance on addressing management challenges and directions for further research.

2 Worker-related ageism: A Systematic Review of Empirical Research

Abstract

With the demographic and workforce ageing, ageism has been reflected in the work context. Ageism can be defined as stereotypes, prejudice and/or age-based discrimination. It is a form of devaluation and non-inclusion of workers, which materializes in a decent work deficit. It affects workers and organizations. The present literature review aims to provide a comprehensive and accurate picture of empirical research on worker-related ageism. We searched the word *ageism* in the title or abstract of articles indexed in the EBSCOhost and Web of Science (WoS). Fifty-eight peer-reviewed articles were retrieved (March 2020). Some of these articles report more than one empirical study. Thirty-two articles include quantitative design studies, 20 qualitative design, three mixed methods, two experimental and three instrument development and/or validation. The focus of the studies is mostly about negative ageism on older workers. The main findings present several facets of ageism and show different experiences, whether implicit or explicit. Ageism acts in a plurality of aspects, such as obstacles in the hiring process, employability, and performance evaluation of older workers. We found research gaps such as determinants and interventions aiming at ageism prevention and proposed corresponding future research.

Keywords: Ageism, Workers, Employees, Workplace, Workforce, Labor Market

2.1 Introduction

This study aims to characterize the empirical research on worker-related ageism by undertaking a systematic review of the literature and deepening the conceptual approach of the concept. Furthermore, we aim at identifying the existing gaps in the research carried out so far and state new conceptual propositions and new lines of research. We offer new inputs to those who intend to design and implement interventions to combat worker-related ageism.

The study of ageism in scientific literature started in 1969 when Butler (1969: 243) coined it for the first time as "age discrimination or ageism, prejudice by one age group toward other age groups". Despite this definition, Butler's article related to the elderly population and the early studies have been focused only on the ageism against the older people (Butler 1980; North and Fiske 2013; Palmore 2001, 2004). Furthermore, the first empirical research article on worker-related ageism appeared only in 1983 and the second one ten years later.

The main components of ageism are discrimination due to age, or the prejudice of one age group against other age groups, based on systematic stereotyping (Butler 1969; Palmore 1999), which according to Jost and Hamilton (2005) definition is: fixed ideas, beliefs, which attribute psychological characteristics to others, and which justify the acceptance or rejection of a group. In its complexity includes cognitive (perceptions and images of others based on age), affective (prejudice), and behavioral (discrimination) components, is expressed positively and negatively, can be implicit and explicit, and is present at the micro (intrapersonal), meso (social networks), and macro (institutional/organisational) levels. It can be conscious and include exploiting the vulnerabilities of the older people or the young or be unconscious and inadvertent (ILC-USA 2005).

The unprecedented demographic changes as a result of increased longevity and the extremely low birth and death rates, especially in Europe and North America, led to the ageing of the global population (European Commission 2015b; Rouzet, Sánchez, Renault and Roehn 2019; United Nations (UN) 2019a, 2019b). The proportion between the active population and people aged 65 and over has been steadily declining for several decades. This context profoundly challenges the sustainability and management of organizations that promote and generate paid work, health care, social security, and retirement (Gahan, Harbridge, Healy and Williams 2017; Lagacé, Nahon-Serfaty and Laplante 2015; Rouzet *et al.* 2019). Older workers tend to prolong their working lives. Often they find in ageism an obstacle to their well-being, to productive employment, to training and qualification opportunities (Cebola 2016; Garcia,

Fontainha and Passos 2017; Unson and Richardson 2013), and job satisfaction, commitment and involvement (Macdonald and Levy 2016).

Ageism is a transversal phenomenon. It observed in the work context in different countries, expressed in many ways. For example, in discrimination regarding selection and access to job vacancies (Drydakis, MacDonald, Chiotis and Somers 2017; Garcia *et al.* 2017; Jones, Sabat, King, Ahmad, McCausland and Chen 2017), pressure to retirement (Thorsen, Rugulies, Løngaard, Borg, Thielen, and Bjorner 2012), negative stereotypical images, devaluation of older workers (McMullin and Marshall 2001), relational discomfort (Dixon 2012), and the stress that arises from the imposition of the youth of the image of women, particularly on TV (Spedale, Coupland and Tempest 2014). Regarding younger workers, ageism can be expressed in the lack of confidence in their age/experience (Loretto, Duncan and White 2000), in not being taken too seriously (Jyrkinen and Mckie 2012) or in barriers to promotion (Duncan and Loretto 2004). Ageism can be expressed in legally prohibited behaviors (hard ageism) or in behaviors that, not being prohibited, affect their targets negatively (soft ageism), often in the interpersonal sphere (Stypinska and Turek 2017). The concept evolved and is no longer described or studied only concerning the elder (Butler 2005; Hooyman 2003; Levy and Macdonald 2016; Palmore 2001, 2004) but also concerning the younger (European Social Survey 2012; Raymer, Reed, Spiegel and Purvanova 2017). Ageism can also have a positive characteristic that seems empathetic but is paternalistic and discriminatory instead, leading to negative ageism (Chonody 2016; Iversen, Larsen and Solem 2009; Lagacé *et al.* 2015).

Ageism being depreciation and non-inclusion that affects workers results in a decent work deficit (ILO - International Labour Office 2001). Therefore, its importance, combat and concern are expressed in the Declaration on Fundamental Principles and Rights at Work (ILO 1998) and in the Decent Work Agenda (Ferraro, Pais, dos Santos and Moreira 2018; ILO - International Labour Organization n.d.). The Sustainable Development Goals of the Agenda 2030 (UN 2015) also express this concern, namely in objectives 3, 4 and 8, focusing on social inclusion and decent work.

The psychological and sociological approach to ageism, at the individual level, can be made by the theory of terror management: from death – to which ageing leads – in a response of avoidance and detachment; from the threat of deterioration of the physical body and physical appearance that reminds us of our mortal nature (which opposes the current apology for physical health and youth); and from insignificance, through the loss of skills and resources that

conditions positive self-esteem. This approach is complemented by two other theories, the stereotype embodiment theory – age stereotypes and negative attitudes internalised and incorporated throughout life; and the social identity theory – the identification related to interpersonal and intergroup behaviors (Lev, Wurm and Ayalon 2019).

The psychological approach explains ageism in the intrapsychic reasons for simplifying reality (uncertainty reduction) and valuing the ingroup (those of the same age) compared to the outgroup (those of other ages, the oldest, the youngest, etc.). The sociological approach highlights the importance of the context in the following ways: (i) different places where it occurs (workplace, family, society); (ii) cultural and cross-cultural perspective (local, regions, national and/or international).

Ageism can hit all age groups, although there is a great deal of agreement that older people are more significant victims of this scourge with the ageing of the population. However, reverse ageism – ageism directed at young people – is also an important issue. Some authors even claim that younger people have related more perceived age discrimination than older ones (Bratt, Abrams, Swift, Vauclair and Marques 2018).

Given the ageism-related problems for individuals, organizations and society, its combat requires a comprehensive study that describes, maps, explains and prevents or remedies it. Empirical research undertaken so far is enough for deserving a literature review, and it is of great use to public policy and intervention. It is helpful to take stock of the empirical research and propose new avenues for future developments. Jones *et al.* (2017) conducted a meta-analysis in which they sought to understand the relationship between prejudice and discrimination in the workplace concerning gender, age, and race. However, their target was not workers.

Additionally, more than double were students, and the rest were undifferentiated. Their meta-analysis is essential to understand the prejudice-discrimination relationship in the workplace. However, it does not address the main findings and purposes of the empirical research conducted on worker-related ageism.

2.3 Method

2.3.1 Literature search and inclusion criteria

This systematic review follows the guidelines by the Centre for Reviews and Dissemination (CRD) at the University of York (CDR 2009) and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Moher, Liberati, Tetzlaff and Altman 2009). This review includes only empirical research reported in English, focused on worker-related ageism (workers/labor market/workplace/workforce) published in peer-reviewed journals.

2.3.2 Procedure

We searched the electronic academic databases EBSCOhost (Academic Search Complete, Business Source Complete, Directory of Open Access Journals, ERIC and Science Direct) and Web of Science (WoS) (Core Collection) until March 2020.

Figure 1 shows the different combinations of keywords applied. We retrieved 381 articles after duplicates removed. After all rounds and eliminating the articles that did not meet the eligibility criteria, we retain 58 articles for analysis. Figure 1 describes the process.

2.4 Results

2.4.1 Study characteristics

Research on ageism in the labor market is relatively recent. Most studies analyzed were published post-2000, only 15 articles before 2010, and just three before 2000. Most of the studies were from the USA (12) and UK (9). The others were from the following countries: Australia, Canada (4), Belgium, New Zealand, Norway, Sweden (3), Finland (2), Brazil, Czech Republic, Denmark, France, India, Japan, Netherlands, Poland, Spain, Finland and Scotland, Netherlands and Germany, UK and Hong Kong, Portugal and Brazil, the USA and Canada, and the USA and New Zealand (1), as shown in Appendix A.

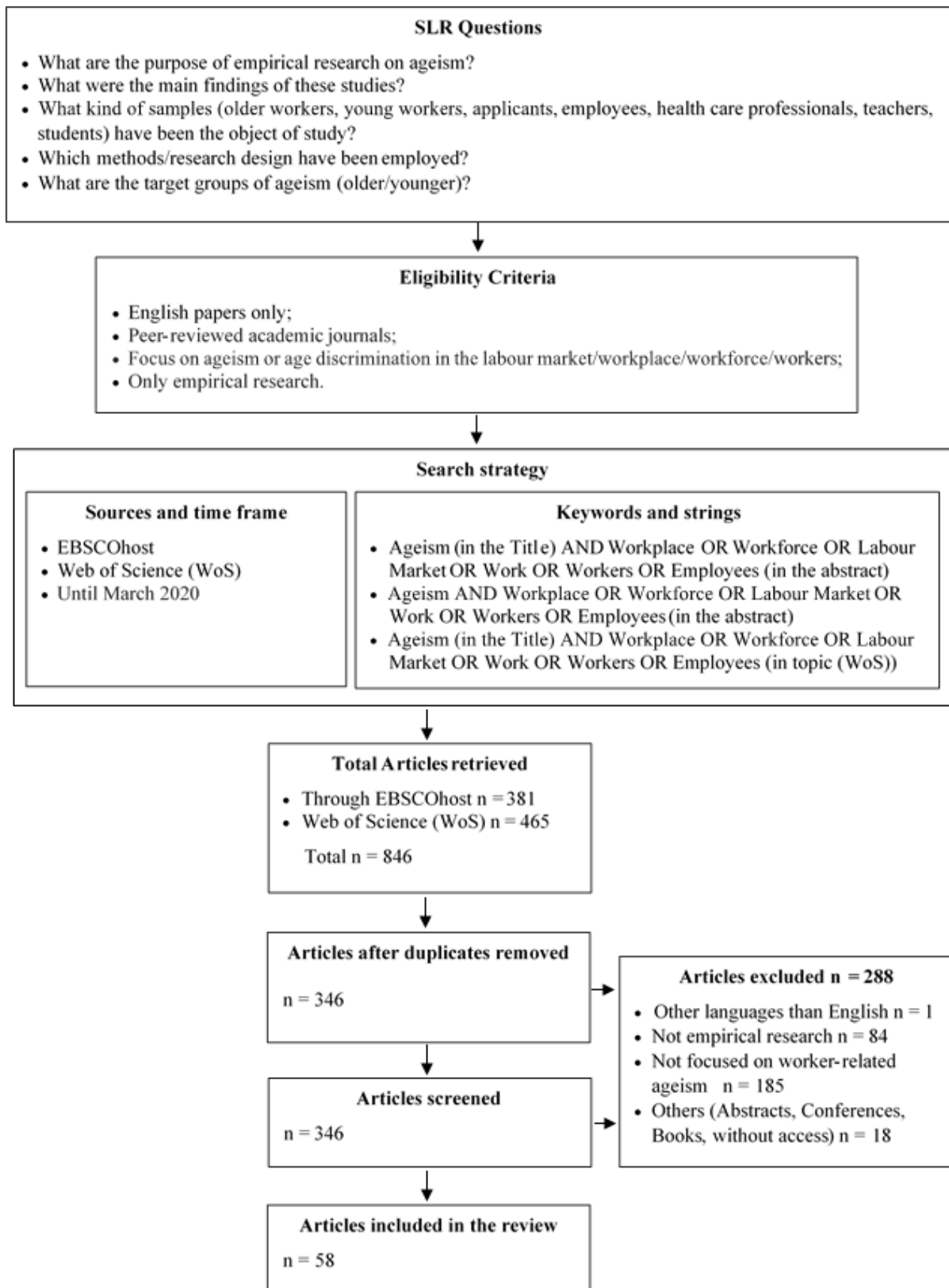


Figure 2.1

Flow diagram of articles selection

The sample sizes are highly diverse, ranging from one to 4,852, and are composed of applicants, job-searchers, workers, recruitment texts, government web pages and even a text of a final judgment of an employment tribunal court case. Ten articles had research with samples aged explicitly over 45. Just two had ages specifically less than 50, one article had a sample above 18 years old, and three studies had students' samples (workers or with work experience). In addition, 35 per cent of samples are under 100, 32 per cent from 100-500, 15 per cent from 501-1000, and 18 per cent above 1001.

Most studies adopted a quantitative approach (33), followed by those using a qualitative approach (21). In their article Iweins, Desmette and Yzerbyt (2012) have two studies, one used a quantitative approach, and the other adopted an experimental approach. Two studies followed a mixed research design, and three reported instrument development.

2.4.2 Research objectives and main findings

Considered the objectives and the main findings of the studies, seven main categories emerged:

Category 1

The most represented one is diagnosis studies. Twenty-seven articles report research aiming to identify and describe the prevalence of ageism (Table 2.1). All studies found some ageism in the corresponding samples, going from the hiring process and employability, the severity with which the performance of older workers is evaluated, to retirement, making salient that the psychological process behind ageism crosses all the working life span.

Table 2.1

Diagnosis studies on ageism

Reference & Place	Objectives	Main findings on ageism
Ahmed, Andersson, and Hammarstedt, 2012; Sweden	To investigate whether people are discriminated against in the hiring process based on their age.	Younger applicants receive more call-backs for interviews.
Allen, Armstrong, Riemenschneider, and Reid, 2006; USA	To investigate the standpoint of female IT employees related to workplace barriers and voluntary turnover.	Ageism emerged in the implicit map of women working in IT as a promotion barrier and "had an impact on Lack of Respect".

Reference & Place	Objectives	Main findings on ageism
Amorim, Fischer, and Fevorini, 2019; Brazil	To identify the ageism and prejudice against workers (≥ 50 years old) in the Brazilian labor market.	Some companies hire fewer old workers than the market.
Brodmerkel and Barker, 2019; Australia	“To understand the lived experience of older creatives in advertising agencies in their own terms and in its richness and complexity”.	Ageism is implicit, older workers have “the need to perform the immaterial labour of embodying specific forms of youthfulness valorised by their workplace cultures”.
Challe, 2017; France	To identify the differences between labor market participation of older workers in France and age.	Significant discrimination against older workers. Discrimination decreased significantly during the crisis period. This might be interpreted as an apparent non-degradation, in relative terms, of the employment rates of older workers compared to those of workers in the median age of the population during the crisis.
Drydakis, MacDonald, Chiotis, and Somers, 2017; UK	<ul style="list-style-type: none"> • Whether ageism is prevalent in the UK at the initial stage of the hiring process. • Whether race can moderate the relationship between age and labor market outcomes. 	Older people have lower access to vacancies and sorting in lower-paid jobs. A minority racial background exacerbates both penalties - lower access to vacancies and sorting in lower-paid jobs.
Duncan and Loretto, 2004; UK	How ageism affects different age categories of employees (gender).	Employees over 45 and under 25 were most prone to negative age discrimination. Men: Negative treatment related to pay, benefits or job deployment (below 40). Women: barriers to promotion; less favorable treatment and more negative attitudes resulting their (perceived) youth. Over-40s: women have unequal access to promotion. Older men and women: negative barriers to training.
Gringart Gringart, Jones, Helmes, Jansz, Monterosso, and Edwards 2012; Australia	Western Australian nursing recruiters’ attitudes toward older nurses.	Negative attitudes of nursing recruiters toward older nurses.
Handy and Davy, 2007; New Zealand	Relationship between mature female jobseekers and private employment agencies in the Auckland region.	Gendered ageism based on women “appearance and the perception that they might not relate well to younger staff and have deficiencies in technical skills”.
Jyrkinen and Mckie, 2012;	Intersectionality of gender and age in work and careers of women managers.	Women experience ageism and lookism.

Reference & Place	Objectives	Main findings on ageism
Finland and Scotland		
Jyrkinen, 2014; Finland	Intersections of gender and age in the careers of senior level women managers in private companies and third sector organization.	Gendered ageism is the prevalence and take place at many moments of career.
Kanagasabai, 2016; India	“To map the intersections of ageism, sexism, and capitalism in these neoliberal newsroom settings,” by analyzing “how young female journalists working in Indian English-language television newsrooms negotiate feminism in relation to their profession”.	“...ageism was more pronounced in the television newsrooms, ...” but, “ageism does play out in subtler ways in print newsrooms as well”. “solidarity is built in female-only spaces of camaraderie behind the scenes of corporate TV newsrooms.”
Kaye and Alexander, 1995; USA	To examine the “placement experiences of older adults at four senior employment programs in the greater Philadelphia metropolitan area”.	Discrimination was not perceived to be a major impediment. When is perceived, it is “reflected in reduced salaries, fewer promotions, arid inadequacies in fringe benefit packages”.
Lagacé, Nahon-Serfaty and Laplante, 2015; Canada	To understand the arguments on which the Canadian institutional discourse is built, how the Canadian government frames issues around ageing, work and older workers.	"Underlying standards of positive ageing models, which may generate, perhaps inadvertently, a new form of ageism by creating intra-and intergenerational divides in the workplace”.
Loretto, Duncan, and White, 2000; UK	To what extent younger adults experience ageism in employment; How salient the issue of ageism is among younger adults; To what extent younger adults are themselves ageist in their attitudes and beliefs about older employees; The degree of cross-generational solidarity and inter-generational tensions in the younger.	“The term ageism should refer to any form of age-based discrimination, irrespective of age. “ Thirty-five per cent of the students who had working experience had experienced age-related discrimination. Given that “the majority were in favour of legislation to tackle ageism, particularly that which would challenge discriminatory attitudes and behaviour”.
Lössbroek and Radl, 2019; The Netherlands and Germany	Gender differences in older employees’ training participation.	“Older women more often pay for enrolment in educational programmes themselves”; “Managerial ageism primarily targets older women, excluding female employees from the training opportunities available to their comparable male colleagues”. For on-the-job training, the level of training is higher for older men than for older women in the departments that have a female manager.

Reference & Place	Objectives	Main findings on ageism
Lucas, 1993; UK	<p>“Whether hospitality employers understood the nature of the demographic time bomb and to shed some light on the employment strategies being developed by these employers to counteract the demographic change”.</p> <p>“To review organizations' recruitment policies in changed (adverse) economic conditions against longer-term labour market changes with particular reference to older workers”.</p>	<p>“Incomplete understanding of the labour force is resulting in too much emphasis being placed on initiatives to enable businesses to attract young people”.</p>
Malinen and Johnston, 2013; New Zealand	<p>Implicit attitudes towards older workers and their malleability.</p> <p>To compare implicit-explicit attitude.</p>	<p>“Negative implicit attitudes towards older workers remained stable even when positive examples of older workers were made salient.”</p> <p>“Explicit attitude measures showed no bias against older workers, and these were easier to modify”.</p>
McGann Ong, Bowman, Duncan, Kimberley and Biggs, 2016; Australia	<p>How age and gender interact to shape older jobseekers' experiences of age discrimination.</p>	<p>“There has been a considerable decline in national levels of perceived ageism generally among older men relative to older women”.</p> <p>“Women were significantly more likely than men to cite ageism as a barrier to finding work”.</p> <p>“The nature of ageism experienced by older women is qualitatively different from that experienced by men”.</p>
McMullin and Marshall, 2001; Canada	<p>Whether ideological and/or behavioral dimensions of ageism are at play within garment workers in Montreal' lives.</p> <p>To assess ageism from the point of view of older workers.</p>	<p>Age relations shape both the ideological and behavioral components of ageism.</p> <p>Older garment workers believed that their fate was linked to ageism and that their work experience was discounted by management.</p> <p>Managers seemed to use stereotypical images to discourage older workers and did not organize work routines to facilitate the adaptation of them.</p> <p>Workers implicated the owners, managers and themselves as being ageist.</p>
McVittie, McKinlay, and Widdicombe, 2003; UK	<p>To “analyse the actions being performed” by Human Resources “when they described their organizations' current employment practices in the context of equal opportunities and the employment of older workers”: (1) “commitment to equal opportunities for older workers”, (2) “the age balance of the workforces employed by the organizations” and (3) “the age balances which were described” by them.</p>	<p>“New ageism offers a readily available set of discursive resources which justify the existing marginalization of older workers within organizations and have the ideological effect of maintaining existing inequalities”.</p>

Reference & Place	Objectives	Main findings on ageism
Ojala, Pietilä, and Nikander, 2016; Finland	To better understand the diversity of ageism, its contextual variations and gender-specific dynamics in people's daily lives, this study focuses on how different interactional contexts shape men's perceptions of ageism.	Men are not totally immune to ageism. Negative ageism took place in institutional contexts, in contrast to family contexts, where positive ageism was seen as a favorable feature of intergenerational relations rather than discrimination.
Rupp, Vodanovich, and Credé, 2006; USA	Employee's age and manager ageism interactions on the severity of recommendations about employee's performance errors.	"Older employees received more severe recommendations for poor performance than did their younger counterparts. Also, some ageist attitudes moderated the relationship between age and performance recommendations. Stability attributions mediated the relationship of employee age on endorsement of the more punitive recommendations".
Solem, 2016; Norway	To explore "the cognitive, affective and behavioural aspects of ageism in working life in Norway".	Age discrimination is not very frequent. Employed people "have experienced a little more often than managers that age discrimination occurs" and women more than men. "Managers think of workers above age 50 as performing at least as well as younger workers. Yet, managers tend to hesitate to call in applicants in their late 50s, to job interviews". "Seniors" and "older workers" have higher scores for retention than for recruitment.
Spedale, Coupland, and Tempest, 2014 UK	To study of gendered ageism in the workplace by investigating how the routine of day-parting in broadcasting participates in the social construction of an ideology of 'youthfulness' that contributes to inequality.	"The ideology of youthfulness was constituted through discursive strategies of nomination and predication that relied on an inherently ageist and sexist lexical register of 'brand refreshment and rejuvenation'. "... in the legitimate and authoritative version of the truth constructed in the Tribunal's final judgment, ageism discursively prevailed over sexism as a form of oppression at work".
Stypinska and Turek, 2017; Poland	To characterize ageism hard and soft in the labor market and correlations with sociodemographic.	Soft discrimination was experienced more often than hard discrimination with higher occurrences among women than men, people in precarious job situation or residents of urban areas. Education played no role in perceived discrimination.
Wilson and Roscigno, 2017; USA	To know more about the consequences of age and ageism for minority workers and susceptibilities to downward mobility.	"Substantial support for an age-minority vulnerability nexus". African Americans older workers "compared to their White gender counterparts have significantly higher

Reference & Place	Objectives	Main findings on ageism
	Coupling insights regarding race with recent work on employment-based age discrimination and the extent to which African American and Whites, aged 55 and older, experience job loss across time.	rates of downward mobility”, specifically, among older men”. “This pattern of inequality is similarly found among women, although race differences tend to be smaller”.

Some of the studies relate sociodemographic variables to ageism, showing that gender and race can potentiate ageism. The type of ageism identified is implicit and explicit, and the studies suggest that it is a cross phenomenon present in multiple cultures. The older worker is the main target of ageism, followed by the younger. Cortina, Kabat-Farr, Leskinen, Huerta and Magley (2013), Kaye and Alexander (1995) and Solem (2016) found not frequent or even no evidence or perceived discrimination at work. Moreover, there is no evidence of age-based selective incivility – which could be, in the first case, the result of relatively young samples. Furthermore, McGann, Ong, Bowman, Duncan, Kimberley and Biggs (2016: 375) found “a considerable decline in national levels of perceived ageism generally among older men relative to older women”.

Category 2

Seventeen articles are focused on expanding the nomological network of ageism (Table 2.2). The variables studied can be framed within five types: a) demographics (e.g., gender); b) psychological characteristics or states (e.g., dual identity); c) organizational procedures, processes and policy (e.g., organizational multi-age perspective); d) interaction practices (e.g., intergenerational contact); e) context (e.g., labour market characteristics).

Table 2.2

Studies on the nomological network of ageism

Reference & Place	Objectives	Main findings on ageism
Dixon, 2012; USA	To explore how age was a central factor in describing sexuality in the workplace.	Age stereotypes emerged. Older co-workers are kept out of certain conversations and considered that they lose their sexual identity.

Reference & Place	Objectives	Main findings on ageism
Harnois and Bastos, 2018; USA	The extent to which discrimination and harassment contribute to gendered health disparities.	Men and women report similar levels of workplace ageism. Women: the combination of age and gender discrimination may be particularly detrimental for mental health. Multiple forms of discrimination associated with decreased physical health.
Iweins, Desmette and Yzerbyt, 2012; Belgium	Whether age-related preferential treatment reinforces ageist attitudes in the workplace.	“Policies favouring 50 years old workers increased negative perceptions toward them”. “Compared to a merit-based treatment, a preferential treatment increased negative perceptions, emotions, and behaviours toward an old target”.
Iweins, Desmette, Yzerbyt and Stinglhamber, 2013; Belgium	<ul style="list-style-type: none"> • Influence of both intergenerational contact and organizational multi-age perspective on ageism and attitudes at work. • Ageist attitudes at work by considering stereotypes of, behaviours toward, and emotions about older workers. 	Workers’ dual identity (high identification with both age group and the organization) mediates the effects of context (intergenerational contact and organizational multi-age perspective) on positive and negative ageism. Favourable intergenerational context and organizational multi-age perspective are positive associated to favourable perceptions of older workers, to positive emotions about them and facilitation behaviours; and negative associated with intentions to quit. Dual identity mediates the relationship between (a) intergenerational contact and organizational multi-age perspective and (b1) stereotypes; (b2) intentions to quit. Procedural justice appeared to be a complementary mediator in explaining the effects of a multi-age diversity and organizational multi-age perspective, and stereotypes toward older workers and marginally on intentions to quit.
Lagacé, Van de Beek and Firzly, 2019; Canada	To what extent positive intergenerational climate and, knowledge sharing and donating practices, contribute to lower levels of perceived ageism.	“The perception of a positive intergenerational workplace climate seems to decrease feelings of ageism and increase satisfaction as well as successful aging at work” while “influences knowledge donating and collecting practices and vice versa”.
Macdonald and Levy, 2016; USA	Perceived age discrimination “that may buffer or hinder job satisfaction, commitment, and engagement”.	“Age discrimination at work was negatively related to job satisfaction and job commitment; however, it was not significantly related to job engagement”. “Greater age identification overall was positively correlated with job satisfaction, commitment, and engagement”.

Reference & Place	Objectives	Main findings on ageism
Meinich and Sang, 2018; Norway	To discuss the intergenerational contact and its relationship to ageism, to understand their mechanisms and impacts.	<p>“Age discrimination is perceived by both older and younger workers”.</p> <p>Ageist stereotypes, implicit and explicit.</p> <p>“The perceived strengths of younger workers were often associated to be the weaknesses of older workers and vice versa.” (:213)</p> <p>“Institutional-level ageism operated within TechNor1, through mandatory retirement at 67 years old; despite the official retirement age in Norway of 70 years” (:214). “Ageism was exercised by managers who restricted opportunities for employees over 45” (:214).</p> <p>Being too young was often articulated in terms of inexperience.</p>
Raymer, Reed, Spiegel and Purvanova, 2017; USA	Origins and consequences of reverse ageism.	<p>“Compared with Millennials, Boomers and Xers view ‘the typical young professional’ more stereotypically”.</p> <p>“Age moderated the relationship between endorsements of generational stereotypes and assessments of work skills”.</p> <p>Over 60% of older employees describe their young colleagues negatively, and 30% of young employees experience reverse age discrimination.</p>
Redman and Snape, 2002; UK and Hong Kong	To examine stereotypical beliefs and discriminatory attitudes towards teachers over-50s.	<p>Stereotypical beliefs about older teachers consists of two dimensions: “work effectiveness” – job skills and work attitudes - and “adaptability” - “ability to adapt to change, to learn and be trained, and to accept new technology”.</p> <p>“Age is a positive predictor of both work effectiveness and adaptability.”</p>
Rego, Vitória, Tupinambá, Júnior, Reis, e Cunha, and Lourenço-Gil, 2018; Portugal and Brazil	“Brazilian managers’ attitudes toward older workers, and how those attitudes explain HRM decisions in hypothetical scenarios”.	<p>“Managers’ attitudes toward older workers explain the managers’ decisions, but this relationship is a multiplex one”.</p> <p>Despite “expressing positive attitudes toward older workers, a significant number of managers chose a younger one even when the older worker is described as more productive”.</p> <p>“Ageism in the workplace is multi-targeted, in that it discriminates against individuals from different age strata”.</p> <p>“Managers’ ageism is affected by their own age”.</p> <p>This “study does not corroborate the double jeopardy for women”.</p>

Reference & Place	Objectives	Main findings on ageism
Shippee, Wilkinson, Schafer and Shippee, 2019; USA and Canada	To examine “the role of work-related perceived age discrimination on women’s mental health over the life course and tests whether financial strain mediates this relationship”.	“Women who experienced age discrimination had greater overall depressive symptoms but not after controlling for financial strain”. (...) Age discrimination affected financial strain, which, in turn, increased women’s depressive symptoms. Women who reported age discrimination had lower odds of being in higher categories of overall life satisfaction; financial strain partially mediated the relationship but age discrimination remained a significant predictor”.
Soidre, 2005; Sweden	To find out “the factors that were associated with preferences for ‘early retirement’ or ‘late exit’ from paid work”.	“In some of these cases, the ‘push’ factor” that made men feel that they were unappreciated at work and wish for an early exit was related to ageism.
Thorsen <i>et al.</i> , 2012; Denmark	To examine the association between psychosocial factors (particularly ageism) at the workplace and older workers’ retirement plans, while taking health and workability of the employee into account.	Ageism is associated with older male workers’ retirement plans. “Ageism’ was a significant predictor in the male subgroup, but not at all in the female subgroup”. “The gender difference is found in the effect of ‘ageism’ and not in the prevalence of ageism.” “A part of the explanation is that women on average retire at a younger age than men — hence, they retire before ageism becomes a notable issue”.
van der Horst, 2019; Netherlands	“To assess the degree to which internalised ageism is related to one’s preferred retirement age”.	Only women who consider themselves old want to retire earlier. A consistent relationship between health pessimism and preferred retirement age.
Wanner and Mcdonald, 1983; USA	To determine the degree to which older people employed full-time experience a decline in earnings not related to a decline in productivity.	“Older persons do not earn less than younger workers because they are unable, as are other minorities, to transform training, occupational level, or education into higher earnings; instead, they earn less almost exclusively because they have been in the labour force longer”.
Wolfram, 2017; UK	“Whether the association between modern prejudice and strength of conjunction error was weaker for gender-untypical than for gender-typical targets.”	Modern ageism is correlated with greater strength of conjunction error. But it was not shown to be a significant predictor of conjunction error. No evidence “that different types of prejudice” (racism, sexism, ageism) “are equally relevant to strength of conjunction error”.
Yamada, Sugisawa, Sugihara and Shibata, 2005;	To examined whether the existing research on organizational commitment applies to older employees, whether measures that are unique to older employees have significant relationships to	Negative ageism and employer-sponsored programs for older employees had significant relationships to organizational commitment.

Reference & Place	Objectives	Main findings on ageism
Japan	their organizational commitment, and whether the effects of these factors differ by retirement status.	

The main findings suggest that age (and gender-based) discrimination at work may be particularly detrimental for mental health (Harnois and Bastos 2018; Shippee, Wilkinson, Schafer and Shippee 2019). However, policies favouring older workers, or preferential treatment, increased negative perceptions towards them, provoking ageism (Iweins *et al.* 2012). Younger workers also can suffer ageism (Meinich and Sang 2018; Raymer *et al.* 2017), despite the fewer empirical studies retrieved. Ageism affects workers, yet it is also a challenge for organisations whose workers affected by it are more prone to voluntary turnover, negative job satisfaction, and job commitment (Macdonald and Levy 2016; Soidre 2005; van der Horst 2019). These factors could have profound implications for an excellent working environment and productivity. However, the high identification of workers with different age groups and the perceived procedural justice are critical mediators in ageism (Iweins, Desmette, Yzerbyt and Stinglhamber 2013).

Category 3

Five articles focus on coping strategies that those who are the ageism target use. Those strategies can be: the care and maintenance of health and well-being of the body and mind, use of external memory aids, change of working hours or flexible working hours, the transition to less physically demanding tasks, plans to avoid future job limitations, flexible attitudes to change, optimism, being willing and open to training, finding an organisation with a compatible value set that recognised prior experience but also provided growth opportunities, work in family and support environments or early retirement, and the case of young women, the adoption of less feminine and young clothing and behaviours (see Table 2.3). The social construction of the older worker and even the self-categorisation of older workers contribute to discrimination against them and negative attitudes towards work (Desmette and Gaillard 2008).

Table 2.3

Studies on coping with ageism

Reference & Place	Objectives	Main findings on ageism
Clendon and Walker, 2016; New Zealand	To identify why some nurses cope well with continuing to work as they age, and others struggle.	Ageism in the workplace is implicit, faced by nurses in the latter stages of their careers.
Desmette and Gaillard, 2008; Belgium	To analyse strategies older workers are likely to adopt to deal with age-related stigmatization at workplace; Relationship between perceived old worker identity and attitudes towards early retirement and commitment to work.	Ageism is implicit. Early retirement intentions revealed that cognitive identification with age-related peers increased the wish to retire as soon as possible. Only complete retirement was predicted by cognitive identification. Intergenerational competition was more likely to be adopted by participants who were in poor health. The work-to-private conflict did not predict the redefinition of ageing.
Krekula, 2019; Sweden	Conditions for extended working life from an organising perspective.	“Conceptions of career moves as being on- or off-time are constructed parallel with age-normality constructions, and that the temporal order constitutes a disciplining element for the employees; it makes individuals plan for avoiding future job limitations as a result of ageism”.
Unson and Richardson, 2013; USA and New Zealand	To examine “the barriers faced, the goals selected, and the optimization and compensation strategies of older workers in relation to career change”.	Ageism is faced as an external barrier, especially in finding work. Strategies to cope: Preparation: sometimes for about 15–20 years prior and, also, being able to seize the moment. Flexible attitudes to change, optimism, being willing and open to training, and a concern to make the most of their remaining time alive. The support of others, including family, colleagues, and managers. Finding an organization with a compatible value set that recognized prior experience but also provided opportunities for growth and development together with flexible work schedules.
Worth, 2016; Canada	To examine specific instances of agency, power, and privilege in the contestation of age and gender stereotypes in young women’s working life stories, within the wider context of labour market precarity and everyday sexism and ageism in the workplace.	“Some millennial women had some power to be seen differently and changed themselves to avoid negative stereotypes. Many aimed at portraying themselves as less girly at work, developing work identities that were perceived as older and less feminine through dress, speech and behaviour”. “Some women with particular kinds of privilege are able to challenge everyday age and gender discrimination, carving out work spaces where stereotypes are contested”.

Category 4

Three articles refer to instrument development (Table 2.4). Only two different ageism instruments were reported. One is the Nordic Age Discrimination Scale (NADS), from Norway, for monitoring age discrimination in the workplace among elderly workers. The other is the WICS, from the USA, designed to measure employees' attitudes and perceptions about workers of different ages in the workplace. The third instrument paper is a Spanish validation of the NADS.

Table 2.4

Instrument development studies

Reference & Place	Objectives	Main findings on ageism
Carral and Alcover, 2019; Spain	Spanish preliminary validation of the Nordic Age Discrimination Scale (NADS)	The Spanish NADS meets standard psychometric properties.
Furunes and Mykletun, 2010; Norway	To construct a scale for measuring work-related discrimination of older workers.	Nordic Age Discrimination Scale (NADS) showed adequate psychometrics properties (Norwegian, Swedish, and Finnish samples).
King and Ryant, 2017; USA	To develop and validate a new tool, the Workplace Intergenerational Climate Scale (WICS).	The findings of these three studies support the reliability and validity of the WICS (five subscales).

Category 5

Three articles focus on a theoretical test (Table 2.5). Only the Cortina et al. (2013) theory of selective incivility is presented as a theory, while the other two studies test theoretical hypotheses.

Table 2.5

Theoretical tests on ageism

Reference & Place	Objectives	Main findings on ageism
Bowman, McGann, Kimberley and Biggs, 2017;	To compare two key explanations of the difficulties confronting older jobseekers: human capital theory (focused on the	Deployment of different forms of capital valued in labour market influencing older workers' employability.

Reference & Place	Objectives	Main findings on ageism
Australia	obsolescence of older workers' job skills), and ageism in employment.	
Cortina, Kabat-Farr, Leskinen, Huerta and Magley, 2013; USA	To test aspects of Cortina's theory of selective incivility as a "modern" manifestation of sexism and racism in the workplace and extend it to ageism.	No age-based selective incivility. One possible explanation for these null effects is that participants in both samples were relatively young (mean \pm 40 years old).
Paleari, Brambilla and Fincham, 2019; USA	To test the "prediction that ageism against older and younger workers was related to prejudiced individuals' behaviours toward colleagues and organizational identification, both directly and indirectly through intergroup anxiety and quality of intergroup contact".	Ageism was negatively related to organizational identification. Ageist prejudice was consistently related to the quality of intergroup contact. The interpersonal level prejudice had an indirect negative impact on behaviours toward colleagues, which was mediated by the quality of intergroup contact. Higher levels of ageism and of poor quality of intergroup contact corresponded to higher levels of counterproductive behaviours.
	"To examine whether ageist attitudes toward co-workers predicted decreases in the prejudice holders' reported quality of intergroup contact and organizational identification and increases in their counterproductive behaviors over a 3-month period"	Ageism has equally detrimental outcomes for both older and younger prejudiced workers. Ageism was:(a) "concurrently associated with quality of intergroup contact and significantly predicted it over time"; (b) related to counterproductive work behaviors, both concurrently and longitudinally through quality of intergroup contact"; (c) "concurrently related to vitality at work and organizational identification and marginally predicted them over time indirectly, through quality of intergroup contact".

Category 6

Two articles try to identify determinants of ageism such as the *ideology of youthfulness* and the *social construction of the 'older worker'*, how they insinuated, reproduced and manipulated (Riach 2007; Spedale *et al.* 2014) (Table 2.6).

Table 2.6

Determinants of ageism

Reference & Place	Objectives	Main findings on ageism
Riach, 2007; UK	The social processes that create and reproduce ageist ideologies within an organizational context. Older worker identity as a discursive phenomenon.	The “social construction of the ‘older worker’ may in itself serve to marginalize and contribute towards age inequalities”.
Spedale, Coupland and Tempest, 2014 UK	To study of gendered ageism in the workplace by investigating how the routine of day-parting in broadcasting participates in the social construction of an ideology of ‘youthfulness’ that contributes to inequality.	“The ideology of youthfulness was constituted through discursive strategies of nomination and predication that relied on an inherently ageist and sexist lexical register of ‘brand refreshment and rejuvenation’”. “The ideology of youthfulness was reproduced through a pervasive discursive strategy of combined de-agentialization, abstraction and generalization that maintained power inequality in the workplace by obscuring the agency of the more powerful organizational actors while further marginalizing the weaker ones”. “Despite evidence that the intersection of age and gender produced qualitatively different experiences for individual organizational actors, in the legitimate and authoritative version of the truth constructed in the Tribunal’s final judgment, ageism discursively prevailed over sexism as a form of oppression at work”.

Category 7

Two articles focus on the managerial strategies to prevent and minimise ageism and its effects (Table 2.7).

Table 2.7

Ageism management studies

Reference & Place	Objectives	Main findings on ageism
Urbancová and Fejfarová, 2017; Czech Republic	“To evaluate the importance of individual visions of age management according to Ilmarinen (2006) and Cimbáľníková et al. (2012) in organisations in the Czech Republic and to identify factors that influence the implementation of individual visions in the organisation.”	“Age management is employed by only 29.3%”; 43% do not consider age management important and “28.1% of respondents said that the culture of the organisation does not support age management”. “The main disadvantages that became evident during and after the implementation of age management ... include the demanding character of leading and managing an age-diverse group of employees,

Reference & Place	Objectives	Main findings on ageism
Wainwright, Crawford, Loretto, Phillipson, Robinson, Shepherd, Vickerstaff, Weyman, 2019; UK	To seek new organisational policies and management strategies on Extending Working Life.	<p>higher demands on communication in order to plan work, and higher financial and time demands”.</p> <p>“Many of participants expressed a strong sense of entitlement to a period of healthy life between the ending of formal employment and the onset of serious illness and death. For these people, retirement is an important rite de passage marking a major transition in the lifecourse”.</p> <p>Detrimental effects in extending workplace anti-discrimination law to include ageism, as organisations have retreated from the active management of retirement through fear of falling foul of the legislation, despite its benefits for older workers.</p>

In the analysed articles, some authors adopt definitions of ageism previously presented by other authors, quoting mainly Butler and Palmore (Carral and Alcover 2019; Cortina *et al.* 2013; Desmette and Gaillard 2008; Furunes and Mykletun 2010; Iweins *et al.* 2012, 2013; King and Bryant 2017; Loretto *et al.* 2000; Lucas 1993; McMullin and Marshall 2001; Meinich and Sang 2018; Rupp, Vodanovich and Credé 2006; Spedale *et al.* 2014; Stypinska and Turek 2017). All these authors present this phenomenon in its complexity (e.g., discrimination based on age, stereotypes – positive and negative –, stigmatisation, beliefs, and attitudes). Although some of these authors (Cortina *et al.* 2013; Desmette and Gaillard 2008; Iweins *et al.* 2012, 2013; Rupp *et al.* 2006 and Stypinska and Turek 2017) analysed several dimensions of ageism, they only applied those dimensions to the elders. Challe (2017), Harnois and Bastos (2018), Raymer *et al.* (2017), and Thorsen *et al.* (2012) define ageism as workplace mistreatment and attitudes and discrimination against older adults, without citing other authors. (Jyrkinen 2014; Paleari, Brambilla, and Fincham 2019; Raymer *et al.* 2017). Despite ageism being mostly felt and studied against older people, it is not exclusive to them and can also emerge against the younger (Jyrkinen 2014; Paleari *et al.* 2019; Raymer *et al.* 2017). The concepts of positive and negative ageism, implicit and explicit, personal and institutional, cognitive, affective and behavioural, already appears in the definition in some of the studies (Rupp *et al.* 2006; Stypinska and Turek 2017; Allen, Armstrong, Riemenschneider and Reid 2006).

2.6 Discussion

The ageing of the workforce makes ageism a real threat to workers, the economy, and society. While a type of discrimination, ageism goes against the decent work concept. Among the seven decent work dimensions, non-discrimination is part of *fundamental principles and values at work* (Ferraro *et al* 2018). Therefore, those targeted at ageist treatment suffer a decent work deficit. That is against the 3rd, 4th and 8th Sustainable Development Goals of the United Nations 2030 Agenda. Consequently, there is high legitimacy to actions which aim at combating ageism at work.

This review found the lack of reliable and broadly used instruments on worker-related ageism. The construct mainly was measured using a few ad hoc questions or scales whose items were withdrawn and often adapted from other studies/scales, which do not allow a robust comparison between studies. The Nordic Age Discrimination Scale (NADS) is an essential first step. A Spanish version of the scale is already available. Nevertheless, this scale focuses only on the elderly workers, which entails at least two questions: First, it is not clear what an elderly worker is, from what age someone is old or elderly in the workplace/labour market. Most studies consider old workers aged 55 and over. For the labour market, a worker can be considered old much earlier (e.g., in the recruitment and selection process or IT sector), creating deviations in the results. Thus, the age from which one can be considered an old or elderly worker is another difficulty to allow a robust comparison between studies. Secondly, young workers, and the rest of the age spectrum, are left out of this scale and still do not have an instrument that measures the behaviours of prejudice and discrimination targeting them. Another important measuring instrument found in this review is the Workplace Intergenerational Climate Scale (WICS). This instrument, measuring the intergenerational climate of an organisation, covers all ages. That is an essential aid to study ageism, considering the importance of positive intergenerational contact to minimise or even eliminate ageism.

Regarding diagnostic studies, one of the aspects that stood out in this review was that the cluster of samples age was over 50 years old. There are hardly any studies on ageism in young workers or workers who are no longer young but are also not yet old or elderly. Consequently, there is a lack of accurate information for institutions and organisations to develop policies and practices to fight against ageism, considering its particularities in these different age groups.

Researchers from Asia, Europe, America, and Oceania studied ageism. Despite the cultural differences between the various geographic regions of the studies, there were no

differences in its focus or their main findings. Almost all studies have identified some type of ageism, implicit and explicit. Those studies focus on the full range of working life moments, from employability and the hiring process to retirement. Researchers reported studies in varied sectors of activity – IT, advertising, financial, education, health care, journalism, hospitality, employment tribunal court, and HR managers. Overall, research shows that ageism cross all the working life span and contexts. Even though ageism can be positive or negative, the studies retrieved are mostly about negative ageism on older workers.

Race and gender are moderators (see Figure 2.2) which potentiate ageism (Drydakis *et al.* 2017; Kanagasabai 2016; McGann *et al.* 2016; Spedale *et al.* 2014; Stypinska and Turek 2017), as well as age and image, with the latter, in a society oriented to beauty and youth, having higher incidence among women. Several studies show that older women are not the only ones who have to deal with the stigma of the juxtaposition of age and image (Handy and Davy 2007; Jyrkinen 2014; Spedale *et al.* 2014). Young women sometimes have to deal with this burden, often seeking to create a professional character, less female and less young, to feel taken seriously (Jyrkinen and Mckie 2012; Worth 2016).

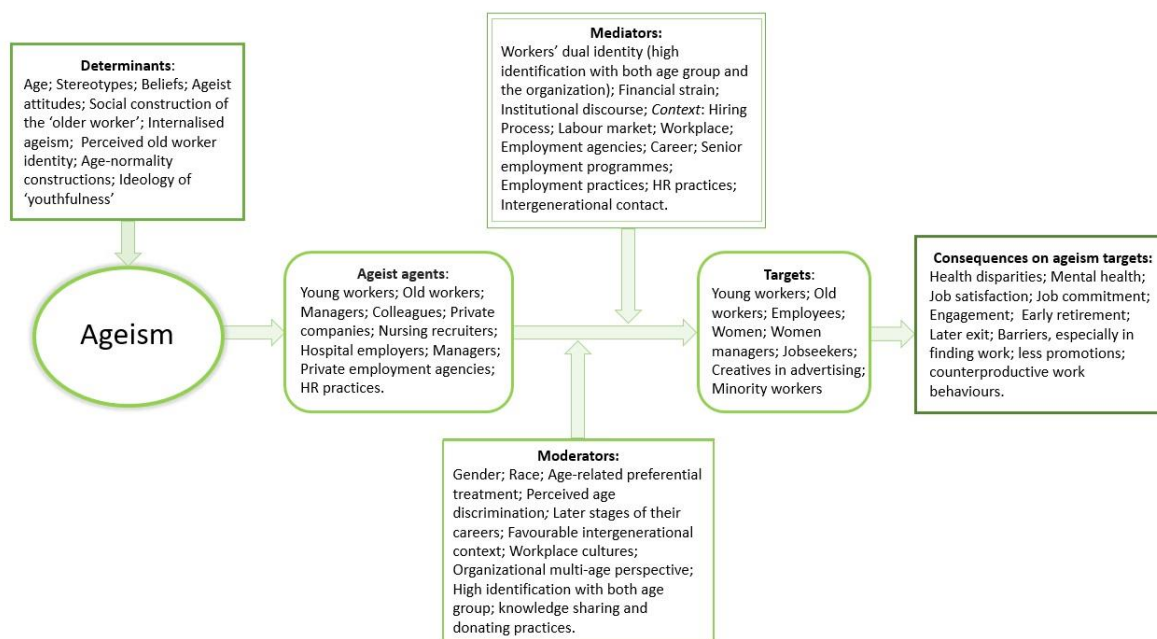


Figure 2.2

Ageism components

Until a few years ago, governments and organisations had appealed for the anticipation of retirement, either due to the economic crisis and consequent reduction of jobs or because of the need to make room for the younger ones (Eichhorst, Boeri, De Coen, Galasso, Kendzia, and Steiber 2014). Nevertheless, now, whether it is for the increase in longevity – physically and cognitively sound – for the sustainability of institutions or the significant human and intellectual capital of older workers, it is urgent to delay retirement age and retain workers full of knowledge (European Commission 2015a; Gibson, Jones, Cella, Clark, Epstein, and Haselberger 2010; ILO - International Labour Office 2011; Kenny, Groeller, McGinn and Flouris 2016; Nelson 2016; Stevens 2010). This need and urgency have led governments and institutions to create and disseminate positive images about ageing and promote policies and programs that help and favour older workers (Iweins *et al.* 2012). However, that can lead to negative ageism or generate positive ageism (Iweins *et al.* 2013; Lagacé *et al.* 2015), which *per se* can lead to negative ageism.

For several reasons, older workers tend to extend their working lives (ILO - International Labour Office 2011; Rouzet *et al.* 2019) while younger generations enter or try to enter the labour market, becoming more technological and competitive. While older workers are regarded as potential sources of knowledge, experience, and talent, they also may be seen as an obstacle to young people entering the labour market. However, despite being considered more agile and better prepared for the new skills required by the labour market, younger workers also suffer from ageism. They are considered inexperienced, being too casual, having communication training need, or even not staying long enough to deserve investment in training (Meinich and Sang 2018; Raymer *et al.* 2017).

Ageism targets individuals physically and mentally (Harnois and Bastos 2018; Shippee *et al.* 2019) and impacts organisations (UNECE 2019). It can directly correlate to job satisfaction, job and organisational commitment (Levy and Macdonald 2016; Yamada, Sugisawa, Sugihara and Shibata 2005), and retirement plans (see Figure 2).

Workers' strategies to cope with ageism are diverse. They range from early preparation for the end of the career, attention to health and physical performance, attitudes to change, training, support from others, change of working hours, and the physical and behavioural appearance (Clendon and Walker 2016; Desmette and Gaillard 2008; Krekula 2019; Unson and Richardson 2013; Worth 2016). These are essential apports of this study for those investigating and preparing policies and strategies to combat this problem.

Furthermore, some companies use to cope with ageism by age management. However, the percentage of companies that are aware of workforce ageing and the challenge of a multigenerational workforce and try to manage it doing age management is still low (Urbancová and Fejfarová 2017).

Besides that, extending workplace anti-discrimination law to include ageism has led organisations to withdraw from active retirement management for fear of violating legislation, despite its benefits for older workers (Wainwright, Crawford, Loretto, Phillipson, Robinson, Shepherd, Vickerstaff and Weyman 2019).

The summary of the studies and prominent findings in this review are an asset for researchers and organisations. Those who want to manage the workforce ageing and the multiple variables of a multigenerational workforce find inspiration and evidence to design suitable policies and HR practices. Age management and retirement management can be carried out, with more evident benefits for organisations and workers.

Workers are targeted at ageism by their colleagues, managers, and recruiters.

However, ageism is also often created by the worker her/himself (Desmette and Gaillard 2008), who insinuated on her/him, over time, the stereotypes and prejudices present in society. We could realise that the social construct of the 'older worker' and the ideology of youth are determinants of ageism (Riach and Kelly 2015; Spedale *et al.* 2014).

Nevertheless, good intergenerational relationships, as we said previously, can help to minimise ageism (Iweins *et al.* 2013) by leading younger workers to be less prejudiced towards older workers, to accept their knowledge, often tacit, and their professional experience.

Additionally, older workers would be able to learn and take advantage of the skills and characteristics of younger workers (Stevens 2010). Good labour relations, knowing how to coexist, learning from each other, taking advantage of each other's assets and filling individual and group weaknesses make it possible for organisations and society to grow healthy (Di Fabio 2017). If organisations understand the importance, for their success, of an excellent relational climate among workers, they can use this knowledge to improve HR management practices.

In an economic and social context with limited resources and employment, making efforts to improve the employability of older or less young workers is essential for the survival of institutions, for the physical and mental health of individuals and the well-being of society. However, like the reverse of the medal, this need may decrease the employment of young people, who themselves are often the target of ageism or who, feeling threatened, may have ageist attitudes.

This review constitutes a fundamental support base for studies on age and ageism. Information on worker-related ageism is synthesised, gaps identified, and future lines of research are proposed in the next section. It is a base for organisations to access information about the impact of ageism and the ageing of the labour force, allowing them strategically to anticipate scenarios and plan their HR management. It draws a vital input regarding interventions aiming at preventing and mitigating worker-related ageism.

The workplace, while a locus of acculturation, is an essential target of such interventions. Considering the ageism determinants (Table 2.6), the test of explanatory theories (Table 2.5), studies on coping with ageism (Table 2.3), and age management practices (Table 2.7), those interventions must focus on: a) Designing human resources policy and practices meeting non-discrimination standards as proposed by the concept of decent work; b) Creating positive intergenerational interactions integrating the full range of ages, namely intergenerational cooperation; c) Persuading organisations to include in their job advertisements non-age discrimination statements; d) Helping organisations to design and implement age management practices. By providing such inputs, this study also addresses the concerns of Agenda 2030, Goal 8 (United Nations (UN), 2015b), and UNECE (UNECE, 2019).

2.7 Limitations and Recommendations for Future Research

This review has the limitation of being restricted to only two databases (EBSCOhost and WoS), keywords with ageism in the title, or abstract, which may exclude studies about age discrimination but without using the word *ageism*. Furthermore, only articles written in English were included. Additionally, the search strategy did not seek other databases and studies not published, which was ineffective in dealing with publication bias.

The multidimensionality and complexity of ageism at work have a ground to be explored.

Table 2.8 synthesizes the main gaps found and the future studies for filling those gaps, and the assumptions behind the suggestions.

Table 2.8

Gaps, Suggestions and Assumptions

Research Gaps	Suggested further studies foci	Assumptions
Instruments to measure ageism against young and middle-age workers	New instruments design and development	Ageism measurement is relevant for theory development, empirical research enabling and intervention.
Research on the full range of age groups	Full range of age groups	Different age groups may have different perceptions of ageism and ageist attitudes.
Ageism determinants	Ageism determinants	It is important preventing ageism
Age and gender discrimination at work	Combining age and gender discrimination on hiring process, employment, treatment at work and career development opportunities	Gender-balanced employment and treatment combined with no discriminations by age are values that deserve to be pursued.
Ageism in professions that involve image or physical appearance	Impact and consequences of age in professions like mannequins, models, actresses / actors, pivots, TV presenters, and customer service	Different professions may have different perceptions of ageism and ageist attitudes. Ageism has negative consequences for individuals, organizations, and society.
Ageism in professions involving physical strength or dexterity	Impact and consequences of age in professions like construction, security forces, industry, professional drivers.	Different professions may have different perceptions of ageism and ageist attitudes. Ageism has negative consequences for individuals, organizations, and society.
Research on ageism in different types of workers	Impact and consequences of ageism in different types of workers such as independent contractors; permanent or fixed-term employees; part-time employees; casual employees; entrepreneurs.	Different kind of workers may have different perceptions of ageism and ageist attitudes. Ageism has negative consequences for individuals, organizations, and society.
Level of job position	Discrimination of age against managerial or leadership positions and other kind of workers	Different job positions in the organizations may have different perceptions of ageism and ageist attitudes. Ageism has negative consequences for individuals, organizations, and society.
Activity sector	Ageism in different activity sectors: e.g. public or private sector; areas of education, health, commerce, services, or others.	Different activity sectors may have different ageist attitudes and ageism perceptions against their workers.

Research Gaps	Suggested further studies foci	Assumptions
		Ageism has negative consequences for individuals, organizations, and society.
Reverse ageism at work	Hard and soft reverse ageism at work	Ageism is negative per se since is an expression of discrimination and goes against Human Rights and decent work; Ageism has negative consequences for individuals, organizations and society.
Positive ageism at work	Impact and consequences of positive ageism over time	Positive ageism can lead to negative ageism which is an expression of discrimination and goes against Human Rights and decent work; Ageism has negative consequences for individuals, organizations, and society.
Consequences of ageism on intergenerational cooperation	Studying organizational consequences of ageism on knowledge management	New generations need to learn from the elderly population their knowledge and wisdom.
Experimental studies on interventions aiming at ageism prevention	Experimental research designs in intervention studies	Intervention studies can build new relevant knowledge through explanation of the psychological processes underlying ageism and contribute to prevent ageism.
Organizations and HR Management policies and strategies	Organizations and HR management policies and strategies	Organizational culture and management of age by organizations and HRM are relevant for knowledge and to enable interventions to reduce and deal with it.

Ageism has the potential to become a more relevant topic in research and intervention, also in the field of economics and management. For this to be true, an effort is needed to unite the different research disciplines, carrying out interdisciplinary research, thus contributing to understanding this phenomenon and its impact.

2.8 Implications for Organisations

Ageism is an issue that, if not tackled now, with the expected growth of ageing in the coming decades, could have a significant negative impact not only on workers and organisations but also on the economy and society. Ageism combat should be a priority for policymakers, those in charge of organisations and people management. For that endeavour, it is imperative

to adopt a broad perspective of worker-related ageism - throughout the entire process, from vacancies and job applications to employment, pre-unemployment and pre-retirement - and identifying the determinants, actors and moderators at play.

Ethical standards - This systematic review study used published data in public domains and therefore required no ethical approval.

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3 Ageism, Intergenerational Work Relations, and Decent Work

Abstract

Decent Work (DW) is included in the 8th of the 2030 Sustainable Development Goals. While an overarching concept, it encompasses the main research topics in labor-related fields. Discrimination, such as work-related ageism, is one of them. This paper aims to analyze the relationship between age discrimination, intergenerational work relations, and decent work. We tested eight hypotheses on negative association between several DW dimensions and ageism and positive association between DW dimensions and intergenerational relationships at work. Workers aged 19 to 71 (n =260) filled in the Nordic Age Discrimination Scale (NADS), the Workplace Intergenerational Scale (WICS), and the Decent Work Questionnaire (DWQ). We present preliminary validation evidence of the Portuguese versions of the NADS (Cronbach's alpha = .85) and the WICS (Cronbach's alpha = .80). The validity of the two instruments is given by conceptual opposition, with the NADS being negatively correlated with the WICS. The Pearson correlations between the NADS plus the WICS dimensions and the DWQ dimensions confirm that decent work correlates negatively with ageism and positively with intergenerational labour relations. The results highlight the importance of promoting good intergenerational relationships to prevent ageism and to support decent work..

Keywords: Ageism; Age Discrimination at Work; Decent Work; Nordic Age Discrimination Scale; Workplace Intergenerational Climate Scale.

3.1 Introduction

The decent work concept was launched in 1999 by the International Labour Organization, and for more than one century, this organization strived to disseminate the values behind that concept worldwide (Ferraro, dos Santos, Pais, & Mónico, 2016). The concept reached a consolidated version in the last 20 years, after its 11 substantive elements were defined, which originated a seven dimensions model corresponding to the way workers perceive it: (1) fundamental principles and values at work, focused on the quality of work relationships; (2) working time and workload, related to the efforts, time and work schedules; (3) fulfilling and productive work, which is based on self-fulfilling at work and the feeling of giving back to society; (4) adequate remuneration for the exercise of citizenship, centered on the idea that through working the person must receive sufficient remuneration to allow them to comply citizenship duties and rights; (5) social protection, referring to worker protection in case of having medical issues, unemployment or retirement; (6) opportunities, related to worker development, entrepreneurship, self-employment, and alternative work opportunities; (7) health and safety at workplace, centered in risk protection at workplace (Ferraro, Pais, dos Santos, & Moreira, 2018). Being decent work an aspirational concept, the United Nations included it in the 8th of the 2030 Sustainable Development Goals. Furthermore, it is an overarching concept encompassing the main research topics in labor-related fields (dos Santos, 2019). Work-related ageism is one of them.

Due to low birth and mortality rates and increased longevity, the European, American, and Canadian populations are increasingly aging (Carneiro, Chau, Soares, Fialho, & Sacadura, 2012; Lagacé et al., 2015; Silva & Borges, 2013). Consequently, the labor force reflects this dynamic, presenting in the workplace four generations together, distinct in their way of being, thinking, and acting, both at a personal and professional level (Čič & Žižek, 2017; ZAJAČ, 2015). We can characterize these intergenerational relationships as solidarity, cooperation, or conflict (Djabi & Shimada, 2013; Rudolph & Zacher, 2015; Szydlik, 2008). Often, these conflicts result from ageism, i.e., age-based discrimination and stereotypes (Butler, 2005a; Iversen et al., 2009).

In light of demographic aging, it is crucial to think about the future of the workforce and organizations with strategic intent, which identifies the essential skills that need to be developed and the technologies that can support them (Hamel & Prahalad, 1994; Prahalad & Hamel, 1990). It involves evaluating where the organization stands currently, what workers it has, its strengths and weaknesses, the markets in which the business operates, and where it wants to be

in the next 2, 5, or 10 years. To this end, it is essential to consider the workforce, the human and intellectual capital the organization will require, and the needs and desires of the population, stakeholders, and the workforce across different age groups. As for human capital, organizations recognize it as the strategic value of human assets, the collective value of their workforce, capabilities, knowledge, skills, life experiences, motivation, and what each person brings and contributes to the organization's success (Stevens, 2010).

The importance of work relationships for the proper functioning and development of contemporary organizations is confirmed, according to ZAJĄC (2015) from the study of Nowotarska-Romaniak (2009), where the most critical factors that affect the work environment include relationships with colleagues, financial conditions, and mutual respect and relationships with superiors. Negative stereotypes are harmful. For example, to think that older workers are less productive and skilled, more resistant to change and new technologies, more challenging to train, and more absent due to illness can cause tensions between generations and cause older workers to believe that about themselves, to question their skills and abilities and make them more apt to leave the workforce earlier (Lagacé et al., 2015). A study of more than 11,000 workers interviewed in eight of Europe's leading economies (France, Germany, Italy, Netherlands, Poland, Spain, Switzerland, and the United Kingdom) concluded that different values and working styles are causing conflicts. More than two-thirds (67%) of workers say they encounter intergenerational problems at work, with Italy, Poland, and Spain, where these problems are more significant (ADP, 2015). The main concerns are conflicting views on how things should be done (19%); greater permanence in the labor market of older workers leaving less room for the entry of new talent (18%); different approaches to organizational values and corporate responsibility (18%), (ADP, 2015). Corroborating these data, an English study by the CIPD (2014) shows that the most critical challenges in working with colleagues of different ages, from the perspective of workers, are the lack of shared interests (32%), misunderstandings (29 %), lack of shared values (28%) and potential for disruptive conflict (22%). Intergenerational interaction is an unavoidable factor in organizations and Human Resources Management. With the increase in longevity and the extension of the retirement age, it is crucial to analyze how workers perceive age at work.

Considering the efforts made by the International Labour Organization concerning worldwide decent work dissemination, age-based discrimination is against that effort. Non-discrimination is one component of the first decent work dimension, together with trust, freedom of expression, participation in decisions that affect the worker's life, and justice

(Ferraro et al., 2018; dos Santos, 2019). Consequently, we expect ageism relates negatively to the first decent work dimension (H1). That prediction can be considered a confirmation that ageism contributes to a decent work deficit regarding the ‘fundamental principles and values at work’ dimension.

Ageism affects both older (Levy, 2018; North & Fiske, 2013b) and younger people (Meinich & Sang, 2018; Raymer et al., 2017; Rupp et al., 2006). Moreover, it arises daily in social and family contexts (Butler, 2005b; Buttigieg, Ilinca, Jose, & Larsson, 2017; Giles & Reid, 2005) and the work context. Although evidence suggests that different generations have different work styles and working life values (ADP, 2015), some authors also showed that managing generational differences and similarities in the workplace can optimize organizational performance and improve work environments (Lagacé, Tougas, Laplante, & Neveu, 2008). Therefore, we expect that the good quality of intergenerational relationships relates positively with the first decent work dimension (H2).

Decent work, and more strictly non-discrimination, is an aspirational ideal. Therefore, it is unnecessary to demonstrate the harmful consequences of age discrimination. Despite that, several studies have evidenced that ageism discrimination in the work context can harm workers (Desmette & Gaillard, 2008; Duncan & Loretto, 2004; Harada, Sugisawa, Sugihara, Yanagisawa, & Shimmei, 2018; Harnois & Bastos, 2018; Shippee et al., 2019). Older workers may be more severely punished for poor performance and have worse recommendations for transfer, training, salary increases, or career advancement than their younger colleagues (Roscigno, 2010; Rupp et al., 2006). Age discrimination is also reflected in the more incredible difficulty for older workers to obtain an interview, reemployment, or mobility (Ahmed et al., 2012; Bowman et al., 2017; Drydakis et al., 2017; Gringart et al., 2012; McVittie et al., 2003; Solem, 2016). Those consequences can make us expect that more ageism impact less career advancement, training, employment, and job opportunities, the sixth decent work dimension (Ferraro et al., 2018; dos Santos, 2019). Where there are such social barriers as ageistic attitudes from those who currently relate or can relate in the future with a specific worker, he or she sees job opportunities diminished. Following this reasoning, we can expect a negative association between ageism and the ‘opportunities’ decent work dimension (H3). Moreover, if those who express ageistic attitudes have hierarchical responsibilities in the organization, there will be less opportunity for salary increase. Consequently, ageism will be related to a decent work deficit on the fourth dimension, related to meaningful remuneration for exercising citizenship (H4).

In addition, objectives 8 and 10 of the United Nations 2030 Sustainable Development Goals (Raposo & Carstensen, 2015), which focus on social inclusion and decent work, reflect this issue. Precisely, target 10.2 of the SDG 10 indicates the intention to ‘empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status’ (United Nations (UN), n.d.). This importance, concern, and need to combat ageism are also expressed in the Declaration on Fundamental Principles and Rights at Work (ILO - International Labour Office, 1998), in the Decent Work Agenda (Ferraro et al., 2016), and in the law of different countries.

Likewise, considering ageism can be expressed widely in the workplace, it can be expected that in the presence of ageistic attitudes, workers can hardly find flexible human resource management practices allowing them to balance their work and non-work life. Consequently, we expect a negative association between the second decent work dimension (working time and workload) and ageism (H5) and a positive association with the quality of intergenerational relationships (H6).

Concerning the fulfilling and productive work dimension of decent work, we expect a positive association between both constructs since good intergenerational relationships improve workplace social climate (H7). Contrary, ageism is expected to relate negatively to that decent work dimension (H8).

Considering that social protection and health and safety at work (fifth and seventh decent work dimensions) are not directly dependent on the quality of work relationships, no association is expected regarding those two dimensions and ageistic attitudes and intergenerational relationships at the workplace.

In 2010, Furunes and Mykletun developed and validated a scale for monitoring age discrimination in the workplace. Their validation study provides a psychometric contribution to the study of the behavioural component of ageism, and it draws on three Nordic datasets from Norway, Sweden, and Finland, respectively. Measuring age discrimination is very important to develop the study of ageism and for the qualification and intervention of empirical research.

In 2017, King and Bryant developed and validated a scale to assess the intergenerational climate in the workplace. In their research, the authors provide a psychometric contribution to studying intergenerational relationships in the workplace. They based their study on three studies / three datasets – staff from non-profit seniors housing and service organization (1 + 3)

and one from workers with at least 20 hours a week in a job where they interacted with several co-workers daily recruited through Amazon Mechanical Turk (MTurk).

As described above, the present study verifies to what extent each decent work dimension relates to ageism and intergenerational relations at work regarding the several dimensions of each construct. Additionally, it presents preliminary evidence of a Portuguese validation of the Nordic Age Discrimination Scale (NADS) and the Workplace Intergenerational Climate Scale (WICS). Considering that these instruments measure opposite constructs – if there is age discrimination, there are no good intergenerational relations – we expect a negative correlation between ageism and a good intergenerational environment in the workplace (H9). The validation of these instruments to Portuguese is highly relevant because it enables future studies in Portuguese-speaking cultural contexts, thus making it possible to conduct cross-cultural research.

3.2 Method

3.2.1 Participants

Two hundred sixty participants (workers aged 19 to 71) who met the selection criteria – active workers, with at least 6 months of professional experience, working in a company/organization with more than 10 employees – completed the Nordic Age Discrimination Scale (NADS), the Workplace Intergenerational Scale and the Decent Work Questionnaire (DWQ). Participants' age mean = 40.79, are mostly women (59.6%, n = 155) and workers in the private sector (73.1%). Regarding education, 46.2% of respondents indicated secondary education, 34.6% had Higher Education, and 0.4% said they could only read and write (see Table 3.1).

Table 3.1

Descriptive Statistics of Sample (N=260)

	Min.	Max.	Mean	SD	n	%
Sex						
Men					104	40
Women					155	59.6
Other					1	.4
Age	19	71	40.79	11.319		
Educational Qualifications						

	Min.	Max.	Mean	SD	n	%
Less than Primary Education					1	.4
Primary Education					15	5.8
Lower Secondary Education					34	13.1
Upper Secondary Education					120	46,2
Higher Education					90	34,6
Professional Sector						
Public Sector					69	26.5
Private Sector					190	73.1
Employment contract						
Service provider / independent worker					17	6.5
Fixed-term contracts / Casual					67	25.8
Employment contracts						
Permanent employee					173	66.5

3.2.2 Instruments

DWQ

The Decent Work Questionnaire (DWQ) (Ferraro et al., 2018) was designed to identify the factors that underlie a worker's perceptions of the concept of decent work and consists of seven factors, with a total of 31 items: (1) Fundamental principles and values at work (ex, "At my work, I am accepted for who I am (regardless of sex, age, ethnicity, religion, political orientation, etc.)"); (2) Adequate working time and workload (e.g., "My work schedule allows me to manage my life well."); (3) Fulfilling and productive work (e.g., "Through my work I can develop myself professionally"); 4. Meaningful remuneration for the exercise of citizenship (e.g., "What I earn through my work allows me to live my life with dignity and independence"); 5. Social protection (e.g., "I feel that I am protected if I become ill (social security or equivalent, NHS, public aid, health insurance, etc.)"); 6. Opportunities (e.g., "I think that I have opportunities to advance professionally (promotions, skills development, etc.)"); 7. Health and safety (e.g., "I have everything necessary at work to ensure that my health and safety are protected". These dimensions are linked to the employee's perception of their work and occupational context. On a five-point Likert scale, participants indicate the degree of agreement with each item (1 = I do not agree; 5 = I fully agree). The internal consistency (Cronbach's alpha) of the original DWQ was .92 in the Portuguese sample and .93 in the Brazilian sample.

The DWQ has been tested in several cross-cultural studies showing invariance between samples and maintaining the same factorial structure (Ferraro, dos Santos, Pais, Zappalà, & Moreira, 2021; Ferraro, Pais, dos Santos, & Martinez-Tur, 2023; Ferraro et al., 2018). Furthermore, the first dimension of this instrument was found to correlate positively to intrinsic and identified work motivation and psychological capital in Portuguese and Brazilian samples of knowledge workers (Ferraro et al., 2018).

NADS

The Nordic Age Discrimination Scale (NADS) was designed to measure age discrimination at work and consists of six items, one for each area of potential work-related age discrimination: (a) promotion, (b) training, (c) development, (d) development appraisals, (e) wage increases, and (f) change processes (Furunes & Mykletun, 2010). These areas are where age discrimination most occurs in the workplace. Participants indicated to what degree they agreed with each item on a five-point scale, where one (1) corresponds to totally disagree, and five (5) corresponds to totally agree. The original NADS's internal consistency (Cronbach's alpha) was between .82 and .87.

WICS

The Workplace Intergenerational Climate Scale (WICS) measures the attitudes and perceptions of employees about workers of different ages in the workplace and is composed of 5 factors, each with four items: (1) Lack of Generational Stereotypes (ex, “Co-workers who are not of my generation are not interested in making friends of other generations”); (2) Positive Intergenerational Influence (e.g., “I like to interact with co-workers from different generations”); (3) Intergenerational Contact (e.g., How often do you talk to co-workers who are not of your generation?); (4) Generational Inclusion in the workplace (e.g., Workers of all ages are respected in my workplace); (5) Intergenerational Retention in the workplace (e.g., My co-workers make older people feel they should retire) (King & Bryant, 2017)). These dimensions are linked to workplace orientation, opinions about older workers, and job satisfaction. On a four-point scale, participants indicate the degree of agreement with each item (1 = strongly disagree; 4 = strongly agree), except for the Intergenerational Contact dimension (1 = never; 5 = very often). The internal consistency (Cronbach's alpha) of the original WICS was between .85 and .87.

3.2.3 Procedures

3.2.3.1 Translation and back translation

The Nordic Age Discrimination Scale (NADS) (Furunes & Mykletun, 2010) and the Workplace Intergenerational Climate Scale (WICS) (King & Bryant, 2017) did not have a previous Portuguese version. Therefore, we undertook the procedures required for their development and validation. First, we asked the authors for permission to use the scales. After they allowed it, the original items were independently translated into Portuguese by three experts who had Portuguese as their mother tongue and were familiar with the content of the items. Then they compared the three versions of the items and discussed the differences until they agreed. Next, a think-aloud reflection was carried out with a few workers, from different professions, with ages ranging from 24 to 52 years, to look for possible non-conformities (either in the understanding or hard-to-read sentences). Then the items were back translated into English by a bilingual native speaker (Portuguese and English), independent from the research team. This person was also an expert on the content of the questionnaires (work, organizational, and personnel psychologist). The translators and back translator reported their comments, especially on any words or concepts that were difficult to standardize between both languages. After verifying the equivalence of the items in both languages, we reached the final consolidated version of the scales written in Portuguese.

3.2.3.2 Data collection

As part of their training in research methods, psychology students from a public university in Portugal collected the data. Each student underwent specific training, developed technical skills and ethical standards to perform the task among their network, and afterward was responsible for collecting responses from five participants. Data collectors provided information (project objective, research team identification, estimated time to complete the task, and the research context) and assured anonymity and confidentiality of the individual responses. The data collectors asked respondents to sign an informed consent before filling in the questionnaires. They also recorded the email addresses of respondents interested in receiving a summary of the results separately. Each student distributed the questionnaires to the employees of organizations in various areas of Portugal, within their network and with the most diverse professional occupations, to obtain a diverse sample. After application, each student

submitted a report on the task performed and signed a term of responsibility as part of the course's assignment and as a strategy to obtain high-quality data.

3.2.4 Ethical approval

The Ethical Committee of the university approved this study. Furthermore, the research followed the ethical standards of the American Psychological Association and Order of Portuguese Psychologists.

3.2.5 Data analysis

The data analysis included exploratory factor analysis, reliability tests (Cronbach's alpha), Pearson's correlation, frequency distributions, and descriptive statistics. We used the IBM SPSS Statistics 24 software (IBM Corp. Released, 2016).

3.2.6 DWQ correlations with the WICS and the NADS

We analysed the correlations between the DWQ and the WICS and NADS factors to confirm or reject the eight formulated hypotheses: H1: ageism relates negatively to the first decent work dimension (fundamental principles and values at work); H2 : the good quality of intergenerational relationships relates positively with the first decent work dimension; H3 : ageism is expected to relate negatively with the 'opportunities' decent work dimension; H4 : ageism will be related to a decent work deficit on the fourth dimension (meaningful remuneration for the exercise of citizenship); H5 : ageism is expected to relate negatively with the second decent work dimension (working time and workload); H6 : working time and workload will relate positively with the quality of intergenerational relationships; H7 : good intergenerational relationships relate positively with fulfilling and productive work dimension of decent work; H8 : ageism is expected to relate negatively to fulfilling and productive work dimension.

3.2.7 Convergent validity of the WICS and NADS

We assessed the convergent validity of the WICS and NADS by correlating each of the WICS's five factors and the NADS, which measures age discrimination at work (Promotion; Training; Development', Development appraisals; Wage increase; Change processes). We

expected that Intergenerationality at work correlates negatively with age discrimination (Lagacé et al., 2019) (H9).

3.3 Results

3.3.1 Nordic Age Discrimination Scale (NADS)

The factorial extraction method for the main components, with varimax rotation, led to the extraction of just one component, as in its original version, which explains 57% of the total variance (Table 3.2).

According to the results of the Kaiser-Meyer-Olkin (KMO) statistic (.84) and Bartlett's sphericity test (Table 3.3, chi-squares = 630.808; $p = .000$), the suitability of the Principal Component Analysis is considered “good” (Hair, Black, Babin, & Anderson, 2010).

The scale reliability was determined by Cronbach's alpha coefficient (.85), which shows that the internal consistency of the NADS is good, and that the reliability of the Portuguese version remains similar to the original, which supports the robustness of the scale.

Table 3.2
NADS Descriptive and Communalities

	Min	Max	Mean	Std. Deviation	Communalities
N1: (a) Promotion	1	5	2.75	1.394	.712
N2: (b) Training	1	5	2.33	1.290	.599
N3: (c) Development	1	5	3.19	1.376	.482
N4: (d) Development appraisals	1	5	2.58	1.263	.710
N5: (e) Wage increase	1	5	2.23	1.277	.538
N6: (f) Change processes	1	5	2.63	1.311	.385
Eigenvalues = 3.43					
Explained Variance (%) = 57.11%					
Cronbach's alpha = .85					
KMO = .840					
$\chi^2 (15) = 630.808$ P-value = .000					

The Pearson correlation coefficient calculated between the single factor obtained from the exploratory factor analysis of the NADS and factor number 1 of the DWQ, which measures workers' perceptions of fundamental principles and values at work, points to a significant

negative correlation ($r = -.159$, $p = .010$) (Babones, 2016; Cohen, 1988), supporting the hypothesis formulated (H1) and providing convergent validity of the measure.

The other two factors that pointed to a significant negative correlation were factors number 2 and 3, which measure Adequate Working Time and Workload ($r = -.151$, $p = .015$), and Fulfilling and Productive Work ($r = -.248$, $p = .000$) supporting the hypothesis (H5 and H8) formulated and providing convergent validity of the measure. Meaningful Remuneration for the Exercise of Citizenship, and Opportunities, however, do not have a significant correlation with age discrimination (H3 and H4 not supported).

3.3.2 Workplace Intergenerational Climate Scale (WICS)

For the structure study, the exploratory factor analysis analyzed the 20 items of the original version of the Workplace Intergenerational Climate Scale (King & Bryant, 2017).

The adequacy of the sample for further analysis was (Hair et al., 2010) performed using the KMO statistic, which revealed sufficient suitability ($KMO = .765$; Bartlett's sphericity test = 1565,138; $p = .000$) (Hair et al., 2010). The method of factorial extraction of principal components with varimax rotation verified the possible correlation between dimensions, leading to the extraction of six factors. However, after a first analysis of the factorial matrix, it was found that one of the items (PIA4) had saturations in more than one factor/component, all of them equal to or less than $|.45|$, thus revealing some ambiguity. Therefore, we eliminated this item and went back to the factor analysis.

With the variable removed, the sample continued to reveal mean suitability ($KMO = .752$; Bartlett's test of sphericity = 1467,724; $p = .000$) and forced the extraction of five factors with a total explained variance of 58.33% (see Table 3.3), which is considered acceptable (Damasio, 2012). We can also see that factor 1 explains 13.95% of the total variance. All these items refer to Intergenerational Retention at Workplace. Factor two explains 12.54% and contains all items of the Intergenerational Contact subscale. Factor three explains 12.36% of the total variance, including the three items of the Positive Intergenerational Influence (the item removed belonged to this subscale). However, it also contains two items that belonged to the Generational Inclusion in the Workplace subscale in the original version. Factor four explains 11.42% of the total variance and is entirely composed of the items in the Absence of Generational Stereotypes subscale. Finally, factor five explains 8.06% of the total variance and comprises only two items. The other two that made up the original version of the Generational

Inclusion in the Workplace subscale have always had a very low saturation in this subscale and much higher in factor three, the Positive Intergenerational Influence subscale.

Table 3.3

Varimax rotated factor solution of the WICS, without item PII4

Variables	Components					Communalities
	1 WIR	2 IC	3 PII/WGI	4 LGS	5 WGI	
WIR3_recoded	.808	.016	.119	.127	.091	.692
WIR2_recoded	.791	.089	.313	.008	-.053	.525
WIR1_recoded	.641	.031	.138	.283	.119	.734
WIR4_recoded	.606	.063	-.242	.209	.179	.505
IC2	.075	.848	.098	.161	-.033	.762
IC3	-.066	.770	-.038	.223	.187	.683
IC1	.292	.685	.223	.078	.072	.616
IC4	-.026	.654	.104	-.084	-.001	.446
PIA1	.098	.086	.712	-.064	-.002	.528
PIA2	.198	.065	.665	.023	.085	.494
WGI4	-.002	.046	.634	.017	.130	.421
PIA3	-.319	.215	.523	.300	.170	.540
WGI3	.343	.147	.511	.069	.247	.466
LGS2_recoded	.015	.025	-.077	.768	.074	.602
LGS4	.083	.125	-.100	.651	.032	.457
LGS3_recoded	.298	.168	.216	.644	-.024	.580
LGS1_recoded	.320	-.014	.215	.611	.089	.529
WGI1	.121	.183	.113	-.025	.839	.765
WGI2	.130	-.046	.282	.0197	.775	.738
Eigenvalues	4.547	2.112	1.884	1.420	1.121	
Variance explained (%)	13.949	12,544	12,356	11,418	8,061	
Variance accumulated (%)	13.949	26,494	38,850	50,268	58,329	
Cronbach's alpha = .80	.743	.747	.640	.684	.655	
Alpha de Cronbach Based on Standardized Items	.766	.758	.667	.686	.663	
KMO = .752						
$\chi^2 (171) = 1467,724$ P-value = .000						

The reliability of the scale and the five factors obtained were determined by Cronbach's alpha coefficient, which had a value of .75 in its first version (all variables). After removing the variable that presented ambiguous values, Cronbach's alpha coefficient presented a value considered "good" (.80).

The Pearson correlation coefficient calculated between each factor obtained from the exploratory factor analysis of the WICS and the single factor of the NADS, which measures

age discrimination at work, points to significant negative correlations: between the Workplace Intergenerational Retention and the NADS ($r = -.249, p = .000$); between the Intergenerational Contact and the NADS ($r = -.123, p = .047$); between the Lack of Generational Stereotypes and the NADS ($r = -.340, p = .000$); and no significant negative correlation between the Positive Intergenerational Influence and the NADS ($r = -.061, p = .328$); and between the Workplace Generational Inclusiveness and the NADS ($r = -.043, p = .487$) (Babones, 2016; Cohen, 1988), supporting part of the hypothesis formulated (H9).

The Pearson correlation coefficient calculated between each factor obtained from the exploratory factor analysis of the WICS and the seven factors of the DWQ points to significant positive correlations.

3.3.3 Decent Work Questionnaire (DWQ), Workplace Intergenerational Climate Scale (WICS) and Nordic Age Discrimination Scale (NADS) correlations

To assess the confirmation or rejection of the eight formulated hypotheses, a Pearson Correlation was performed between the DWQ factors and each of the other factors of the other two instruments (NADS and WICS) obtained from the exploratory factor analysis. The Pearson's significant correlation coefficient calculated between the seven factors of the DWQ and the single factor of the NADS and between the seven factors of the DWQ and the five factors of the WICS are presented in Table 3.4.

Table 3.4

Correlations between the DWQ the NADS and the WICS

	NADS factors		WICS factors			
	Pearson correlation (r)	Sig. (p)		Pearson correlation (r)	Sig. (p)	
DWQ factors	F1) Fundamental Principles and Values at Work	-.159**	.010	F1) Workplace Intergenerational Retention	.146**	.019
				F2) Intergenerational Contact	.094	.132
				F3) Positive Intergenerational Influence	.263**	.000
				F4) Lack of Generational Stereotypes	.224**	.000
				F5) Workplace Generational Inclusiveness	.553**	.000
	F2) Adequate Working Time and Workload	-.151*	.015	F1) Workplace Intergenerational Retention	-.017	.786
				F2) Intergenerational Contact	.038	.546
				F3) Positive Intergenerational Influence	.093	.134
				F4) Lack of Generational Stereotypes	.162**	.009
				F5) Workplace Generational Inclusiveness	.320**	.000
	-.248**	.000	F1) Workplace Intergenerational Retention	.026	.682	

	NADS factors		WICS factors		
	Pearson correlation (r)	Sig. (p)	Pearson correlation (r)	Sig. (p)	
F3) Fulfilling and Productive Work			F2) Intergenerational Contact	.169**	.006
			F3) Positive Intergenerational Influence	.265**	.000
			F4) Lack of Generational Stereotypes	.174**	.005
			F5) Workplace Generational Inclusiveness	.363**	.000
			F1) Workplace Intergenerational Retention	-.041	.515
F4) Meaningful .Remuneration for the Exercise of Citizenship	-.090	.148	F2) Intergenerational Contact	-.040	.520
			F3) Positive Intergenerational Influence	.052	.399
			F4) Lack of Generational Stereotypes	.078	.208
			F5) Workplace Generational Inclusiveness	.223**	.000
			F1) Workplace Intergenerational Retention	-.030	.629
F5) Social Protection	-.056	.368	F2) Intergenerational Contact	.054	.387
			F3) Positive Intergenerational Influence	.101	.103
			F4) Lack of Generational Stereotypes	.105	.090
			F5) Workplace Generational Inclusiveness	.173**	.005
			F1) Workplace Intergenerational Retention	-.032	.608
F6) Opportunities	-.062	.320	F2) Intergenerational Contact	.126*	.043
			F3) Positive Intergenerational Influence	.153*	.014
			F4) Lack of Generational Stereotypes	.066	.288
			F5) Workplace Generational Inclusiveness	.302**	.000
			F1) Workplace Intergenerational Retention	.026	.674
F7) Health and Safety	-.092	.138	F2) Intergenerational Contact	.069	.266
			F3) Positive Intergenerational Influence	.151	.015
			F4) Lack of Generational Stereotypes	.107	.085
			F5) Workplace Generational Inclusiveness	.438**	.000
			F1) Workplace Intergenerational Retention	.026	.674

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

We can realize that, as could expect, the NADS correlates negatively with the Fundamental Principles and Values at Work (H1), the Adequate Working Time and Workload (H5), and the Fulfilling and Productive Work (H8), given that these are the factors most directly related to people, their attitudes and relationship quality. Therefore, H3 and H4 are not supported.

As for the correlations of the Decent Work Questionnaire with the WICS, we can see that there are significant correlations with all the DWQ factors, not only five, contrary to what we supposed, given that dimension seven (health and safety) is positively related to Workplace Generational Inclusiveness.

3.4 Discussion

This paper aims to analyze the relations between age discrimination, intergenerational work relations, and decent work. In addition, we present preliminary validation evidence of the Portuguese versions of the Nordic Age Discrimination Scale (NADS) and the Workplace Intergenerational Climate Scale (WICS).

The results obtained for the NADS presented a unifactorial structure equivalent to the original version. The results obtained in this study allow us to conclude that the Portuguese version of NADS presents adequate levels of reliability, with a value above .80. The NADS and the first, the second and the third factors of DWQ correlate negatively, as expected, showing the existence of convergent validity (H1, H5 and H8).

These correlations confirm that these are conceptually antagonistic constructs. If there is age discrimination (measured by the NADS), fundamental principles and values at work (DWQ-1) should have a negative correlation (H1). Indeed, ageism has harmful effects on workers (Drydakis et al., 2017; Iweins et al., 2012; Macdonald & Levy, 2016; Rupp et al., 2006; Shippee et al., 2019), which directly or indirectly impact organizations (Griffin, Bayl-Smith, & Hesketh, 2016; Macdonald & Levy, 2016; Shippee et al., 2019; Soidre, 2005; van der Horst, 2019). This impact can be observed on the negative correlation between the NADS and the working time and workload (DWQ-2), and fulfilling and productive work (DWQ-3) (H5 and H8). As a form of devaluation and non-inclusion of workers, ageism materializes a decent work deficit that must be tackled and fought against "to achieve full and productive employment and decent work for all women and men" without discrimination of age and "equal pay for work of equal value" and "protect labour rights" (ILO - International Labour Organization, n.d.) so that we can achieve Goals 8 and 10 of the Agenda 2030, specifically, the target 10.2 which indicates the intention to 'empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status' (United Nations (UN), n.d.).

The results for the Workplace Intergenerational Climate Scale (WICS) presented a factorial structure equivalent to the original version, in which the different items were grouped into five dimensions, as published by the authors (King & Bryant, 2017). However, it should be noted that 1 item was removed – "People work better with people of the same age" – due to saturation in more than one factor, which made it ambiguous. This saturation around different factors – in its original dimension, "Positive Intergenerational Influence", and in the dimensions "Absence of Generational Stereotypes" and "Intergenerational Contact" – may have happened

because the respondents did not understand the context of the question or because of cultural differences between the country of origin and Portugal. These differences can happen because the Portuguese are, in general, affectionate (Donaldson, 2023; Ramos & Magalhães, 2021), and "working better with people of the same age" can be directly linked not only with a "Lack of Generational Stereotypes" but also with Intergenerational Contact and the good influence of these contacts ("Positive Intergenerational Influence"). Therefore, due to the ambiguity of this item, it was removed. Nevertheless, it does not appear that this subtraction has any adverse effect on the evaluation of the constructs.

However, it should be noted that this model obtained from the exploratory factor analysis is a different model from the original even though the factor structure of five factors is respected and contains adjustment indices. This model has four items in the first, second, and fourth factors, five items in the third, and only two items in the fifth. In comparison, the original model has four items in each of the five factors. In other words, the exploratory factor analysis generated an alternative model that presents acceptable fit indices despite differing from the original model. The results obtained in this study allow us to conclude that the Portuguese version of the WICS presents adequate levels of reliability, with a value well above .70 for the whole scale and showing coefficients well above .70 in 2 of them and above for the subscales .60 in the remaining ones – 2 of which with values above .67 – , considering these values to be acceptable (Hair et al., 2010).

The WICS and the NADS correlate negatively, as expected, showing the existence of convergent validity. In short, the Portuguese versions of the NADS and the WICS have adequate psychometric properties for their use in research on Age Discrimination and Intergenerationality in the workplace.

Based on the results obtained in the Decent Work Questionnaire (DWQ) and the NADS, which measures age discrimination in the workplace, it was confirmed that ageism is negatively correlated with the Fundamental Principles and Values at Work (H1), Time of Adequate Work and Workload (H5) and Fulfilling and Productive Work (H8). These are factors directly related to people, their attitudes, and the quality of their relationships. However, there was no support for H4 (negative association between ageism and significant remuneration for exercising citizenship), which we believe is due to the questions raised in the fourth dimension of the DWQ, which focused on comfort, safety, and quality of life with the that the worker earns. Furthermore, ageism does not have a significant relationship with "opportunities" (H3), despite what we supposed. This result could be attributed to the questions in the opportunities factor,

which may only consider some aspects of discrimination professionals feel due to age. Questions in the opportunities factor have to do with what the participants think about having possibilities for career progression, prospects for improving remuneration, and job opportunities for professionals like himself, including creating their own jobs. Respondents may think just about their own qualifications and skills rather than think about a professional with their qualifications and skills at their age. Furthermore, the opportunities factor does not consider opportunities for employment or re-employment or even the severity of evaluation for poor performance or, conversely, the public appreciation of the work done, which are the areas where discrimination is most felt. Although it is illegal to discriminate based on age, some employers and managers use other variables to circumvent the issue in recruitment and selection processes and performance evaluations, resulting in discrimination based on age, even though age is not explicitly mentioned.

The results obtained on the associations between the Decent Work Questionnaire (DWQ) and the Workplace Intergenerational Climate Scale (WICS) indicate that there is support for H2 and H7, while H6 is only partially supported. Positive intergenerational influence, lack of generational stereotypes, workplace generational inclusiveness, and workplace intergenerational retention positively correlate with the fundamental principles and values at work (H2). Therefore, it can be concluded that good intergenerational relationships, intergenerationality, and the absence of generational stereotypes can help combat ageism, which is in line with other studies (Dixon, 2012; Iweins et al., 2013; Lagacé et al., 2019), and positively impact various decent work dimensions, including the fundamental principles and values at work. In addition, workers are more likely to be pleased with their work and productivity if there is ‘Positive Intergenerational Influence’, ‘Lack of Generational Stereotypes’, ‘Workplace Generational Inclusiveness’, and ‘Intergenerational Contact’ (H7).

Regarding the relationship between time and workload with the intergenerational climate in the workplace (H6), the absence of generational stereotypes and the perception of generational inclusion in the workplace are the correlated factors. When stereotypes do not exist, workers tend to feel more satisfied in their workplace ((Levy & Macdonald, 2016), and the emotional and physical toll of time spent at work and their workload is minimized. It can even help eliminate any ageism that may exist in the workplace. Furthermore, when there is generational inclusion, workers feel that everyone, regardless of age, has a place in the company or organization, which can lead to greater job satisfaction by not feeling at risk because of their age. Intergenerational retention correlates only with work fundamentals and core values.

Intergenerational contact and positive intergenerational influence are decisive factors regarding the perception of fulfilling and productive work and opportunities, showing the importance of positive intergenerational relationships. However, of these two factors, only the positive intergenerational influence is correlated with the fundamentals and principal values at work, without considering that there is unnecessary intergenerationality and intergenerational contacts at work. However, when there are, then yes, it is essential that they are positive.

We found statistically significant correlations. Portugal, as in other European countries, the United States, and Canada, discrimination is prohibited by law, so explicit ageism (discrimination based on age) will always be veiled. Discrimination ratios, expectably, would never be very high. Furthermore, the Portuguese are welcoming, friendly, and mainly tolerant people (Donaldson, 2023; Ramos & Magalhães, 2021). Discrimination will arise much easier when refusing access to job offers because there are different ways of blocking access to older or very young workers, for example, through selection criteria in which, although age is not expressed, due to requirements, different groups of workers are excluded from the outset, either due to the low rate of calls for interviews or, when interviewed, they are excluded without any plausible justification, but never mentioning their age. It is essential to consider that in certain professions – fighter pilots, air traffic controllers, high-level competitive athletes, or any other professions that require great physical capacity or speed of response and mental processing – age, different for each role and job, is a factor critical to be considered, but only as an indicator. The exclusion of any worker from high-risk or demanding roles should only be done after physical and aptitude tests and when the reference values for each role are not reached, given that everyone is a particular case regarding his physical, cognitive, and emotional capacity. When age is an immediate exclusion factor, companies and organizations can lose valuable talent. Additionally, if a project extends over time, it is crucial to consider if the worker is willing and able to keep up with its demands. What cannot be done is to discriminate solely because of age if the worker has the qualifications and skills required for the job. For instance, Rego et al. (2018) found that during downsizing, managers preferred to retain younger workers over older ones, even though the latter were described as superior performers, suggesting that this behavior indicates that biases toward older workers may be more resistant to change than to attitudes.

These results are consistent with previous studies (Harnois & Bastos, 2018; Shippee et al., 2019; Yamada et al., 2005), which show that prejudice and discrimination based on age,

both facets of ageism, negatively impact mental health, job satisfaction, and commitment (see Figure 3.1).

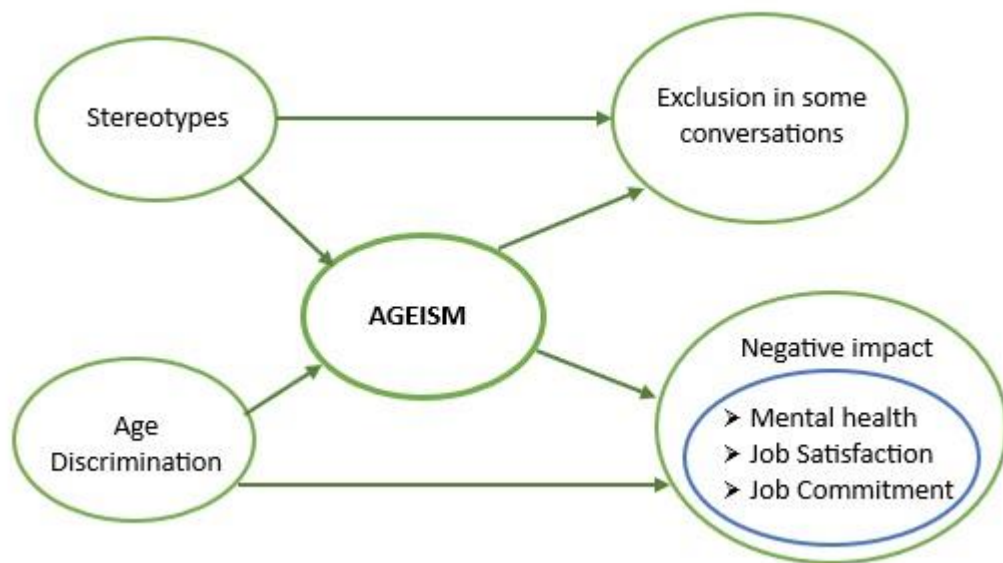


Figure 3.1
Ageism network

Conversely, a positive intergenerational climate in the workplace helps to minimize ageism and increase job satisfaction and commitment (see Figure 3.2), which in turn helps to fulfill a decent work agenda and productivity and success of organizations.

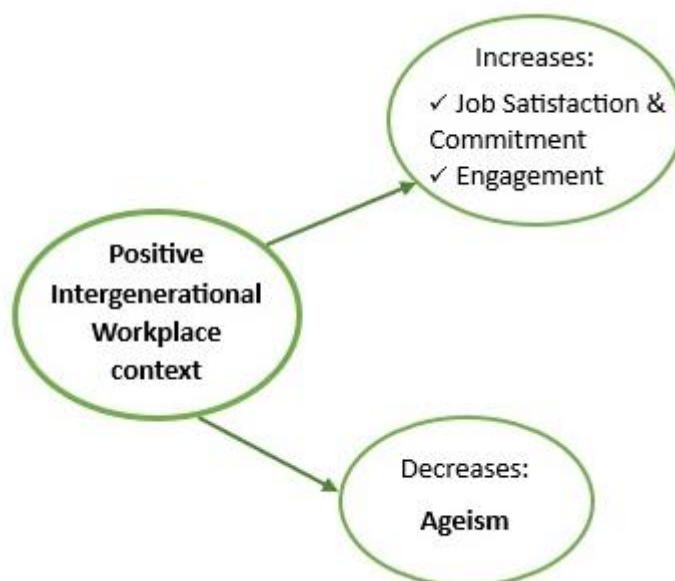


Figure 3.2
Positive intergenerational workplace relations

Companies' strategic plans must be translated into HR plans, which must consider the population's aging and the diversity of its workforce. As explicit discrimination based on age is still relatively low and good intergenerational relationships help support decent work, a way to manage ageism will be through training on age and its physical and cognitive characteristics in each age group and their contribution to the functions of each organization. Requalification training should also be provided for older or longer-tenured workers, and mentoring programs will help younger and older workers share and transmit knowledge while dispelling stereotypes and minimizing or eliminating prejudices. HRM should focus on good intergenerational relationships as a practice and culture of organizations to leverage team spirit, mutual help, and knowledge sharing. Everyone will win: workers, managers, and organizations.

3.5 Conclusion

As a result of this study, we can confirm that ageism negatively correlates with intergenerational work relations and decent work. Nevertheless, on the other hand, intergenerational labor relations and decent work are positively correlated, as expected. We can therefore state that the investment in the management of intergenerational relationships, in the retention and promotion of workers, in a way that does not discriminate in terms of age, and consequently in the management for the absence of generational stereotypes will be critical tools for the minimization or elimination of ageism in the workplace. We will also achieve some decent work objectives if we achieve this goal. Good intergenerational relationships are the environment where mechanisms and good practices support decent work and achieve the Objectives of Agenda 2030.

This study has limitations in the sample size, which does not allow us to make inferences nor observe differences between different professions, sectors of activity, or even in organizations that allow us to characterize certain professionals, sectors, or specific organizations in some way. Furthermore, the observed correlations may be driven by third variables not measured in the present study. Therefore, studies with much larger samples are suggested so that inferences can be made at a national or regional level, comparing different samples or even case studies, that allow us to have new perspectives on ageism and intergenerational relationships, knowing that they have a direct implication on the decent work and the achievement of objective 8 of the United Nations 2030 Agenda.

The Portuguese versions of the NADS and the WICS have adequate psychometric properties for their use in research on Age Discrimination and Intergenerationality in the workplace. Furthermore, they present the first scale validation study for the Portuguese population, an important starting point for similar studies in other Portuguese-speaking countries. This instrument that is now available can be used in future studies to deepen the understanding of work-related ageism and other phenomena in its nomological network. Finally, due to the sample size, further validation studies can be recommended with larger samples and those from other Portuguese-speaking countries.

This study contributes to the field of investigation by correlating, for the first time, age discrimination in the workplace with decent work and good intergenerational relations in the workplace, shedding new light on these issues and pointing out ways for managing ageism.

4 Age discrimination in work-related decisions: An experimental design study

Abstract

This study aims to assess to what extent workers, discriminate candidates by age for a job and a professional merit award. After excluding incomplete answers or those not meeting the inclusion criteria, the final sample had 380 participants, divided in two samples, which we named as conditions. Participants in both conditions were asked to choose between four candidate CVs in each of two tasks: choosing one candidate for a job opening (T1) and one for a professional award (T2). Each Condition had similar CVs, which varied only in the age of the candidates (31, 45, 54, and 63 years old). Among the conditions, there were two CVs that were exactly the same, including age (54 years in both conditions) and two others that were identical except for age (31 years in one condition and 63 in the other). Participants were also required to describe the reason for the choice they made. The study reveals in both condition that the CV of the youngest candidate, aged 31, was significantly more chosen followed closely by the second youngest, aged 45. When identical CVs from candidates aged 54 were compared, the frequency of selections was similar. However, when the only differentiating factor was age, the oldest candidate, aged 63, was three times less likely to be chosen than the youngest, aged 31. It is noteworthy that the candidates who were 54 years old were the least selected among the four ages presented in both hiring and awarding work-related situations. The results showed that age plays a significant role in how candidates are evaluated, specifically related to the older.

Keywords: Age; Ageism; Experimental research design.

4.2 Introduction

Ageism is relatively unexplored in economics and management, although researchers have been studying other forms of discrimination in different markets for some time, such as racial and gender discrimination. However, age discrimination, which first appeared in 1969 called ageism by Butler (1969: 243), is defined from the outset as affecting both older and younger people (Cebola, dos Santos, & Dionísio, 2021). In its complexity, ageism includes prejudice, that is, the perceptions and images of others based on their age. It is affective (positive or negative) and can become behavioral with explicit discrimination. While conscious, ageism can include exploitation of the vulnerabilities of the elderly or the young, but it can also be unconscious and inadvertent (Cebola et al., 2021; International Longevity Center-USA (ILC), 2005).

In the context of work, ageism can harm workers (Desmette & Gaillard, 2008; Duncan & Loretto, 2004; Harada et al., 2018; Harnois & Bastos, 2018; Shippee et al., 2019) and organizations, either because it affects workers job satisfaction, or because it can affect commitment (Griffin et al., 2016; Macdonald & Levy, 2016) and productivity, and can lead to the loss of talent in organizations. Regardless of the consequences, any kind of discrimination is unfair and must be unacceptable.

The global population, especially the European, American, and Canadian – despite a slowdown, probably due to the Covid-19 pandemic (Eurostat) that mainly affected the elderly – is, due to low birth and death rates and increased longevity, aging dramatically (European Commission, 2015b; Rouzet et al., 2019; United Nations (UN), 2019b, 2019c). As a result, the proportion between the active population and people aged 65 and over has continuously decreased over several decades, which has led to an increase in the employment rate of the older population (Berde & Mágó, 2022; Cebola et al., 2021). This disproportion can trigger and reinforce ageism among older and younger people. Older workers can be considered obstacles to a more significant number of job vacancies and, also, because they are often considered slower, less predisposed to change, to new technologies, less flexible, and willing to accept help and young people's ideas (Posthuma & Campion, 2009). On the other hand, the younger workers are often considered threats to the older ones, mainly regarding access to job vacancies, when organizations are acquired by others, in restructurings, or when there is technological and process innovation. Also, young people are often seen as more irresponsible, less loyal (always ready to take on a new challenge or opportunity) and unwilling to learn from older coworkers (Posthuma & Campion, 2009; Raymer et al., 2017).

It is crucial to identify workplace ageism so that the areas, sectors, and even possibly, functions and contexts where it exists can be identified so that tools or strategies can be proposed to combat it. Many studies analyze ageism in the workplace using experimental or quasi-experimental research designs, mainly concerning access to the labor market (Bendick, Brown, & Wall, 1999; Berde & Mágó, 2022; Burn, Firoozi, Ladd, & Neumark, 2023b; Carlsson & Eriksson, 2019; Drydakis et al., 2017; Riach & Rich, 2010). However, as Riach & Rich (2002) noted, the majority/network of age discrimination occurs right at the beginning of the hiring process in CV screening.

In the typical condition, to fill a vacancy, candidates must undergo a hiring process to access the labor market or change jobs. The hiring process seeks the ideal fit between the employer's needs – to hire and retain talent in an increasingly complex and competitive market at all levels – and the worker's skills and competencies (Kumari, 2012; Mktalent, 2022; Rozario, Venkatraman, & Abbas, 2019). In the selection phase, CV screening aims, as a first step, to eliminate unqualified candidates, creating a pool that will be observed and selected later through interviews and, depending on the size of the company, possibly also through tests (e.g., ability, personality). As for candidates, the hiring process is a process that can give them the opportunity they aspire to come and work in the function and, hopefully, in the company to which they are applying, in which the preparation and submission of CVs are vital. Hence, most experimental studies on ageism try to understand recruiters' attitudes toward age. Most of that study research is conducted by sending pairs of identical resumes. The analysis uses a callback response rate method for each application (Ahmed et al., 2012; Berde & Mágó, 2022; Carlsson & Eriksson, 2019; Drydakis et al., 2017; Lahey, 2019; Peter A. Riach & Rich, 2010) and the results show an age discrimination rate, mostly against older workers. Furthermore, ageism is even more significant when filling positions that require more skills (Berde & Mágó, 2022) and, in line with other studies, for women (Carlsson & Eriksson, 2019; Kanagasabai, 2016; McGann et al., 2016; Riach & Rich, 2002; Spedale, Coupland, & Tempest, 2014).

However, some studies use The Implicit Association Test (Malinen & Johnston, 2013), which is a reaction time-based measure of the strength of association between two categories (e.g., older worker/younger worker) and two evaluative dimensions (e.g., good/bad), but with the same results. For example, negative, stable implicit attitudes towards older workers emerged in both studies by Malinen & Johnston (2013). However, these studies did not show age bias explicit discrimination, which is more susceptible to the change intervention.

Burn, Firoozi, Ladd, & Neumark (2023a; 2023b) conducted a different study by looking at this issue from a different perspective. They studied the responses of real candidates to fictitious job advertisements, with language usually used by job recruiters, some taking care not to use ageist language and others taking care to use ageist language (generated by a machine-learning). Survey participants were shown job requirements and told they were from job advertisements posted online. For each requirement, respondents were asked whether they agreed or disagreed with the statement that '(a particular treatment or control requirement)' is biased against workers over age 50' (Burn et al., 2023b, p. 17). This study shows that language in job advertisements classified as closely related to ageist stereotypes by the machine-learning algorithm is generally perceived as ageist by experimental subjects as biased against older job applicants.

Another work context where we need to think more about ageism is the recognition of professional merit. Public recognition can be achieved through a public tribute as recognition of career merit, but it is also achieved through awards and rewards. Awards for merit or exceptional performance confer public recognition and, as such, have a substantial impact on the individual's subsequent behavior – significantly increasing their performance – and that of their closest network, and may change beliefs, norms, or interests (Ashraf, Bandiera, & Lee, 2014; Berlinski & Ramos, 2020; Bradler, Dur, Neckermann, & Non, 2013; Moreira, 2019). Recognition is assumed to be one of the main motivating factors for workers (Wiley, 1997).

This study assesses to what extent workers discriminate against candidates for a job and a professional merit award based on age. The present study intends to contribute to the area of investigation, investigating explicit discrimination based on age in screening or selection in hiring processes and recognition of professional merit while also trying to understand whether implicit/unconscious ageism exists.

Studies on ageism mainly focus on older people or, in much lesser cases, on younger people (Cebola et al., 2021). After identifying this gap, this study seeks to understand who is affected by ageism, whether the oldest, the youngest, or even an age between them. As for the type of sample, our study option avoids bias and uncontrollable variables, such as the macroeconomic state of the labor market and fluctuations in unemployment, which, when it rises, increases the proportion of applicants per vacancy and will increase the probability of rejection, regardless of whether or not there is discrimination (Riach & Rich, 2002).

4.3 Method

Unlike most studies that analyze age discrimination on the part of recruiters/employers or job seekers concerning job advertisements, this study aims to assess how workers, newly unemployed or recently retired, discriminate against candidates by age for a job and a professional merit award. We chose this type of study because it allows us to analyze ageism in workers about other workers, who may, themselves, become candidates for employment, either by entering or re-entering the labor market or by mobility, change of company, or career, either because some of them may be or will be managers and are or become responsible for vacancies and for choosing candidates.

Our study has 2 groups/samples, which we called conditions A and B, and is divided into two tasks, equal for both conditions. The first task involves applying for a job vacancy, and the second task involves nominating for a professional merit award. Participants were shown the requirements for the labor and merit awards and were informed that they were employment ads for task 1 and a professional merit award for task 2. They were then provided with four identical resumes for each task and asked to choose one CV per task. Finally, they were asked to explain the reason for their choice in an open answer. As there were paired CVs between the two groups/samples, we were able to verify the extent to which different ages determine higher or lower frequency in choices.

First, we checked whether the distribution of responses was similar between CV pairs, given that the CVs were similar in terms of qualifications and experience and that the gender of the applications was kept equal. Assuming that the CVs were similar in each pair, the distribution would be expected to be equivalent, between both CVs of the same pair (null hypothesis – Chi-square test).

To complement the test about the uniform distribution of categories, we also compare directly the proportion of response for similar CVs using the Z statistic based on the normal distribution. This test is based on the approximation of the normal distribution by the binomial distribution and allows to higher accuracy given the fact that is a parametric test. Finally, we did a content analysis of the qualitative responses to understand the reason for the Choices participants made.

After conducting the content analysis, we performed a subsequent analysis that was carried out excluding the qualitative responses that focused on age.

4.4 Participants

Four hundred and seventy-nine participants with work experience in different professional categories and organizations divided into two groups filled up two identical online questionnaires. The inclusion criteria were workers (a), or unemployed for under two years with at least three years of work experience (b) or retired for under five years with at least ten years of work experience (c). After excluding incomplete responses or those that did not meet the inclusion criteria, the final sample has 380 participants – (aged 18 to 80) with age mean 38.90, mainly being women (56.8%, $n = 216$), workers (92.4%) in the private sector (62.9%). Regarding education, 38.2% of respondents indicated secondary education, and 47.1% had higher education (see Table 4.1).

4.5 Measures

The outcome was measured by the choice of the participants for each task – job vacancy and professional merit award – of the CVs for the competition, answering the question “Respond by choosing one of the options/CVs you consider the most suitable candidate.” Furthermore, justifications regarding the choices made were required in both tasks.

4.6 Procedures

4.6.1 Data collection

As part of their training in research methods, students enrolled in psychology graduation from a public university in Portugal collected the data. Each student underwent specific training, developed technical skills and ethical standards to perform the task among their network, and afterward was responsible for collecting responses from eight to ten participants. Data collectors provided information (project objective, research team identification, estimated time to complete the task, and the research context) and assured anonymity and confidentiality of the individual responses. The data collectors asked respondents to sign an informed consent before performing the task. They also recorded the email addresses of respondents interested in receiving a summary of the results separately. Each student distributed the questionnaires to the Portuguese individuals who met the inclusion criteria within their network without any geographical restriction.

Table 4.1

Descriptive Statistics of Samples

	Min.		Max.		Mean		SE		n			%					
	Conditions / Samples		Both Samples		Conditions / Samples		Both Samples		Conditions / Samples		Both Samples	Conditions / Samples		Both Samples			
	A	B	A	B	A	B	A	B	A	B	A	B	A	B			
N	197	183	380	197	183	380	197	183	380	197	183	380	197	183	380		
Sex																	
Women												113	103	216	57.4	56.3	56.8
Men												84	80	164	42.6	43.7	43.2
Age	18	19	18	68	80	80	39.31	38.46	38.90	13.175	13.126	13.141					
Educational Qualifications																	
Primary Education												5	8	13	2.5	4.4	3.4
Lower Secondary Education												24	19	43	12.2	10.4	11.3
Upper Secondary Education												79	66	145	40.1	36.1	38.2
Higher Education												89	90	179	45.2	49.2	47.1
Workers												181	173	354	91.9	94.5	32.2
Unemployed												12	8	20	6.1	4.4	5.3
Retired												4	2	6	2	1.1	1.6
Workers:																	
Professional Sector																	
Public Sector												41	56	97	20.8	30.6	25.5
Private Sector												134	109	243	68	59.6	63.9
Both (Public & Private Sector)												6	9	15	3	4.9	3.9
Employment contract																	
Service provider / independent worker												16	15	31	8.1	8.2	8.2
Fixed-term contracts / Casual Employment contracts												59	54	113	29.9	29.5	29.7
Permanent employee												90	91	181	45.7	49.7	47.6

About the two groups/samples, which we call conditions A and B, each student had two links, one for each questionnaire (sample). Each questionnaire included four similar candidacies except in age, from fictitious individuals, one from a younger candidate, aged 31, another from an older candidate, aged 63, and two others aged 45 and 54. In addition, these two questionnaires contained 2 CVs with the same qualification, age, and experience and another two CVs with the same information except for the age, in the same order of presentation to the respondents. Each student had to collect data from the two links (conditions A and B) randomly in a way that could reach a number of participants in each condition as similar as possible. After collecting data, each student delivered a report on the task and signed a term of responsibility as part of the course's assignment and as a strategy to obtain high-quality data.

4.7 Ethical approval

The Ethical Committee of the university approved this study. Furthermore, the research followed the ethical standards of the American Psychological Association and Order of Portuguese Psychologists.

4.8 Data analysis

The data was summarized quantitatively using frequencies. The results investigated used descriptive statistics, chi-square for the null of uniform distribution, and z-tests for the equality of proportions. P-values less than .05 were considered significant for all statistical analyses in this study.

The qualitative data followed a deductive and an inductive approach. Finally, it was summarized quantitatively using frequencies.

The data was analyzed using SPSS 26.0.

4.9 Results

4.9.1 Application for a job (Task 1)

Quantitative analysis

After analyzing each Sample/Condition individually, with all the similar CVs, it is evident that younger candidates (specifically, those who are 31 and 45 years old) tend to receive

more choices (Figure 4.1). In condition/Sample A, the percentage of choices for these two age groups was exactly the same (37.1%), but in condition B, the youngest CV (31 years old) received more choices (44.8%) compared to the 45 years CV (25.1%). On the other hand, the 54 years CV received the lowest score (11.7% – in Condition A and 12.6% – in Condition/Sample B) (Table 4.2).

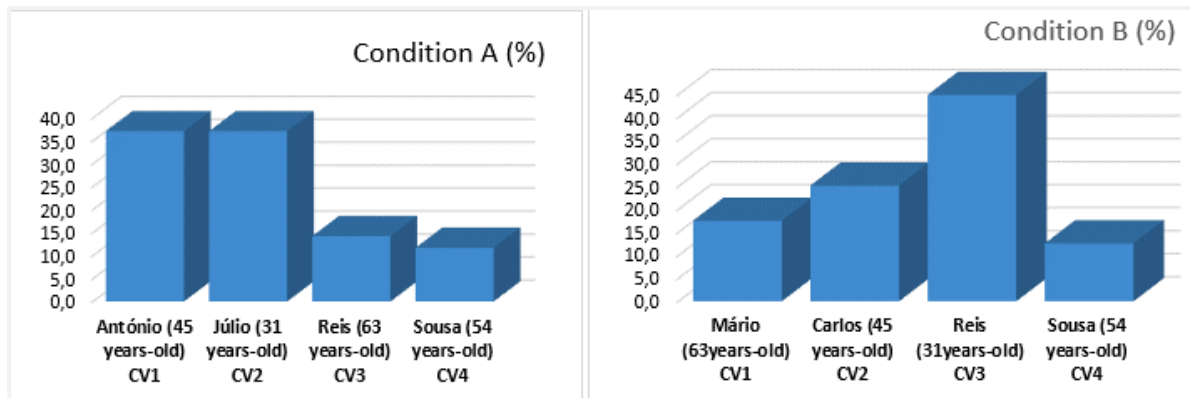


Figure 4.1

Choices for job vacancy

To further assess the data, we conducted a chi-square test (Table 4.2) to evaluate whether the distribution among candidates was uniform (H_0). We tested Conditions/Samples A and B, and the null of uniform distribution was rejected.

Table 4.2

Chi-square test (task 1)

Age	n	Condition A		Condition B		
		%	χ^2	n	%	χ^2
31	73	37.1		82	44.8	
45	73	37.1		46	25.1	
54	23	11.7		23	12.6	
63	28	14.2		32	17.5	
Total	197	100.0	23.38375	183	100.0	24.13628

*Critical values:

1% significance – 11.34

5% significance – 7.815

Then, we compared the choice of CVs that are the same between the two samples (conditions), which gave us important outputs (Figure 4.2). In CVs, which are precisely the

same except for age (63 vs. 31 years old) to job vacancy task, we find that the 31-year-old candidate receives many more choices (44.8%) than the 63-year-old candidate (14.2%).

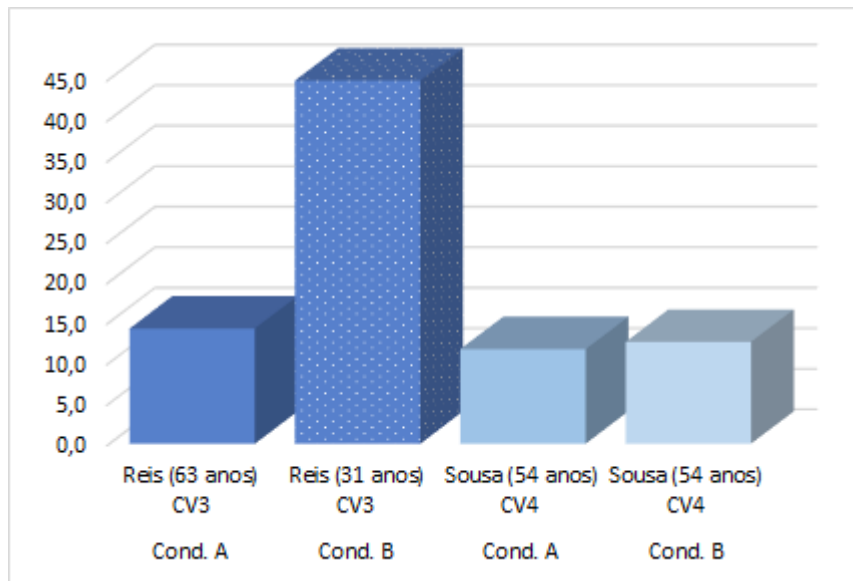


Figure 4.2

Comparisons choices for equal CVs for Task 1

Moreover, comparing the number of choices of CVs that are precisely the same (54 years) in Conditions A and B, we notice that the choice is very similar in both conditions (11.7% in Condition A and 12.6% in Condition B); see Table 4.3.

Table 4.3

Comparisons choices of equal CVs (task 1)

Ages Comparison	Samples	Equal CVs	N = 380	n	%
63 vs 31	Condition A	CV3 - 63 years old	197	28	14.21
	Condition B	CV3 - 31 years old	183	82	44.81
54 vs 54	Condition A	CV4 - 54 years old	197	23	11.68
	Condition B	CV4 - 54 years old	183	23	12.57

We then carried out an evaluation test of proportions to assess whether the proportion of responses was statistically significant or not. The hypotheses under test are the following:

$$H_0: p_1 = p_2$$

$$H_1: p_1 \neq p_2, P(Z \leq -Z_{\alpha/2} \text{ or } Z \geq Z_{\alpha/2}) = \alpha$$

Table 4.4

Test of proportions (task 1 – job vacancy)

	Z
First comparison (63 vs 31)	-6.57098*
Second comparison (54 vs 54)	-0.26671

*Critical values:

1% significance – 2.576

5% significance – 1.96

According to the results presented in Table 4.4, the only statistically significant difference (1%) was found in comparing CVs with equal qualifications except for age ($Z = -6.57098$). No significant differences were found in comparing the other CVs.

Qualitative analysis

In the subsequent phase, we analyzed qualitative responses to gain insight into the reasons behind these choices. Our analysis revealed that some participants (5%) cited age as the sole reason for their selections – two percent of these participants chose “the youngest” – while others (49%) offered additional justifications, as for example, “a 31-year-old candidate is more motivated than a 63-year-old candidate.” Forty-six percent gave answers without mentioning age as the choice factor.

Looking at Table 4.5, it's clear that a significant portion (54%) of the participants showed some form of age discrimination, citing it as either the main or contributing factor in their decisions.

Table 4.5

Respondent choices (task 1)

Age	Age (without other justifications)			Age + other justifications			Age vs Experience
	Age (only) %	Youngest %	Oldest %	Age (only) %	Youngest %	Oldest %	
31	1.1	1.8		12.4	15.8		1.8
45	2.1	.3		12.6	1.6		2.6
54				4.2	.3		.5
63				1.6		.8%	
Total	3.2	2.1	-	30.8	17.6	.8	5

Table 4.6 presents examples of justification of the given answers.

Table 4.6

Justifications of the use of age

Ages	“categories”	Examples of given answers:
Different ages	Motivation, Strength Adaptability	<i>“a 31-year-old is more motivated than a 63-year-old candidate”</i>
		<i>“...is a person (31) with more spiritual openness, physical capacity, work capacity and dexterity”</i>
	To give an opportunity	<i>“He is only 31 years old, that is, he is at the beginning of his professional life and therefore should have an opportunity in the field and should be given the chance to contribute his knowledge to the company for several years.”</i>
		<i>“Because at 31 years old, he has a life to live and this way there will be more possibility of increasing the birth rate in our country.”</i>
		<i>“...are older and less likely to find a job at this age</i>
	Progression	<i>“...give opportunities to young people”</i>
		<i>“belongs to an age group that has room for career progression, being an added value both for himself and for the company”</i>
		<i>“his margin of professional progression. Being a 31-year-old with 10 years of experience, he will more easily bring new ideas to the field”.</i>
	Creativity & innovation	<i>“...room for career progression in the company or area, ... his experience and the possibility of investing in him”</i>
		<i>“Being able to bring experience and innovation to the company with a younger mindset”</i>
		<i>“...age, curriculum and capacity for innovation”</i>
		<i>“...is experienced and is neither too young nor too old, having more creativity”</i>
	Wisdom & maturity	<i>“...being the youngest, has the ability, from the outset, to adapt to new environments and have new (more modern) ideas.”</i>
		<i>“Due to his age (45), he will have a level of maturity appropriate to the functions”</i>
		<i>“Maturity, experience guaranteeing innovation”</i>
<i>“Age (63) brings with it wisdom to resolve situations”</i>		
Tenure in the organization	<i>“I chose application 4 due to its greater maturity in relation to application 3, more time in the job market than application 2 and the fact that the individual in application 1 is almost at retirement age, so that the 54-year-old proves to be the most suitable”</i>	
	<i>“Age would be the deciding factor, because if you were hiring you would want someone who intended to stay at the company for several years.”</i>	
		<i>“He is a young person who promises a long future in the company”</i>

Ages	“categories”	Examples of given answers:
		<i>“I decided to choose the youngest candidate. This avoids a new recruitment process in the near future, as well as being younger, you have more learning potential.”</i>
Different ages	Adaptability	<i>“...an age that perhaps allows greater adaptation to new practices and new products.”</i>
	Distance from retirement	<i>“...because he has the required experience and requirements, as the others but are close to retirement age. being younger, has the ability, from the outset, to adapt to new environments and have new (more modern) ideas.”</i> <i>“Because I think he is the person who best fits the desired profile, candidate 3 also has a very complete profile but as he is 63 years old he is close to retirement age.”</i>
	Age / Range of age	<i>“He falls into an age group (45) that has room for career progression, being an added value both for himself and for the company.”</i>
		<i>“...Although I was tempted to choose candidate number three, he was not chosen due to his age.”</i>
		<i>“I did not select candidate number 1 due to his advanced age (63)”</i>
		<i>“...is of intermediate age” (45)</i>
		<i>“Lower age and qualifications identical to those of other candidates”</i>
	Health	<i>“...good length of experience in relation to age, also because you are further away from retirement and are probably less likely to not have health problems that affect the professional activity.”</i> <i>He is less likely to get sick, in principle he works longer and insurance is cheaper.</i>
	Justice & Inclusion	<i>“...a contribution to a more inclusive and less prejudiced society in relation to ageism. Even though it seems unfair to make a selection based on such criteria.”</i>
	No specific reason	<i>“I was in doubt between the first two candidates.... I opted for candidate two because of the age of the first candidate”</i>
<i>“I found the most competent”</i>		
<i>“Because it was what caught the most attention, even though they all looked alike.”</i>		
The youngest		<i>“The youngest of the candidates, with the same experience or almost equivalent, with plenty of space and time to evolve.”</i>
		<i>“...the youngest candidate and also has several years of experience and various capacities to occupy the intended place.”</i>
		<i>For fulfilling all the requirements and being the youngest.”</i>

Ages	“categories”	Examples of given answers:
The oldest		<i>“...is the oldest and the one with more years of experience because he must have more knowledge than the others.”</i>
		<i>“I think I would choose candidate 3 because he is the oldest and that aspect may mean he has more knowledge about the area”.</i>

Note: The numbers in brackets are de age of the chosen candidates

Excluding age as a determining factor

After analyzing the qualitative responses, we excluded responses that referenced age as a determining factor in decision-making without any justification. This led to very similar results, in which the youngest candidate's CV continued to be the most chosen by participants. We then performed a new chi-square test (Table 4.7) to determine whether the distribution between candidates was uniform (H0). We found that the null hypothesis of uniform distribution continued to be rejected for conditions A and B. This indicates that the distribution among candidates is not random and suggests that age may have influenced their choices.

Table 4.7

Chi-square test (task 1, second test)

Age	Condition A			Condition B		
	n	%	χ^2	n	%	χ^2
31	69	36.7		75	43.6	
45	68	36.2		42	24.4	
54	23	12.2		23	13.4	
63	28	14.9		32	18.6	
Total	188	100.0	21.0729	172	100.0	20.9032

Note: Critical values:

1% significance – 11.34

5% significance – 7.815

After conducting a thorough evaluation, we analyzed another test of proportions that compared candidates with identical CVs but varying ages, as well as identical CVs in the two different samples, after removing all answers that explicitly gave age as a justification. Our goal was to determine whether the proportion of responses was statistically significant or not, as shown in Table 4.8. Upon analyzing the data, we found that the difference in proportions is not statistically significant.

Table 4.8

Test of proportions (task 1, second test)

	Z
First comparison (63 vs 31)	-.15837
Second comparison (54 vs 54)	-.34067

Note: Critical values:

1% significance – 2.576

5% significance – 1.96

After reviewing the previous results, we decided to exclude all answers that referenced age as a determining factor in decision-making without any justification or with insufficient justification for doing so. To ensure accurate results, new tests were performed (Tables 9 and 10).

Table 4.9

Chi-square test (task 1, third test)

Age	Condition A			Condition B		
	n	%	χ^2	n	%	χ^2
31	17	20.0		22	23.9	
45	32	37.6		25	27.2	
54	14	16.5		16	17.4	
63	22	25.9		29	31.5	
Total	85	100,0	*10.33910			4.2533

*Critical values:

1% significance – 11.34

5% significance – 7.815

Table 4.10

Test of proportions (task 1, third test)

	Z
First comparison (63 vs 31)	.307587
Second comparison (54 vs 54)	-.155444

Note: Critical values:

1% significance – 2.576

5% significance – 1.96

75 Our analysis shows that age may have played a role in the decision-making process of candidates in Condition/Sample A. We observed that contrary to the previous tests, in Condition A, the most chosen CV is that of the 45-year-old candidate, followed by the older CV, aged 63. In Condition/Sample B, the most chosen CV is that of the oldest candidate, followed by the 45-year-old CV. The least chosen CV remains that of the 54-year-old candidate (Figure 4.3).

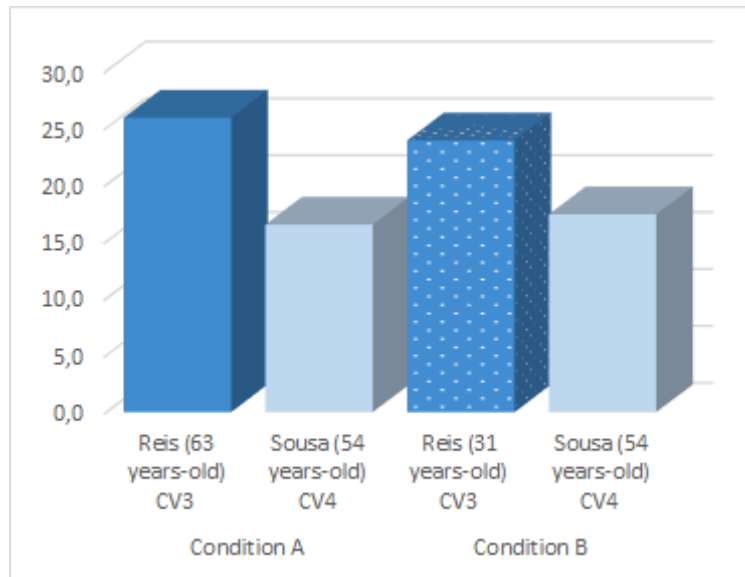


Figure 4.3

Task 1 Comparisons after removing age as a mentioned factor.

Our data suggest that the distribution among candidates who did not refer age as the only or principal reason for their choices was not uniform. The null hypothesis of uniform distribution is rejected for Condition A at a 1% level of significance, which could indicate that age influenced their choices, even implicitly. Furthermore, the difference in proportions continues to be non-significant.

Concerning qualitative answers, Table 4.11 presents the justifications provided by the participants who did not include age as a factor for their choices.

Table 4.11

Reasons without using explicitly age as a factor

“categories”	Examples of given answers:
Experience; competence	<p><i>I believe that 10 years of professional experience is enough to learn this function (31)</i></p> <p><i>“It was at random. All candidates had relatively similar professional experience and educational qualifications” (31)</i></p> <p><i>“A know-how that candidate 2 still needs another 30 years to be able to measure up.”</i></p> <p><i>“Training, experience and competence in the area”</i></p> <p><i>“All the required requirements and combines experience in the sector and an age that allows you, perhaps, greater adaptation to new practices and new products.”</i></p>
Progression	<p><i>“High progression capacity”</i></p> <p><i>“Has the potential to evolve further”</i></p>
Tenure	<p><i>“Greater possibility of implementing long-term projects”</i></p>
Maturity	<p><i>“Has some maturity to exercise the position” (45)</i></p>
Retirement”	<p><i>“... it will take some time to enter retirement”</i></p> <p><i>...some experience and there are still years to go before retirement” (45)</i></p>
Identification with	<p><i>“For identifying with me!”</i></p>
No particular reason	<p><i>“... is what best suits” (63)</i></p> <p><i>“It seems the most suitable” (31)</i></p> <p><i>“It was random. Really. All candidates had relatively similar professional experience and educational qualifications. I did not consider factors such as age and gender” (31)</i></p> <p><i>“For no particular reason” (63)</i></p>

4.9.2 Professional merit award (Task 2)

Quantitative analysis

Based on the findings presented in Table 4.12, the CVs of the youngest and oldest candidates were selected the most frequently. In Condition A/sample1, the 63-year-old CV was the most chosen, followed by the 31-year-old CV. However, in Condition B/sample 2, the 31-year-old CV was more selected than the 63-year-old CV. The CV of the 45-year-old candidate was the least selected in both conditions (see Figure 4.4).

Table 4.12

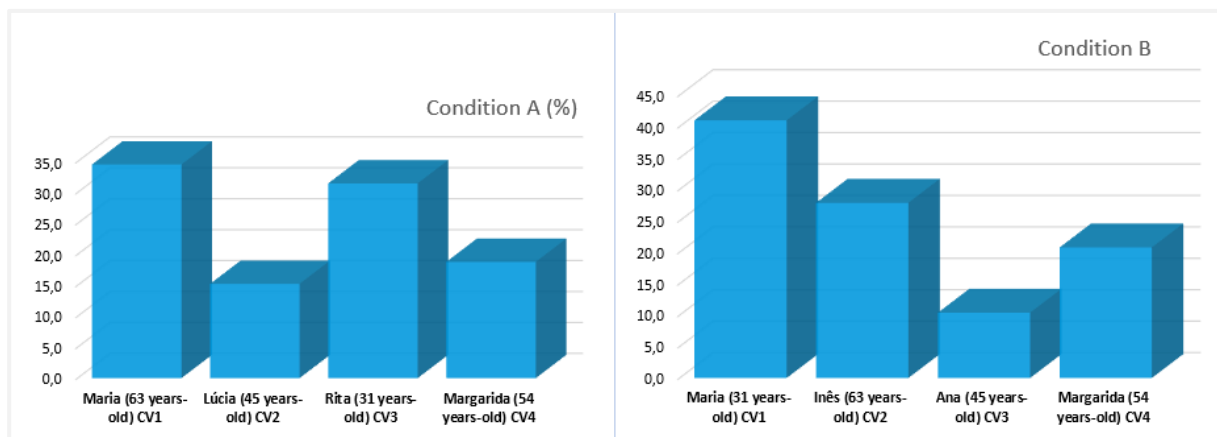
Frequencies (%) and Chi-square test (task 2)

Age	Condition/Sample A			Condition/Sample B		
	n	%	χ^2	n	%	χ^2
31	62	31.47		75	40.98	
45	30	15.23		19	10.38	
54	37	18.78		38	20.77	
63	68	34.52		51	27.87	
Total	197	100.00	*10.66505	183	100.0	19.81248

*Critical values:

1% significance – 11.34

5% significance – 7.815

**Figure 4.4**

Choices for merit award

Based on the data presented in Table 4.13, we can observe a difference in the number of choices of CVs for the professional merit award when comparing candidates with equal CVs of different ages (Maria 31 vs. Maria 63). Specifically, 34.5% of respondents in Condition/Sample A chose the 63-year-old candidate, while 41% of respondents in Condition/Sample B chose the 31-year-old candidate.

Table 4.13

Comparisons of CVs choices (task 2)

Comparisons		N = 380	n	%	
First comparison (63vs31)	Condition A	CV3 - 63 years	197	68	34,52
	Condition B	CV3 - 31 years	183	75	40,98
Second comparison (54vs54)	Condition A	CV4 - 54 years	197	37	18,78
	Condition B	CV4 - 54 years	183	38	20,77

However, comparing both sample's responses for candidates of equal age and CVs, the responses remained relatively similar, with 19% in condition A and 21% in condition B.

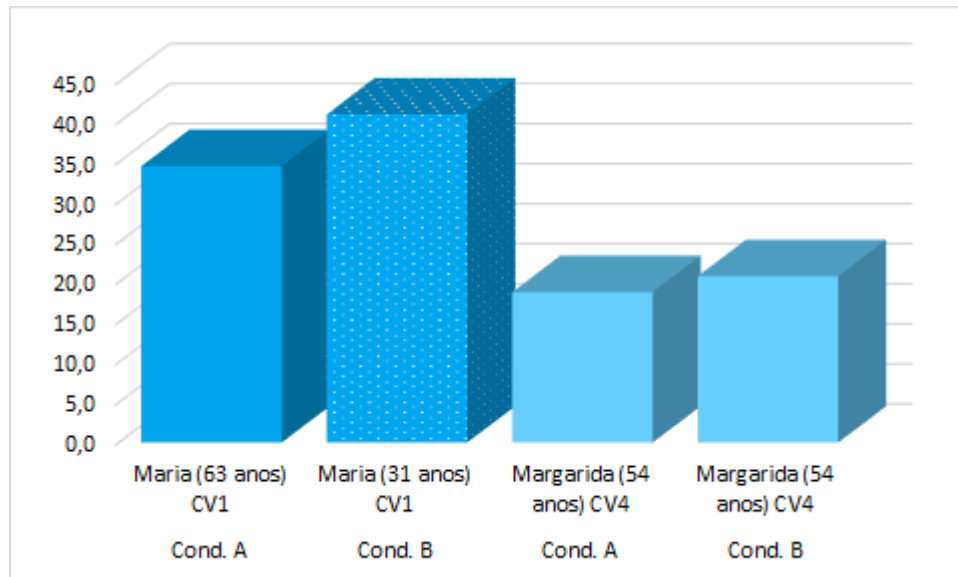


Figure 4.5

Comparisons choices for equal CVs for Task 2

A new chi-square test was performed to evaluate the uniformity of distribution among candidates, and the null hypothesis was rejected for Condition A, at a 1% significance level, and Condition B (Table 4.12).

Additionally, an evaluation test of proportions was conducted to compare responses between identical CVs with different ages and the same CVs, and no significant differences were found (Table 4.14).

Table 4.14

Test of proportions (task 2)

	Z
First comparison (63 vs 31)	-1.29997
Second comparison (54 vs 54)	-.48535

Note: Critical values:

1% significance – 2.576

5% significance – 1.96

Qualitative analysis

During the second phase of our analysis, we delved into the qualitative responses to better understand why participants made certain choices. Our findings revealed that only 4.5% of participants cited age as the sole reason for their decision, with a mere 1% selecting "the youngest" or "the oldest" candidate. A significant 36% also cited other reasons for age being a factor in their decision-making process. For example, one participant selected the 31-year-old candidate because she was a relatively young teacher who had achieved excellent grades in past projects. Another participant chose the 63-year-old candidate due to her age and years of experience. However, of this 36%, 12% specifically chose the youngest candidate to encourage and inspire those pursuing a teaching career. In contrast, only 4% of participants chose the oldest candidate because they believed it was an excellent way to finish their career and give space to younger people. The results are presented in Table 4.15.

Table 4.15

Respondent choices (task 2)

Candidates Age	Age (without other justifications)			Age + other justifications			Age vs Experience %
	Age (only) %	Youngest %	Oldest %	Age (only) %	Youngest %	Oldest %	
31	1.8	1.1			9.2	11.3	
45	.3				5	.3	
54	.3				1.8		
63	.3		.8		4.5		3.9
Total	2.6	1.1	.8		20.5	11.6	3.9
	4.5						
	40.5						

Table 4.16 presents examples of justification of the given answers.

Table 4.16

Justifications of the use of age

Ages	"categories"	Examples of given answers:
The youngest	Encouragement	<i>"I chose the youngest candidate as a form of encouragement and example for those who intend to pursue a teaching career".</i>
		<i>She "is the youngest and could offer her more motivation to continue her career."</i>
		<i>"... (the youngest) because youth should be rewarded"</i>

Ages	“categories”	Examples of given answers:	
		<i>“The world of education suffers from the aging of its professionals and the youngest must be rewarded”</i>	
	Age / Experience	<i>“The youngest person with basically the same years of experience as the rest”</i>	
	Other reasons	<i>“The youngest, I think she may be more available and easier to teach”.</i> <i>“Youngest, most innovative ideas to captivate students”</i>	
The oldest	Recognition	<i>“Because he's the oldest person, and I think it's a good way to finish his career, with recognition and giving space to younger people, with a desire to get success, more patience perhaps. Because in terms of quality, the CVs look relatively identical”</i>	
	To give an Opportunity	<i>“Because being the oldest of all the other teachers, he managed to have the same results of teaching ability and human relations”</i> <i>“I wanted to choose the oldest ones, because young women have more opportunities to win other prizes and the second oldest had a very good international, and the other just good.”</i> <i>“...the oldest candidate. He reveals that he has a lot of experience like the others, but at 63 years old, his chances of receiving a prize in another following year are reduced by his age, close to retirement, and it is not because he is old that he does not deserve a prize.”</i>	
	Other reasons	<i>“...because she is older, and that is why I chose her”</i> <i>“...the oldest still has the same dedication as the youngest”</i> <i>...the oldest person. It has greater life experience, which nowadays we take for granted but has a great impact on our professional life. ”</i>	
	All different ages	Age	<i>“Age, professional experience”</i> <i>“My decision was based mainly on the issue of age since the other data are very similar between all the applications”</i> <i>“She is young and will have a lot to contribute”</i> <i>“Because she is younger, she will have other types of approaches that other teachers probably won't have”.</i> <i>“The reason has to do with age itself, and its responsibility, as well as career goals.”</i> <i>“Has an average age, she already have experience and personal skills that convince me to apply for you”</i> <i>“Younger age may make it easier to socialize and adapt to younger students”</i>
		Age / experience	<i>“At a young age she has already done a lot”</i> <i>“Has more experience given by age”</i> <i>“Applications are very similar. I chose to choose the candidate considering the following criteria: longer service (1st criterion); younger age (2nd criterion)”</i>

Ages	“categories”	Examples of given answers:
		<p><i>“She is only 31 years old and managed to obtain ratings as good as the rest, which effectively demonstrates her hard work and dedication to her career and therefore should be awarded.”</i></p> <p><i>“She “is a person who already has a certain age and experience and is a person who has contributed to society, and also because she is positively evaluated internationally.”</i></p> <p><i>“Since the candidates were very similar in terms of assessment, my choice is Candidate B, due to her age and years of experience”</i></p> <p><i>“age, years of profession and evaluations by the jury”</i></p> <p><i>“She is less years old but has almost the same years of professional experience as the other candidates and taking into account her assessment by the jury, which is similar to that of the others.”</i></p>
	Retirement (close to or far from)	<p><i>“She is the person who has the longest period of work until retirement to be able to improve the assessment to a higher level than everyone else”</i></p> <p><i>“I chose the older one as it will be closer to retirement</i></p> <p><i>almost at retirement age so there is nothing better than winning a merit award to end your career, the other candidate will have more opportunities”</i></p>
	To encourage or motivate To give an opportunity	<p><i>“Because he is only 31 years old and has very good evaluations, I consider him to be a hard-working person with passion for his work, therefore he should be rewarded, to encourage him to continue the work he has done so far.”</i></p> <p><i>“This award can motivate the person to continue the excellent work during the many years they still have to work”</i></p> <p><i>“I think that a merit award to someone of a young age will result in greater commitment, dedication and passion in the future.</i></p> <p><i>I choose her to give opportunities to others who are so young, but who are not too old” (45)</i></p>
	Recognition	<p><i>She “deserves to be recognized and be an example for the other 3 candidates so that they can continue to do the same work”</i></p> <p><i>“because she's the oldest person, and I think it's a good way to finish his work, with recognition and give a place to younger people, with a desire to succeed”</i></p> <p><i>“63 years of age represents an accumulated experience in teaching that should be rewarded, almost at the end of your career it will be gratifying to be recognized.”</i></p> <p><i>“Among them, I think it is most important to reward a teacher who maintains all these personal skills and pro-activity at the age of 63.”</i></p> <p><i>Given her years of work and her age, I believe she deserves the award</i></p>
	Performance	<p><i>“I chose A because she was a relatively young teacher and even so she managed to achieve excellent grades in the projects carried out” (31)</i></p>

Ages	“categories”	Examples of given answers:
		<i>despite being only 31 years old, he already has 10 years of experience having started early, being able to contribute to new teaching in a more correct and appropriate way.”</i>
	Other reasons	<i>“... a more fit age, with a greater chance of an open mind to continue evolving in knowledge”</i> <i>“Younger teachers have an easier time creating a teacher/student connection, and communication and learning will be easier”.</i> <i>“An active young woman”</i> <i>“Older people are closer to retirement and young people are more capable of working.”</i> <i>“... (31 years old) because I think that younger teachers have more ability to deal with students and create more interpersonal relationships.”</i> <i>“... is the person who has the longest period of work until retirement to be able to improve the assessment to a higher level than everyone else.”</i> <i>“Despite being 63 years old, she was one of the finalists, which shows dedication and passion for teaching.”</i> <i>“school" and "national" qualifications being very good””</i> <i>“given his age (31), he was at the peak of his career”</i>

Excluding age as a determining factor

After careful analysis, we took the next step by removing participants who only used age to justify their choices, and we found that the CV of the youngest candidate continued to be the most chosen by the participants. We conducted a new chi-square test, and we found that the null hypothesis of uniform distribution was rejected at the 1% level for Condition A (Table 4.17), indicating that the distribution among candidates is not uniform.

Table 4.17
Frequencies (%) and Chi-square test (Task 2, second test)

Age	Condition A			Condition B		
	n	%	χ^2	n	%	χ^2
31	60	30.77		71	40.57	
45	30	15.38		19	10.86	
54	37	18.97		37	21.14	
63	68	34.87		48	27.43	
Total	195	100.00	10.38001*	175	100.0	18.53061

* Critical values:

1% significance – 11.34

5% significance – 7.815

Like the results presented in Table 4.12, in condition A, the 63-year-old CV was the most chosen, followed by the 31-year-old CV. However, in condition B, the 31-year-old CV was more selected than the 63-year-old CV. The CV of the 45-year-old candidate continues to be the least selected in both conditions.

After conducting a thorough evaluation, we analyzed another test of proportions (Table 4.18) that compared the identical CVs but varying ages, as well as the identical CVs in the two different samples/conditions. Our goal was to determine whether the proportion of responses was statistically significant or not. Upon analyzing the data, we found that the difference in proportions remained statistically non-significant.

Table 4.18

Test of proportions (task 2, second test)

	Z
First comparison (63 vs 31)	-1.34074
Second comparison (54 vs 54)	-.66101

Note: Critical values:

1% significance – 2.576

5% significance – 1.96

As for the job vacancy (Task 1), we decided to remove all responses that indicated age as a choice factor, either without any justification or with some justification for doing so, and carry out new tests.

Upon analyzing these results, it became evident that the older candidates were preferred over younger ones. Interestingly, the percentage of CVs selected for older candidates was significantly higher compared to previous tests where age justification was still considered. Specifically, 63-year-olds were selected 36% of the time, and 45-year-olds were selected 26% of the time in Condition A.

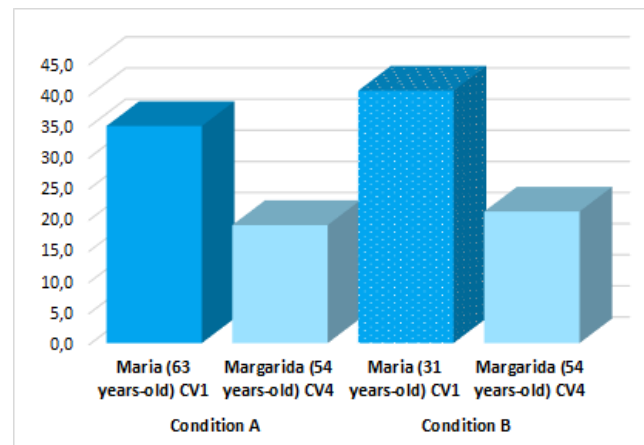


Figure 4.6

Task 2 Comparisons after removing age as a mentioned factor.

In Condition B, both CVs were chosen 33% of the time. The CV of the 45-year-old candidate continues to be, as in Table 4.12, the least selected in both conditions. We performed a chi-square test, and the null hypothesis of uniform distribution was rejected at the 1% level for Condition A (Table 4.19).

Table 4.19

Frequencies (%) and Chi-square test (task 2, third test)

Age	Condition A			Condition B		
	n	%	χ^2	n	%	χ^2
31	31	23.0		25	24,8	
45	20	14.8		10	9,9	
54	35	25.9		33	32,7	
63	49	36.3		33	32,7	
Total	135	100.0	9.45404	101	100.0	13.83198

Note: Critical values:

1% significance – 11.34

5% significance – 7.815

Furthermore, the difference in proportions continues to be non-significant (Table 4.20).

Table 4.20

Test of proportions

	Z
First comparison (63 vs 31)	-.81237
Second comparison (54 vs 54)	-.38373

Note: Critical values:

1% significance – 2.576

5% significance – 1.96

4.10 Discussion

Our research focused on studying workers' selection attitudes towards two different moments in a worker's career. Our approach was unique by looking at four different age groups rather than just the youngest or oldest, or youngest *vs.* oldest. We aimed to determine if ageism is prevalent in the hiring process and professional recognition or if these situations are distinct.

Furthermore, our option of study aimed at the absence of bias, firstly by sex, with candidates having the same sex in each of the tasks (male in the job vacancy and female in the merit awards), and then, by the type of sample that, when not submitting applications for real jobs, avoids uncontrollable variables such as the macroeconomic state of the labor market and fluctuations in unemployment.

Hiring selection CVs

In the application for a job, we found that the youngest CV was the most chosen, followed by the second youngest CV. Interestingly, the least chosen CV was aged 54. When we compared the identical CVs, we found that the frequency of choices was very similar. However, when age was the only difference between two CVs, ageism was evident as the choice of the younger candidate was three times higher than the older one.

Our study on ageism in the beginning of hiring process revealed interesting findings regarding the reasons given for respondents' choices of the youngest CV. While age was a primary factor, other reasons such as margin of progression, evolution in the company, new ways of approach, and far from reform were also cited. However, some of these reasons may be based on preconceived ideas, such as the belief that younger candidates have greater adaptability, more time to work for the company (less tenure) (Posthuma & Campion, 2009), and are less likely to experience illness (Ng & Feldman, 2012), greater capacity for innovation, new ideas, and more motivation. On the other hand, older CVs were seen as more mature and experienced.

While we were analyzing the qualitative responses, we verified that there were some negative prejudices towards the older ones but that it was the positive prejudices towards the younger ones associated with the desire to give them a career opportunity that motivated the choices of these candidates. And this can also be explained by the great difficulty that young people have in entering the labor market and in having a job and a stable career (Parker &

Igielnik, 2020; Rydzik & Bal, 2023) that allow them to have projects and make plans for the future in personal and family terms.

The results changed once we eliminated responses that relied on age as a determining factor. Interestingly, older and 45-year-old candidates emerged as the top picks. Probably due to the vast experience and intrinsic knowledge they acquired over time, although not accounted for in that specific role. As for CVs aged 63, this could be due to positive prejudices, such as maturity and knowledge that only age brings, combined with the intrinsic know-how that years of professional experience, even if not in that specific role, brings. However, when comparing the respondents' choices between the two samples of CVs that were the same (54 vs. 54) and identical except for age (31 vs. 63), we could confirm through the comparison test that the results are statistically significant only for 31 vs. 63, but just when we are considering all answers. When we remove responses that indicate age as a decisive factor, the comparisons are no longer statistically significant in both comparisons.

Merit Award

In the merit distinction, we found that the CVs of younger and older candidates were selected more frequently. In fact, after a more in-depth analysis, we found that these CVs were always the most chosen until the total exclusion of all responses that in any way indicated age as a decisive factor in the choice. In fact, after removing all the answers that gave age as a decisive factor, justified or not, for their decisions, curiously, older candidates were preferred to younger ones. These results can be explained by attributing professional merit, particularly in teaching, for different reasons. One of the reasons is the years of professional activity, although not on that council, with excellent results, deserving recognition from those interviewed. Another reason is that it is often considered a career reward when the candidate is close to retirement. Nevertheless, another is that, although age is not explicitly indicated, it is intrinsic to the life experience of the candidates. Comparing the respondents' choices between the two samples of CVs that were the same (54 vs 54) and identical except for age (31 vs 63), we could confirm through the comparison test that, despite everything, the results are not statistically significant.

Summarizing

Our research into the first screening - without any contact with candidates - to identify the best candidates/CVs in a hiring and merit recognition process indicates that age plays a significant role in evaluating candidates. The results suggest that ageism exists in the workplace and stereotypes often lead to prejudice, both supporting discrimination (Posthuma & Campion,

2009; Raymer et al., 2017). These results align with other studies that prove ageism about the older (Ahmed et al., 2012; Carlsson & Eriksson, 2019; Drydakis et al., 2017), although it is more prevalent in the initial phase of the employee recruitment process than in merit awards. However, these results are mostly non-significant.

Stereotypes and prejudices are facets of ageism, and it is crucial to promote intergenerational cooperation, educate workers about the positive differences between generations that can bring knowledge and enrichment, and destroy myths and prejudices about the physical, cognitive and intellectual capabilities of workers at different ages. We also need to focus on achieving the United Nations 2030 Agenda's goals on sustainable development, emphasizing decent work for all.

It is essential that organizations, especially people and human resources managers, work to minimize ageism. Ultimately, employers and HR should strive to evaluate candidates based on their skills and experience, not their age. However, we must remember that age is inherent to life, has positive and negative characteristics at all stages, but is crucial in certain functions. It is not the same talking about a job that can be performed by any worker regardless of age - administrative workers, customer service, teachers, doctors, for example - in which age should not be a reason for exclusion - if so, it is explicit ageism - rather than talking about jobs that require excellent physical capabilities or mental and cognitive skills - high-level competition athletes, special security forces and special troops, fighter pilots, for example. In the second case, there could be legitimacy in age being a factor of eligibility or exclusion. On the other hand, if the job requires the worker to follow a specific project for an extended period, age can also be an essential factor, but not exclusive, because, for example, new generations have a greater tendency to mobility and change if they encounter better opportunities, which also needs to be considered by employers or people and human resources managers.

In seeking to avoid uncontrollable biases such as macroeconomic status and fluctuations in employment and unemployment, our samples were not obtained through real applications for actual job vacancies, nor did they follow any actual application process for a merit award. Conversely, it does not provide us with the actual vision of employers or HR professionals who are trained and qualified to deal with and avoid age bias.

Overall, this study provides valuable information about the hiring process and recognition awards and can help organizations and decision-makers make more informed decisions when it comes to selecting candidates for open positions or recognition awards.

5 Conclusion

Ageism in the workplace may not have much expression in Portugal, but it is a phenomenon that is becoming increasingly relevant. With the population's aging and the retirement age extension, more and more people remain in the job market for extended periods. On the other hand, technological advancements, robotics, the IA, and economic crises resulting from the COVID-19 pandemic increase the scarcity of jobs. This trend is likely to continue, and different generations with diverse lifestyles and characteristics working together in the same organization or applying for the same vacancies could lead to a more dense and widespread ageism problem if measures are not taken to prevent or alleviate it.

Ageism is a pressing issue, especially for those in the later stages of their professional lives. It is not uncommon for older workers to face discrimination and be overlooked in terms of opportunities simply because of their age. Age discrimination may result from the widespread belief that job performance declines with age. However, several studies state the opposite (Posthuma & Campion, 2009), and chronological age should not be a valid predictor of a worker's performance, given each individual's physical, intellectual, cognitive, emotional, mental, behavioral, and cultural uniqueness. Indeed, to achieve Decent Work goals, the Goal 8 of the United Nations Agenda 2030, and a more just and inclusive society, everyone must deserve equal opportunities to thrive and contribute to the workforce, regardless of age. Ageism can be frustrating and discouraging for a worker; however, it is essential that age is not a barrier to the worker's success and, consequently, to the organization where he/she exercises his/her professional life.

Throughout this investigation, different empirical studies were carried out, which served as exploratory and analytical instruments to find an answer to our starting question: "How does ageism relate to decent work and different ages?". Toward this end, we defined our research question, "How does ageism relate to decent work, and what consequences does it have on access to job opportunities and recognition of excellence at work?". To answer this question, we set specific objectives: 1) Identify empirical research on ageism and point out paths for new investigations; 2) Validate ageism assessment instruments for the Portuguese language; 3) (a) observe the relationship between ageism and the first dimension of decent work - fundamental principles and values at work; (b) verify the extent to which ageism is related to each of the other dimensions of decent work (DWQ); 4) Characterize ageism (quantitatively and qualitatively), through an experimental design study, workers, recently unemployed people and recently retired people; 5) Propose directions and strategies for managing people and

organizations to prevent and manage ageism. It is now necessary to integrate all the results obtained and discussed in each of these studies, which lead us to achieve the objectives defined for this work and help us provide insights into our starting question.

Our first step was RSL, and it was clear that research into ageism in the job market is relatively recent, with most of the studies analyzed published after 2010, and the results are concerning. It is evident that ageism exists at every stage of one's professional journey, from hiring to retirement, and that both explicit and implicit ageism are present in multiple cultures. Older workers are often the main target of ageism, and policies that favor them or provide preferential treatment can promote negative perceptions of them, further perpetuating ageism. The consequences of ageism can be devastating, leading to negative job satisfaction, work commitment, and voluntary turnover. It can also have a detrimental impact on mental health. However, effective coping strategies include caring for physical and mental health, being flexible and optimistic, transitioning to less physically demanding tasks, and finding an organization with compatible values. It follows that it is crucial to implement management strategies to prevent and minimize ageism and its effects, creating a safe and inclusive work environment for all employees, regardless of age.

Based on the SLR, it was found that experimental studies are scarce, and there is a need for more reliable and widely used instruments on worker-related ageism. The Nordic Age Discrimination Scale (NADS) is a significant first step in this direction, but there was still a need for a Portuguese version of the scale. Another is the Workplace Intergenerational Climate Scale (WICS), which measures an organization's intergenerational climate of co-workers of different ages. This instrument is crucial for studying ageism as positive intergenerational contact plays a vital role in minimizing (Lagacé et al., 2022) or even eliminating ageism. It was interesting to note that the diagnostic studies mentioned in this review focused on samples that were predominantly over the age of 50. Additionally, there seems to be a lack of research on ageism regarding younger workers or those who are not quite elderly yet but are no longer considered young. As such, it would be beneficial to see more studies undertaken in these areas to better understand potential age discrimination in the workforce.

Our investigation focused on the impact of work-related ageism in two different situations in a worker's lifespan, specifically on the candidacies for a job and a professional merit award. Moreover, because ageism is a form of prejudice and discrimination that materializes in a deficit of decent work and good intergenerational relations can help to minimize ageism, we took the next step. We carried out a study on the correlations between

ageism, intergenerational work relations, and decent work. To perform this study, we also conducted the preliminary validation of the NADS and WICS instruments for Portuguese.

In our first empirical study, we found that ageism is a concept fundamentally opposed to the constructs of decent work and positive intergenerational relationships, which correlate negatively, as expected. This negative correlation supported by our findings confirms, in general, our initial suppositions. It was also found, as expected, the positive correlation between good intergenerational relationships and decent work. These results confirm previous studies (Djabi & Shimada, 2013), showing that good intergenerational relationships mediate ageism and can, and should, be encouraged, supported, and managed to minimize ageism, which is harmful to workers (Harnois & Bastos, 2018; Shippee et al., 2019), to a good environment in the workplace, to satisfaction at work (Levy & Macdonald, 2016) and, consequently, to productivity and, inherently, to organizations (Ilişanu & Andrei, 2010; UNECE, 2019). These findings emphasize the importance of creating and maintaining a work environment that encourages respect and collaboration between individuals of all ages (Legas & Sims, 2012), valuing skills and talents regardless of age, ultimately leading to greater job satisfaction and productivity.

We found some significant correlations, and we believe the low values happen because, in Portugal (as well as in other European countries, the United States, and Canada), discrimination is prohibited by law, so ageism (discrimination based on age) will always be hidden. In addition, the Portuguese are generally friendly, welcoming, and tolerant people (Donaldson, 2023; Ramos & Magalhães, 2021), so it was not expected that the rates of explicit discrimination would be very high. Worker-related ageism will not be obvious in countries where age discrimination is prohibited by law. Discrimination is more likely to occur in denial of access to job vacancies where there are various ways to block access to a candidate/applicant. For example, selection criteria may exclude certain groups of workers without specifically indicating age. There may be a low rate of calls for interviews, or even if someone is interviewed, they may be excluded for a plausible reason that does not mention their age. Given that, explicit age discrimination is relatively low, and positive relations between generations help to support decent work.

The best way to manage ageism is through training on ageism and its physical and cognitive characteristics in each age group and the benefits that each one brings to the functions of each organization since ageism is based on prejudices related to age. One way to minimize the relationship between ageism and decent work will be through the requalification of older

workers or those who have worked longer to have the same skills and opportunities as their colleagues. Building good intergenerational relationships as a practice and culture of organizations is essential to enhance team spirit, mutual help, and knowledge sharing, which is in line with previous studies that revealed that negative perceptions and lack of similarity affect collaboration, motivation and satisfaction and productivity (Avery, McKay, & Wilson, 2007; Ilişanu & Andrei, 2010; Paleari et al., 2019; Posthuma & Campion, 2009; Stevens, 2010; ZAJĄC, 2015). Furthermore, good intergenerational relations are the environment where mechanisms and good practices support decent work and achieve the Goals of the 2030 Agenda. In doing so, everyone – workers, managers, and organizations- will benefit. Moreover, there may have been other factors at play that we could not measure, which could have influenced the results we observed. Ultimately, by better understanding these issues, we can work towards achieving Goal 8 of the United Nations 2030 Agenda to promote decent work and economic growth for all.

Finally, we also conclude that the Portuguese versions of NADS and WICS have adequate psychometric properties to be used in future research on age discrimination and Intergenerationality in the workplace to deepen the understanding of work-related ageism and other phenomena in its nomological network.

After conducting our second study, Ageism, Intergenerational Work Relations, and Decent Work, and confirming that ageism is contrary to Decent Work and good relations at the workplace, we aimed to gain insight into the behavior of individuals in Portugal who are currently employed or have recently left the labor market in a different and more specific perspective.

An area we want to address, because that has yet to be studied extensively, we did not find studies in our RSL, is about professional public recognition of excellence. Conversely, in the opposite direction, Rupp, Vodanovich, & Credé (2006) observed that older workers received more severe recommendations for poor performance.

Without a doubt, when it comes to workplace situations, there are a few that stand out as particularly challenging. For example, success in filling a job vacancy can be hard for workers entering the job market or looking for a new opportunity or mobility, with ageism being a genuine concern, especially for older workers who may be unfairly discriminated against based on their age.

These situations, challenging for the workers, human resources, and people managers, were why we chose them for our third study. It is essential to realize how vital age is among

the various factors that come into play during the decision-making process when experience, qualifications, and overall performance are equivalent or equal. It is also essential to understand how workers who may one day be candidates for a job or a merit award analyze/choose candidates' CVs in these situations, mainly because some participants may be or become active in choosing candidates in situations like these.

It is an important investigation focusing on age discrimination among peers, not just between recruiters or job seekers. It analyzes the distribution of choices for four ages in equivalent CVs and compares the choices made between CVs that are precisely the same (54 vs. 54 years old) and identical CVs except for age (63 vs. 31 years old). It is a helpful study for decision-making managers, as it helps them be more aware of the repercussions of ageism on screening candidates and in the workplace, and they can take measures to mitigate it.

The study found that ageism was evident in the selections made by the participants, as it revealed that the youngest candidates were preferred in job applications, followed by the second youngest. The study also found that the younger candidate was preferred three times more than the older one when age was the only difference between two identical resumes. The study also revealed that the reasons for selecting the youngest candidate were not solely based on age but other associated factors such as career progression, innovation, and motivation. However, some of these reasons may be based on preconceived ideas, such as the belief that younger candidates have exceptional adaptability and more time to work for the company, and, on the other hand, older candidates can be seen as more experienced and mature. When analyzing the qualitative responses, the results suggest that not so much negative prejudices towards older candidates but somewhat positive prejudices towards younger candidates motivated the selection of participants. Additionally, the difficulty that young people face in entering the job market and having a stable career that allows them to plan their future was one of the factors mentioned by participants who sought to give them an opportunity.

Regarding merit distinctions, the study found that both younger and older candidates' resumes were selected more frequently, but only until age was excluded as a decisive factor. After removing all responses that gave age as a decisive factor, older candidates were preferred to younger ones. This could be attributed to professional recognition, particularly in teaching, where years of professional activity and excellent results deserve recognition. Additionally, it is considered a career reward when the candidate is close to retirement. Furthermore, even though age was not explicitly indicated, it is intrinsic to the life experience of the candidates.

However, the comparison test showed that the respondents' choices between the two samples of CVs that were identical except for age were not statistically significant.

Analyzing the qualitative responses, we realize that it is not so much because candidates are old - responses that show negative stereotypes or prejudice regarding older people are rare - but rather because they are not young. It can happen, perhaps due to the high percentage of youth unemployment and the great difficulty young people face in finding a stable and dignified job that will allow them to find a house and start a family or make plans and projects for the future - a topic discussed and highlighted by the media. It can be the reason for, on the one hand, younger people to defend themselves when they are making their choices/selecting candidates, and on the other hand, for older people, especially those at the end of their careers and, possibly, with children and/or grandchildren who face these same difficulties, to try to give them an opportunity. Giving opportunities to younger people is one of the most cited responses to justify the choices made.

Another fascinating finding is that workers aged 54, in any of the studies and whether we are analyzing complete results or just responses that do not indicate age as a determining factor in participant selection, are the least chosen. Given these data, we can infer some "protectionism" about workers aged 63 years. It may be due to their vast professional experience, but also life experience - which brings with them intrinsic know-how - combined with the short time of professional life, and consequently few opportunities, that these workers will have before retiring. Workers aged 54 are either considered old or very close to it, and their time until retirement is still long. These can be seen as obstacles to the employment of younger people and their career opportunities, in addition to being often seen by younger generations, especially Generation Z, as "out of phase" with significant technological advances and the era of digitalization.

The Portuguese people are not, at least not generally, a people known as discriminating, or intolerant (Donaldson, 2023; Ramos & Magalhães, 2021). However, the aging population, the technological advances of robotization and artificial intelligence, the scarcity of work, migration, the consequences of wars, and the imbalances of globalization could change this paradigm, which politicians and managers must be aware of. Not to intimidate but to challenge to be better, think, plan, and act strategically.

Choosing candidates objectively is crucial to ensure that companies and organizations select the best workers without bias or prejudice and that all workers with the same

qualifications and skills have the same professional opportunities. Multiple fronts need to be addressed to achieve this goal.

On the one hand, political, HRM, and management decision-makers must invest in training on age and aging. However, this training must be intergenerational and transversal to all workers, by department, for example, to prevent the training from being a source of ageism and stress factors for older workers (Oliveira & Cabral-Cardoso, 2018). It should be noted that each country has its own cultural and economic reality. Therefore, from childhood to the fourth age, training on aging must be designed and provided by policymakers, schools, and public and private institutions in a comprehensive way appropriate to each stage of people's lives, countries, and communities.

On the other hand, companies and organizations must seek to train their workers according to their reality, organizational culture, workplace, positioning, and stakeholders. They should provide retraining training to older or longer-tenured workers and invest in mentoring programs to help younger and older workers share and transmit knowledge while dispelling stereotypes and minimizing or eliminating prejudices.

It is, in fact, necessary to face the reality of aging - something that is part of each of our lives and that we cannot avoid - and its consequences for society and the economy. However, looking at this reality objectively and without prejudice is essential. We must be aware that if prejudices are intrinsic, based on stereotypes, and much more challenging to change than explicit behaviors, which can be managed by laws and rules, training is necessary so we can begin to eliminate these stereotypes and prejudices about age. Training must focus on mental, emotional, cognitive, physical, and performance characteristics, positive and negative, strengths and weaknesses of each phase and age, and the complementarity and added value of intergenerationality. For training to be effective and perceived naturally by workers, it must be part of the annual training plan and be given to all workers in the organization, without exception, from the CEO to the lowest level employee.

Additionally, it is also essential to create contexts of intergenerationality not only in the workplace but also in more informal business activities, which provide intergenerational contacts in pleasant environments, given that positive intergenerationality decreases the perception of ageism, eliminates stereotypes, provokes solidarity between generations, improves communication, satisfaction with work, and consequently productivity (Iweins et al., 2013; Lagacé, Van De Beeck, Bergeron, & Rodrigues-Rouleau, 2023; Lagacé et al., 2019; Meinich & Sang, 2018; Redman & Snape, 2002).

Intergenerational interaction is a crucial factor in organizations and Human Resources Management. Each person brings unique characteristics, skills, knowledge, experiences, and values, making them an essential part of an organization's intellectual capital and competitive advantage. As Klein (1998) noted, an organization's success or failure depends on its people's collective contribution, regardless of their age or generational background.

Minor adaptations and investments in management and training can lead to successful objectives, and concrete examples, personal testimonies, or case studies of organizations that have successfully adapted to the intergenerationality of their workers or their aging should always be presented as possible.

To prevent ageism in professional situations similar to our study, we suggest strategies specifically for screening and presenting a CV for a job application and any other candidate selection situation.

One critical step is ensuring that resumes are read and screened without stereotypes or prejudice. To achieve this, and following the results of our experimental design study, we consider it essential to include only information that is decisive for the job or position for which the candidate is applying. CVs must be concise and objective in the first approach or contact. Avoid any data that may reveal the candidate's age or other individual information that is not directly related to the job. This will prevent those responsible for screening from making assumptions based on personal attributes irrelevant to the role's performance. Education and training, for example, should only indicate the degree or certification obtained without mentioning the year of completion to avoid quick (and possibly incorrect) calculations of the candidates' age. By implementing these simple strategies, y implementing these simple strategies, candidates ensure that they can be evaluated based solely on their qualifications, skills, and experience, without bias or discrimination, resulting in a fairer and more equitable hiring process.

As for employers, HRM, or those responsible for selection and hiring, additional information, always necessary for a complete assessment of candidates, should be requested from pre-selected candidates only after the initial screening stage.

For the healthy and sustainable life of organizations, they must be productive and profitable. It allows them to reinvest, stay up-to-date, and provide the best conditions for their workers, suppliers, customers, and the community. For this to happen, all HR strategies, decisions, and priorities that support the general business strategy must consider demographic

changes, the aging of the population, and the ageism that can arise from this and interfere in the lives of workers and businesses.

Selection, hiring, and retention of talent are crucial for organizations to achieve their goals, and satisfied, committed, and engaged workers play a significant role in this regard.

Aging and ageism are reflected in society. Education is a challenge, which is why schools must play a vital role in defining the future of society. Consequently, education about age, aging, and ageism are crucial in schools. Students are the future professionals, parents, and politicians who will form an active society.

Organizations, in turn, must have training activities that involve schools and the community and are good examples for their entire network. In doing so, they assume their commitment to sustainability and social responsibility, to their future, avoiding or minimizing ageism, improving decent work, and the objectives of the 2030 Agenda.

This research highlights the importance of combating stereotypes and prejudices in preventing and managing ageism in the workplace, particularly in screening candidates through CVs, and the importance of intergenerationality in this same fight.

The complementarity of this study contributes to the area of research and management in various ways:

1 - Firstly, it synthesizes existing empirical studies in work-related ageism, providing a comprehensive overview of the topic based on studies from Be-On and EBSCOhost databases.

2 - Additionally, it presents the negative and positive correlations between ageism, decent work, and intergenerational relations at work, highlighting how these factors are interrelated and influence each other.

3 - Moreover, the study contributes to validation of two instruments, the Nordic Age Discrimination Scale (NADS) and the Workplace Intergenerational Climate Scale (WICS). Although these instruments require studies with much larger samples, their preliminary validation is a good starting point for Portuguese-speaking countries, providing a framework for future research.

4 - Finally, the study proposes strategies aimed at helping to minimize ageism in selecting candidates from CVs. These strategies help organizations avoid denying opportunities to talented individuals based solely on their age, thereby maximizing the added value each individual can bring to the organization and the economy. Additionally, these strategies can indirectly help to minimize adverse mental health outcomes associated with ageism in the workplace.

Overall, the complementarity of this study contributes significantly to the area of research and management and provides a valuable resource for future research in this area.

6 Limitations

As a result of the challenges posed by the pandemic and the limited accessibility to workers from organizations, we opted to use a sampling method through a network of contacts of students enrolled in a research methods study unit.

This investigation has limitations in terms of sample size on the first empirical study, which may impact the robustness of the results. Additionally, the samples used in both studies were not probabilistic, which prevents the ability to make inferences about the population being studied.

Conducting new studies with larger sample sizes can provide more accurate and reliable results regarding the distribution of components for each factor of the WICS model. It is essential to understand that although our factor analysis resulted in five factors, we had to remove one component/variable, and two factors' components differed from the original model. Therefore, confirming the distribution of components for each factor through new studies with larger sample sizes can provide more clarity on the WICS model's applicability and effectiveness.

The experimental study's sample consisted of untrained workers, which may not represent the responses of HR professionals. Also, the study did not account for companies with online CV submission forms. It is advised that companies with such forms take the same considerations presented in the study.

References

- ADP. (2015). *The Workforce View in Europe*. ADP. Retrieved from <https://www.adp.pl/assets/vfs/Account-109205/other/the-workforce-view/adp-workforce-view-in-europe-high-res-1-.pdf>
- Ahmed, A. M., Andersson, L., & Hammarstedt, M. (2012). Does age matter for employability? A field experiment on ageism in the Swedish labour market. *Applied Economics Letters*, 19(4), 403–406. <https://doi.org/10.1080/13504851.2011.581199>
- Allen, M. W., Armstrong, D. J., Riemenschneider, C. K., & Reid, M. F. (2006). Making sense of the barriers women face in the information technology work force: Standpoint theory, Self-disclosure, and causal maps. *Sex Roles*, 54(11–12), 831–844. <https://doi.org/10.1007/s11199-006-9049-4>
- Amorim, W., Fischer, A., & Fevorini, F. B. (2019). Workers age 50 and over in the Brazilian labor market: is there ageism? *Revista de Gestão*, 26(2), 161–179. <https://doi.org/10.1108/rege-09-2018-0092>
- Ashraf, N., Bandiera, O., & Lee, S. S. (2014). Awards unbundled: Evidence from a natural field experiment. *Journal of Economic Behavior and Organization*, 100, 44–63. <https://doi.org/10.1016/j.jebo.2014.01.001>
- Avery, D. R., McKay, P. F., & Wilson, D. C. (2007). Engaging the Aging Workforce: The Relationship Between Perceived Age Similarity, Satisfaction With Coworkers, and Employee Engagement. *Journal of Applied Psychology*, 92(6), 1542–1556. <https://doi.org/10.1037/0021-9010.92.6.1542>
- Babones, S. (2016). *Interpretive Quantitative Methods for the Social Sciences*. *Sociology* (Vol. 50). <https://doi.org/10.1177/0038038515583637>
- Bendick, M., Brown, L. E., & Wall, K. (1999). No foot in the door: An experimental study of employment discrimination against older workers. *Journal of Aging & Social Policy*, 10(4), 5–23. https://doi.org/10.1300/J031v10n04_02
- Berde, É., & Mágó, M. L. (2022). Are older applicants less likely to be invited to a job interview? – an experimental study on ageism. *Employee Relations: The International Journal*, 44(6), 1259–1272. <https://doi.org/10.1108/ER-11-2020-0515>
- Berkup, S. B. (2014). Working with generations X and Y In generation Z period: Management of different generations in business life. *Mediterranean Journal of Social Sciences*, 5(19), 218–229. <https://doi.org/10.5901/mjss.2014.v5n19p218>

- Berlinski, S., & Ramos, A. (2020). Peer effects in the decision to apply for a professional excellence award. *Labour Economics*, 67. <https://doi.org/10.1016/j.labeco.2020.101934>
- Bernard Marr. (2023). The Top 10 In-Demand Skills For 2030. Retrieved August 2, 2023, from <https://www.forbes.com/sites/bernardmarr/2023/02/14/the-top-10-in-demand-skills-for-2030/?sh=1a7a2a1c2fb9>
- Bowman, D., McGann, M., Kimberley, H., & Biggs, S. (2017). ‘Rusty, invisible and threatening’: ageing, capital and employability. *Work, Employment and Society*, 31(3), 465–482. <https://doi.org/10.1177/0950017016645732>
- Bradler, C., Dur, R., Neckermann, S., & Non, A. (2013). *Employee Recognition and Performance : A Field Experiment*. <https://doi.org/10.2139/ssrn.2256482>
- Bratt, C., Abrams, D., Swift, H. J., Vauclair, C. M., & Marques, S. (2018). Perceived Age Discrimination Across Age in Europe: From an Ageing Society to a Society for All Ages. *Developmental Psychology*, 54(1), 167–180. <https://doi.org/http://dx.doi.org/10.1037/dev0000398>; <http://dx.doi.org/10.1037/dev0000398.supp>
- Brodmerkel, S., & Barker, R. (2019). Hitting the ‘glass wall’: Investigating everyday ageism in the advertising industry. *The Sociological Review*. <https://doi.org/10.1177/0038026119837147>
- Burn, I., Firoozi, D., Ladd, D., & Neumark, D. (2023a). Age Discrimination and Age Stereotypes in Job Ads. *FRBSF Economic Letter*, 07.
- Burn, I., Firoozi, D., Ladd, D., & Neumark, D. (2023b). Stereotypes of older workers and perceived ageism in job ads: evidence from an experiment. *Journal of Pension Economics and Finance*, 1–27. <https://doi.org/10.1017/s1474747222000270>
- Butler, R. N. (1969). Age-ism: Another form of bigotry. *Gerontologist*, 9(4), 243–246. https://doi.org/10.1093/geront/9.4_Part_1.243
- Butler, R. N. (1980). Ageism : A Foreword. *Journal of Social Issues*, 36(2), 8–11.
- Butler, R. N. (2005a). Ageism: Looking back over my shoulder. *Generations*, 3, 84–86.
- Butler, R. N. (2005b). Combating Ageism: A Matter of Human and Civil Rights. *The Anti-Ageism Taskforce at The International Longevity Center*, 1–7. Retrieved from https://aging.columbia.edu/sites/default/files/Ageism_in_America.pdf
- Buttigieg, S. C., Ilinca, S., Jose, J. M. S. de S., & Larsson, A. T. (2017). Researching Ageism in Health-Care and Long Term Care. In L. Ayalon & C. Tesch-Römer (Eds.), *International Perspectives on Aging 19* (Vol. 19, pp. 493–516). Springer Open.

https://doi.org/https://doi.org/10.1007/978-3-319-73820-8_29

- Carlsson, M., & Eriksson, S. (2019). Age discrimination in hiring decisions: Evidence from a field experiment in the labor market. *Labour Economics*, 59, 173–183. <https://doi.org/10.1016/j.labeco.2019.03.002>
- Carneiro, R., Chau, F., Soares, C., Fialho, J. A. S., & Sacadura, M. J. (2012). O envelhecimento da população: Dependência, ativação e qualidade. *Cepcep*, 363. <https://doi.org/Ficha n°28>
- Carral, P., & Alcover, C. M. (2019). Measuring age discrimination at work: Spanish adaptation and preliminary validation of the nordic age discrimination scale (NADS). *International Journal of Environmental Research and Public Health*, 16(8), 1–16. <https://doi.org/10.3390/ijerph16081431>
- Cebola, M. M. J. (2016). *O Idadismo e as diferentes gerações presentes no mercado de trabalho: Um estudo comparativo entre Portugal e Espanha*. (Master's thesis, ISLA Santarém). Retrieved from https://www.academia.edu/27362486/O_Idadismo_e_as_diferentes_gerações_presentes_no_mercado_de_trabalho_Um_estudo_comparativo_entre_Portugal_e_Espanha
- Cebola, M. M. J., Dos Santos, N. R., & Dionísio, A. (2021). Worker-related ageism: A systematic review of empirical research. *Ageing and Society*, 1–33. <https://doi.org/10.1017/S0144686X21001380>
- Centre for Reviews and Dissemination (CDR). (2009). *Systematic Reviews - CRD's guidance for undertaking reviews in health care*. Centre for Reviews and Dissemination, University of York, 2008 (January 20). York: CRD, University of York. Retrieved from www.yps-publishing.co.uk
- Challe, L. (2017). Ageism and the business cycle: An exploratory approach. *European Journal of Comparative Economics*, 14(2), 221–264. <https://doi.org/10.25428/1824-2979/201702-221-264>
- Chonody, J. M. (2016). Positive and Negative Ageism: The Role of Benevolent and Hostile Sexism. *Affilia - Journal of Women and Social Work*, 31(2), 207–218. <https://doi.org/10.1177/0886109915595839>
- Čič, Ž. V., & Žižek, S. Š. (2017). Intergenerational Cooperation at the Workplace from the Management Perspective. *Naše Gospodarstvo/Our Economy*, 63(3), 47–59. <https://doi.org/10.1515/ngoe-2017-0018>
- CIPD. (2014). Managing an Age-Diverse Workforce Employer and employee Views. *Chartered Institute of Personnel and Development*, (March), 1–19. Retrieved from

- <http://www.cipd.co.uk/hr-resources/survey-reports/managing-age-diverse-workforce-views.aspx>
- Clark, K. R. (2017). Four Generations in the Workplace. *Radiologic Technology*, 88(4), 379–398. Retrieved from [http://www.kileyadvisors.com/publications/Generations in the Workplace 2008.pdf](http://www.kileyadvisors.com/publications/Generations%20in%20the%20Workplace%202008.pdf)
- Clendon, J., & Walker, L. (2016). The juxtaposition of ageing and nursing: The challenges and enablers of continuing to work in the latter stages of a nursing career. *Journal of Advanced Nursing*, 72(5), 1065–1074. <https://doi.org/10.1111/jan.12896>
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. *Statistical Power Analysis for the Behavioral Sciences* (Second Edi). Lawrence Erlbaum Associates. <https://doi.org/10.4324/9780203771587>
- Cortina, L. M., Kabat-Farr, D., Leskinen, E. A., Huerta, M., & Magley, V. J. (2013). Selective Incivility as Modern Discrimination in Organizations: Evidence and Impact. *Journal of Management*, 39(6), 1579–1605. <https://doi.org/10.1177/0149206311418835>
- Davies, A., Fidler, D., & Gorbis, M. (2011). Future Work Skills 2020. *University of Phoenix Research Institute - Usa*, 19. <https://doi.org/10.13140/RG.2.1.3839.4721>
- Desmette, D., & Gaillard, M. (2008). When a “worker” becomes an “older worker.” *Career Development International*, 13(2), 168–185. <https://doi.org/10.1108/13620430810860567>
- Di Fabio, A. (2017). Positive healthy organizations: Promoting well-being, meaningfulness, and sustainability in organizations. *Frontiers in Psychology*, 8(NOV), 1–6. <https://doi.org/10.3389/fpsyg.2017.01938>
- Dixon, J. (2012). Communicating (St)ageism: Exploring Stereotypes of Age and Sexuality in the Workplace. *Research on Aging*, 34(6), 654–669. <https://doi.org/10.1177/0164027512450036>
- Djabi, M., & Shimada, S. (2013). How does generational diversity contribute to the organizational dynamic? An empirical view. *29th EGOS Colloquium in Montreal*, 1–40.
- Donaldson, E. (2023). Portuguese people: 10 interesting facts. Retrieved July 17, 2023, from <https://www.idealista.pt/en/news/erasmus-in-portugal/2023/06/29/990-portuguese-people-10-interesting-facts>
- Drucker, P. F. (1999). Management Challenges for the 21st Century. *Harvard Business Review*, 24, 224. https://doi.org/10.1300/J105v24n03_22
- Drydakis, N., MacDonald, P., Chiotis, V., & Somers, L. (2017). Age discrimination in the UK labour market. Does race moderate ageism? An experimental investigation. *Applied*

- Economics Letters*, (1), 1–4. <https://doi.org/10.1080/13504851.2017.1290763>
- Duncan, C., & Loretto, W. (2004). Never the right age? Gender and age-based discrimination in employment. *Gender, Work and Organization*, 11(1), 95–115. <https://doi.org/10.1111/j.1468-0432.2004.00222.x>
- Eichhorst, W., Boeri, T., De Coen, A., Galasso, V., Kendzia, M., & Steiber, N. (2014). How to combine the entry of young people in the labour market with the retention of older workers? *IZA Journal of European Labor Studies*, 3(1), 1–23. <https://doi.org/10.1186/2193-9012-3-19>
- European Commission. (2015a). *Innovation for Active & Healthy Ageing. European Summit on Innovation for Active and Healthy Ageing, Brussels - Final Report*. <https://doi.org/10.2759/472427>
- European Commission. (2015b). *The 2015 Ageing Report - Underlying Assumptions and Projection Methodologies* (European C). *EUROPEAN ECONOMY 8/2014* (Vol. European E). Brussels: European Commission, Directorate-General for Economic and Financial Affairs, Unit Communication and interinstitutional relations. <https://doi.org/10.2765/76255>
- European Social Survey. (2012). Experiences and Expressions of Ageism: Topline Results (UK) from Round 4 of the European Social Survey ESS Country Specific Topline Results Accessing the European Social Survey Data and Documentation. *ESS Country Specific Topline Results*, (2). Retrieved from <http://www.nesstar.com/index.html%0Ahttp://www.europeansocialsurvey.org>.
- Favero, L. W., & Heath, R. G. (2012). Generational Perspectives in the Workplace: Interpreting the Discourses That Constitute Women’s Struggle to Balance Work and Life. *Journal of Business Communication*, 49(4), 332–356. <https://doi.org/10.1177/0021943612456037>
- Ferraro, T., dos Santos, N. R., Pais, L., Zappalà, S., & Moreira, J. M. (2021). The Decent Work Questionnaire: Psychometric properties of the Italian version. *International Journal of Selection and Assessment*, 29(2), 293–302. <https://doi.org/10.1111/ijsa.12328>
- Ferraro, T., Pais, L., dos Santos, N. R., & Martinez-Tur, V. (2023). The Decent Work Questionnaire: adaptation and validation of the Spanish version. *Management Research*, 21(2), 167–193. <https://doi.org/10.1108/MRJIAM-07-2022-1330>
- Ferraro, T., Pais, L., Santos, N. R. dos, & Moreira, J. M. (2018). The Decent Work Questionnaire: Development and validation in two samples of knowledge workers. *International Labour Review*, 157(2), 243–265. <https://doi.org/10.1111/ilr.12039>

- Ferraro, T., Santos, N. R. dos, Pais, L., & Mónico, L. (2016). Historical landmarks of decent work. *European Journal of Applied Business Management*, 2(1), 77–96. [https://doi.org/10.1016/S1381-1177\(03\)00078-X](https://doi.org/10.1016/S1381-1177(03)00078-X)
- Furunes, T., & Mykletun, R. J. (2010). Age discrimination in the workplace: Validation of the Nordic Age Discrimination Scale (NADS). *Scandinavian Journal of Psychology*, 51(1), 23–30. <https://doi.org/10.1111/j.1467-9450.2009.00738.x>
- Gahan, P., Harbridge, R., Healy, J., & Williams, R. (2017). The Ageing Workforce: Policy Dilemmas and Choices. *Australian Journal of Public Administration*, 76(4), 511–523. <https://doi.org/10.1111/1467-8500.12232>
- Garcia, M. T. M., Fontainha, E., & Passos, J. (2017). Hiring older workers: The case of Portugal. *Journal of the Economics of Ageing*, 9, 71–77. <https://doi.org/10.1016/j.jeoa.2016.08.002>
- Gibson, J., Jones, J., Cella, J., Clark, C., Epstein, A., & Haselberger, J. (2010). Ageism and the baby boomers: Issues, challenges and the TEAM approach. *Contemporary Issues in Education Research*, 3(1), 53–60. Retrieved from <http://www.journals.cluteonline.com/index.php/CIER/article/view/161>
- Giles, H., & Reid, S. A. (2005). Ageism across the lifespan: Towards a self-categorization model of ageing. *Journal of Social Issues*, 61(2), 389–404. <https://doi.org/10.1111/j.1540-4560.2005.00412.x>
- Godet, M. (1976). Scenarios of air transport development to 1990 by SMIC 74-A new cross-impact method. *Technological Forecasting and Social Change*, 9(3), 279–288. [https://doi.org/10.1016/0040-1625\(76\)90012-3](https://doi.org/10.1016/0040-1625(76)90012-3)
- Godet, M. (2000). The Art of Scenarios and Strategic Planning: Tools and Pitfalls. *Technological Forecasting and Social Change*, 65(1), 3–22. [https://doi.org/10.1016/S0040-1625\(99\)00120-1](https://doi.org/10.1016/S0040-1625(99)00120-1)
- Godet, M., & Durance, P. (2006). Europe: gray hair and low growth. *Foresight*, 8(2), 10–29. <https://doi.org/10.1108/14636680610656156>
- Godet, M., & Roubelat, F. (1996). Creating the future : The use and misuse of scenarios, 29(2), 164–171.
- Griffin, B., Bayl-Smith, P., & Hesketh, B. (2016). The longitudinal effects of perceived age discrimination on the job satisfaction and work withdrawal of older employees. *Work, Aging and Retirement*, 2(4), 415–427. <https://doi.org/10.1093/workar/waw014>
- Gringart, E., Jones, B., Helmes, E., Jansz, J., Monterosso, L., & Edwards, M. (2012). Negative

- Stereotyping of Older Nurses Despite Contact and Mere Exposure: The Case of Nursing Recruiters in Western Australia. *Journal of Aging and Social Policy*, 24(4), 400–416. <https://doi.org/10.1080/08959420.2012.735170>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (Seventh Ed). Harlow : Pearson Education Limited.
- Hamel, G., & Prahalad, C. K. (1994). *Competing for the future*. BOSTON, MASSACHUSETTS: HARVARD BUSINESS SCHOOL PRESS.
- Handy, J., & Davy, D. (2007). Gendered ageism: Older women’s experiences of employment agency practices. *Asia Pacific Journal of Human Resources*, 45(1), 85–99. <https://doi.org/10.1177/1038411107073606.Handy.qxd>
- Harada, K., Sugisawa, H., Sugihara, Y., Yanagisawa, S., & Shimmei, M. (2018). Perceived Age Discrimination and Job Satisfaction Among Older Employed Men in Japan. *International Journal of Aging and Human Development*. <https://doi.org/10.1177/0091415018811100>
- Harnois, C. E., & Bastos, J. L. (2018). Discrimination, Harassment, and Gendered Health Inequalities: Do Perceptions of Workplace Mistreatment Contribute to the Gender Gap in Self-reported Health? *Journal of Health and Social Behavior*, 59(2), 283–299. <https://doi.org/10.1177/0022146518767407>
- Hooyman, N. R. (2003). Ageism: Stereotyping and Prejudice against Older Persons. *The Journal of Sociology & Social Welfare*, 30(2), 185–187. <https://doi.org/10.2307/1556464>
- IBM Corp. Released. (2016). IBM SPSS Statistics for Windows, Version 24.0. Armonk, NY: IBM Corp. Retrieved from <https://www.ibm.com/support/pages/how-cite-ibm-spss-statistics-or-earlier-versions-spss>
- Ilişanu, G., & Andrei, V. (2010). Age stereotypes and ageism at the workplace - #ageisjustanumber. *Journal of Comparative Research in Anthropology and Sociology*, 1(2), 1–21.
- ILO - International Labour Office. (1998). Declaration on Fundamental Principles and Rights at Work. Retrieved from <http://www.ilo.org/declaration/thedeclaration/textdeclaration/lang--en/index.htm>
- ILO - International Labour Office. (2001). *Reducing the Decent Work Deficit: A global challenge*. *International Labour Conference. 89th Session 2001*. Geneva. Retrieved from [http://www.ilo.org/public/libdoc/ilo/P/09383/09383\(2001-89\)76.pdf](http://www.ilo.org/public/libdoc/ilo/P/09383/09383(2001-89)76.pdf)
- ILO - International Labour Office. (2011). Age discrimination: Older than 50, so what? *World of Work, The Magazine of the ILO*, (72). Retrieved from

- https://www.ilo.org/global/publications/world-of-work-magazine/articles/WCMS_165356/lang--en/index.htm?mode=ALFS_SUMTAB
- ILO - International Labour Organization. (n.d.). Decent work and the 2030 agenda for sustainable development. Retrieved April 15, 2019, from http://cite.gov.pt/pt/destaques/complementosDestqs2/Decent_work.pdf
- International Longevity Center-USA (ILC). (2005). *Ageism in America*. Retrieved from https://aging.columbia.edu/sites/default/files/Ageism_in_America.pdf
- Iversen, T. N., Larsen, L., & Solem, P. E. (2009). A conceptual analysis of Ageism. *Nordic Psychology*, *61*(3), 4–22. <https://doi.org/10.1027/1901-2276.61.3.4>
- Iweins, C., Desmette, D., & Yzerbyt, V. (2012). Ageism at Work: What Happens to Older Workers Who Benefit from Preferential Treatment? *Psychologica Belgica*, *52*(4), 327–349. <https://doi.org/10.5334/pb-52-4-327>
- Iweins, C., Desmette, D., Yzerbyt, V., & Stinglhamber, F. (2013). Ageism at work: The impact of intergenerational contact and organizational multi-age perspective. *European Journal of Work and Organizational Psychology*, *22*(3), 331–346. <https://doi.org/10.1080/1359432X.2012.748656>
- Jones, K. P., Sabat, I. E., King, E. B., Ahmad, A., McCausland, T. C., & Chen, T. (2017). Isms and schisms: A meta-analysis of the prejudice-discrimination relationship across racism, sexism, and ageism. *Journal of Organizational Behavior*, *38*(7), 1076–1110. <https://doi.org/10.1002/job.2187>
- Jost, J. T., & Hamilton, D. L. (2005). Stereotypes in Our Culture. In J. F. Dovidio, P. Glick, & L. A. Rudman (Eds.), *On the Nature of Prejudice: Fifty Years after Allport* (1st ed., pp. 208–224). 9600 Garsington Road, Oxford OX4 2DQ, UK: Blackwell Publishing Ltd.
- Jyrkinen, M. (2014). Women managers, careers and gendered ageism. *Scandinavian Journal of Management*, *30*(2), 175–185. <https://doi.org/10.1016/j.scaman.2013.07.002>
- Jyrkinen, M., & Mckie, L. (2012). Gender, age and ageism: experiences of women managers in Finland and Scotland. *Work, Employment and Society*, *26*(1), 61–77. <https://doi.org/10.1177/0950017011426313>
- Kanagasabai, N. (2016). In the silences of a newsroom: age, generation, and sexism in the Indian television newsroom. *Feminist Media Studies*, *16*(4), 663–677. <https://doi.org/10.1080/14680777.2016.1193296>
- Kaplan, R. S., & Norton, D. P. (2004). Measuring the Strategic Readiness of Intangible Assets. *Harvard Business Review*, *82*(2). Retrieved from <https://hbr.org/2004/02/measuring-the->

strategic-readiness-of-intangible-assets

- Katz, R. (2022). Gen Z are not ‘coddled.’ They are highly collaborative, self-reliant and pragmatic, according to new Stanford-affiliated research. Retrieved May 13, 2023, from <https://news.stanford.edu/2022/01/03/know-gen-z/>
- Kaye, L. W., & Alexander, L. B. (1995). Perceptions of Job Discrimination Among Lower-Income, Elderly Part-Timers. *Journal of Gerontological Social Work*, 23(3/4), 99–120. <https://doi.org/10.1300/J083V23N03>
- Kenny, G. P., Groeller, H., Mcginn, R., & Flouris, A. D. (2016). Age, Human Performance, and Physical Employment Standards. *Applied Physiology, Nutrition & Metabolism*, 41(June), S92–S107. <https://doi.org/10.1139/apnm-2015-0483>
- King, S. P., & Bryant, F. B. (2017). The Workplace Intergenerational Climate Scale (WICS): A self-report instrument measuring ageism in the workplace. *Journal of Organizational Behavior*, 38(2), 124–151. <https://doi.org/10.1002/job.2118>
- Klein, D. A. (1998). *A gestão estratégica do capital intelectual: Recursos para a economia baseada em conhecimento*. Qualitymark. Retrieved from https://books.google.nl/books/about/A_Gestão_estratégica_do_capital_intele.html?id=vJk23dOd4msC&redir_esc=y
- Krekula, C. (2019). Time, precarisation and age normality: On internal job mobility among men in manual work. *Ageing and Society*, 39(10), 2290–2307. <https://doi.org/10.1017/S0144686X1800137X>
- Krywulak, T., & Roberts, M. (2009). Winning the “ Generation Wars ” Making the Most of Generational Differences and Similarities in the Workplace, (November), 1–76.
- Kumari, N. (2012). A Study of the Recruitment and Selection process: SMC Global. *Industrial Engineering Letters*, 2(1). Retrieved from <https://core.ac.uk/reader/234684990>
- Kupperschmidt, B. R. (2000). Multigenerational employee. *Health Care Manager*.
- Lagacé, M., Donizzetti, A. R., Van de Beeck, L., Bergeron, C. D., Rodrigues-Rouleau, P., & St-Amour, A. (2022). Testing the Shielding Effect of Intergenerational Contact against Ageism in the Workplace: A Canadian Study. *International Journal of Environmental Research and Public Health*, 19(8). <https://doi.org/10.3390/ijerph19084866>
- Lagacé, M., Nahon-Serfaty, I., & Laplante, J. (2015). Canadian government’s framing of ageing at work and older workers: Echoing positive ageing models. *Work*, 52(3), 597–604. <https://doi.org/10.3233/WOR-152114>
- Lagacé, M., Tougas, F., Laplante, J., & Neveu, J.-F. (2008). La santé en péril : répercussions

- de la communication âgiste sur le désengagement psychologique et l'estime de soi des infirmiers de 45 ans et plus. *Canadian Journal on Aging*, 27(3), 285–299. <https://doi.org/10.3138/cja.27.3.285>
- Lagacé, M., Van De Beeck, L., Bergeron, C. D., & Rodrigues-Rouleau, P. (2023). Fostering Positive Views About Older Workers and Reducing Age Discrimination: A Retest of the Workplace Intergenerational Contact and Knowledge Sharing Model. *Journal of Applied Gerontology*, 42(6), 073346482311638. <https://doi.org/10.1177/07334648231163840>
- Lagacé, M., Van de Beeck, L., & Firzly, N. (2019). Building on Intergenerational Climate to Counter Ageism in the Workplace? A Cross-Organizational Study. *Journal of Intergenerational Relationships*, 17(2), 201–219. <https://doi.org/10.1080/15350770.2018.1535346>
- Lahey, J. N. (2019). Age , Women , and Hiring : An Experimental Study. *Journal of Human Resources*, 43(1), 30–56.
- Legas, M., & Sims, C. H. (2012). Leveraging Generational Diversity in Today's Workplace. Retrieved December 17, 2017, from <https://opensiuc.lib.siu.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1100&context=ojwed>
- Lev, S., Wurm, S., & Ayalon, L. (2019). Origins of Ageism at the Individual Level. In L. Ayalon & C. Tesch-Römer (Eds.), *Contemporary Perspectives on Ageism* (pp. 51–72). Springer Open. Retrieved from https://doi.org/10.1007/978-3-319-73820-8_4
- Levy, S. R. (2018). Toward Reducing Ageism: PEACE (Positive Education about Aging and Contact Experiences) Model. *Gerontologist*, 58(2), 226–232. <https://doi.org/10.1093/geront/gnw116>
- Levy, S. R., & Macdonald, J. L. (2016). Progress on Understanding Ageism. *Journal of Social Issues*, 72(1), 5–25. <https://doi.org/10.1111/josi.12153>
- Loretto, W., Duncan, C., & White, P. J. (2000). Ageism and employment: controversies, ambiguities and younger people's perceptions. *Ageing and Society*, 20(03), 279–302. Retrieved from http://journals.cambridge.org/abstract_S0144686X00007741
- Lössbroek, J., & Radl, J. (2019). Teaching older workers new tricks: Workplace practices and gender training differences in nine European countries. *Ageing and Society*, 39(10), 2170–2193. <https://doi.org/10.1017/S0144686X1800079X>
- Lucas, R. E. (1993). Ageism and the UK Hospitality Industry. *Employee Relations*, 15(2), 33–41. <https://doi.org/10.1179/str.2007.54.4.006>

- Macdonald, J. L., & Levy, S. R. (2016). Ageism in the Workplace: The Role of Psychosocial Factors in Predicting Job Satisfaction, Commitment, and Engagement. *Journal of Social Issues*, 72(1), 169–190. <https://doi.org/10.1111/josi.12161>
- Malinen, S., & Johnston, L. (2013). Workplace ageism: Discovering hidden bias. *Experimental Aging Research*, 39(4), 445–465. <https://doi.org/10.1080/0361073X.2013.808111>
- McGann, M., Ong, R., Bowman, D., Duncan, A., Kimberley, H., & Biggs, S. (2016). Gendered Ageism in Australia: Changing Perceptions of Age Discrimination among Older Men and Women. *Economic Papers: A Journal of Applied Economics and Policy*, 35(4), 375–388. <https://doi.org/10.1111/1759-3441.12155>
- McMullin, J. A., & Marshall, V. W. (2001). Ageism, age relations, and garment industry work in Montreal. *The Gerontologist*, 41(1), 111–122. <https://doi.org/10.1093/geront/41.1.111>
- McVittie, C., McKinlay, A., & Widdicombe, S. (2003). Committed to (un)equal opportunities?: “New ageism” and the older worker. *British Journal of Social Psychology*, 42(4), 595–612. <https://doi.org/10.1348/014466603322595293>
- Meinich, J., & Sang, K. (2018). “It does not help to look young and dumb....” *Equality, Diversity and Inclusion: An International Journal*, 37(3), 202–218. <https://doi.org/10.1108/EDI-04-2017-0089>
- MkTalent. (2022). Recrutamento o que é: Processos e técnicas de seleção. Retrieved February 14, 2023, from <https://mktalent.pt/recrutamento-o-que-e-processos-selecao/>
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *Annals of Internal Medicine*, 151(4), 264–269. Retrieved from <http://annals.org>
- Moreira, D. (2019). Success Spills Over: How Awards Affect Winners’ and Peers’ Performance in Brazil. Retrieved from https://dianamoreira.com/pdf/dm/Moreira_MO.pdf
- Nelson, T. D. (2016). Promoting Healthy Aging by Confronting Ageism. *American Psychologist*, 71(4), 276–282. Retrieved from <http://10.0.4.13/a0040221%5Cnhttp://proxy.lib.umich.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ssa&AN=115359808&site=ehost-live&scope=site>
- Ng, T. W. H., & Feldman, D. C. (2012). Evaluating Six Common Stereotypes About Older Workers with Meta-Analytical Data. *Personnel Psychology*, 65(4), 821–858. <https://doi.org/10.1111/peps.12003>
- Nonaka, I. (1991). The Knowledge-Creating Company. *Harvard Business Review*, (I).
- Nonaka, I., & Toyama, R. (2003). The knowledge-creating theory revisited: knowledge creation

- as a synthesizing process. *Knowledge Management Research & Practice*, 1(1), 2–10. <https://doi.org/10.1057/palgrave.kmrp.8500001>
- North, M. S., & Fiske, S. T. (2013a). Act Your (Old) Age: Prescriptive, Ageist Biases Over Succession, Consumption, and Identity. *Personality and Social Psychology Bulletin*, 39(6), 720–734. <https://doi.org/10.1177/0146167213480043>
- North, M. S., & Fiske, S. T. (2013b). Subtyping ageism: Policy issues in succession and consumption. *Social Issues and Policy Review*, 7(1), 36–57. <https://doi.org/10.1111/j.1751-2409.2012.01042.x>
- OECD. (2019). Skills for 2030. *OECD Future of Education and Skills 2030*, 16. Retrieved from https://www.oecd.org/education/2030-project/teaching-and-learning/learning/skills/Skills_for_2030_concept_note.pdf
- Ojala, H., Pietilä, I., & Nikander, P. (2016). Immune to ageism? Men's perceptions of age-based discrimination in everyday contexts. *Journal of Aging Studies*, 39, 44–53. <https://doi.org/10.1016/j.jaging.2016.09.003>
- Oliveira, E. A. da S., & Cabral-Cardoso, C. J. (2018). Buffers or Boosters? The Role of HRM Practices in Older Workers' Experience of Stereotype Threat. *Journal of Psychology: Interdisciplinary and Applied*, 152(1), 36–59. <https://doi.org/10.1080/00223980.2017.1405903>
- Paleari, F. G., Brambilla, M., & Fincham, F. D. (2019). When prejudice against you hurts others and me: The case of ageism at work. *Journal of Applied Social Psychology*, 49(11), 704–720. <https://doi.org/10.1111/jasp.12628>
- Palmore, E. B. (1999). *AGEISM: Negative and Positive* (Second Edi). Springer Publishing Company, Inc. Retrieved from [http://dx.b-ok.org/genesis/644000/fc804da2b01dac5d02df07b185476cea/_as/\[Erdman_Ballagh_Palmore\]_Ageism_Negative_and_Pos\(b-ok.org\).pdf](http://dx.b-ok.org/genesis/644000/fc804da2b01dac5d02df07b185476cea/_as/[Erdman_Ballagh_Palmore]_Ageism_Negative_and_Pos(b-ok.org).pdf)
- Palmore, E. B. (2001). The Ageism Survey: first findings. *Gerontologist*, 41(5), 572–575. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=106908803&site=ehost-live>
- Palmore, E. B. (2004). Research note: Ageism in Canada and the United States. *Journal of Cross-Cultural Gerontology*, 19, 41–46.
- Parker, K., & Igielnik, R. (2020). On the Cusp of Adulthood and Facing an Uncertain Future: What We Know About Gen Z So Far. Retrieved May 13, 2023, from

<https://www.pewresearch.org/social-trends/2020/05/14/on-the-cusp-of-adulthood-and-facing-an-uncertain-future-what-we-know-about-gen-z-so-far-2/>

- Porter, M. E. (1998). *COMPETITIVE ADVANTAGE - Creating and Sustaining Superior Performance* (First Free). THE FREE PRESS and colophon are trademarks of Simon & Schuster Inc. Manufactured.
- Posthuma, R. A., & Campion, M. A. (2009). Age stereotypes in the workplace: Common stereotypes, moderators, and future research directions. *Journal of Management*, 35(1), 158–188. <https://doi.org/10.1177/0149206308318617>
- Prahalad, C. K., & Hamel, G. (1990). The Core Competence of the Corporation. *Harvard Business Review*.
- Ramos, A., & Magalhães, P. C. (2021). *Os valores dos portugueses - Resultados do European Values Study. European Values Study (EVS)*.
- Raposo, S., & Carstensen, L. L. (2015). Developing a research agenda to combat ageism. *Generations – Journal of the American Society on Aging*, 39(3), 79–85. Retrieved from http://griffith.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwnV07T8QwDLbgkBALj-N1cCdIYiu0Sduke-8TCxsItipNXISAK_TK_8fp4zgeYmC118jx47MT2wCCH_reN58QGzSxMbHKjLaEkANjciF9zTGKbFAPwJmvZJx0lYlmtjsnWXtuWxhXND-iuOfwRhwmx69vnlsj5Z5b250ai7DEOUVXUnB5fzZzzW4yTD2Xk6
- Raymer, M., Reed, M., Spiegel, M., & Purvanova, R. K. (2017). An Examination of Generational Stereotypes as a Path Towards Reverse Ageism. *The Psychologist-Manager Journal*, 20(3), 148–175. <https://doi.org/http://dx.doi.org/10.1037/mgr0000057>
- Redman, T., & Snape, E. (2002). Ageism in teaching: stereotypical beliefs and discriminatory attitudes towards the over-50s. *Work, Employment and Society*, 16(2), 355–371. <https://doi.org/10.1177/095001702400426884>
- Rego, A., Vitória, A., Tupinambá, A., Júnior, D. R., Reis, D., e Cunha, M. P., & Lourenço-Gil, R. (2018). Brazilian managers' ageism: a multiplex perspective. *International Journal of Manpower*, 39(3), 414–433. <https://doi.org/10.1108/IJM-09-2016-0167>
- Riach, K. (2007). “Othering” older worker identity in recruitment. *Human Relations*, 60(11), 1701–1726. <https://doi.org/10.1177/0018726707084305>
- Riach, K., & Kelly, S. (2015). The need for fresh blood: Understanding organizational age inequality through a vampiric lens. *Organization*, 22(3), 287–305. <https://doi.org/10.1177/1350508413508999>

- Riach, P. A., & Rich, J. (2002). Field experiments of discrimination in the market place. *Economic Journal*, *112*(483), F480–F518. <https://doi.org/10.1111/1468-0297.00080>
- Riach, Peter A., & Rich, J. (2010). An experimental investigation of age discrimination in the english labor market. *Annals of Economics and Statistics*, *99/100*, 169–185. <https://doi.org/10.2202/1538-0637.1416>
- Roscigno, V. J. (2010). Ageism in the American Workplace. *Contexts*, *9*(1), 16–21. <https://doi.org/10.1525/ctx.2010.9.1.16>
- Rouzet, D., Sánchez, A. C., Renault, T., & Roehn, O. (2019). Fiscal challenges and inclusive growth in ageing societies. *OECD - Better Policies for Better Lives*, 1–25. <https://doi.org/10.1787/c553d8d2-en>
- Rozario, S. D., Venkatraman, S., & Abbas, A. (2019). Challenges in Recruitment and Selection Process: An Empirical Study. *Challenges*, *10*(2), 35. <https://doi.org/10.3390/challe10020035>
- Rudolph, C. W., & Zacher, H. (2015). Intergenerational perceptions and conflicts in multi-age and multigenerational work environments. *Facing the Challenges of a Multi-Age Workforce: A Use-Inspired Approach*, 253–282. <https://doi.org/10.4324/9780203776322>
- Rupp, D. E., Vodanovich, S. J., & Credé, M. (2006). Age Bias in the Workplace : The Impact of Ageism and Causal Attributions. *Journal of Applied Social Psychology*, *36*(6), 1337–1364.
- Rydzik, A., & Bal, P. M. (2023). The age of securitisation: Insecure young workers in insecure jobs facing an insecure future. *Human Resource Management Journal*, (February 2021), 1–18. <https://doi.org/10.1111/1748-8583.12490>
- Santos, N. R. dos. (2019). Decent work expressing universal values and respecting cultural diversity: propositions for intervention. *Psychologica*, *1*(62), 233–250.
- Shippee, T. P., Wilkinson, L. R., Schafer, M. H., & Shippee, N. D. (2019). Long-Term Effects of Age Discrimination on Mental Health: The Role of Perceived Financial Strain. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, *74*(4), 664–674. <https://doi.org/10.1093/geronb/gbx017>
- Silva, P. A. G. da, & Borges, M. de L. (2013). Implicações de um Cenário Multigeracional no Ambiente de Trabalho: Diferenças, Desafios e Aprendizagem. *IV Encontro de Gestão de Pessoas e Relações Do Trabalho*. Retrieved from <http://www.anpad.org.br/admin/pdf/EnGPR250.pdf>
- Soidre, T. (2005). Retirement-age preferences of women and men aged 55-64 years in Sweden.

- Ageing and Society*, 25(6), 943–963. <https://doi.org/10.1017/S0144686X05004216>
- Solem, P. E. (2016). Ageism and age discrimination in working life. *Nordic Psychology*, 68(3), 160–175. <https://doi.org/10.1080/19012276.2015.1095650>
- Spedale, S., Coupland, C., & Tempest, S. (2014). Gendered Ageism and Organizational Routines at Work: The Case of Day-Parting in Television Broadcasting. *Organization Studies*, 35(11), 1585–1604. <https://doi.org/10.1177/0170840614550733>
- Srinivasan, V. (2012). Multi generations in the workforce: Building collaboration. *IIMB Management Review*, 24(1), 48–66. <https://doi.org/10.1016/j.iimb.2012.01.004>
- Stevens, R. H. (2010). Managing Human Capital : How to Use Knowledge Management to Transfer Knowledge in Today 's Multi-Generational Workforce. *International Business Research*, 3(3), 77–83.
- Stypinska, J., & Turek, K. (2017). Hard and soft age discrimination: the dual nature of workplace discrimination. *European Journal of Ageing*, 14(1), 49–61. <https://doi.org/10.1007/s10433-016-0407-y>
- Szydlik, M. (2008). Intergenerational solidarity and conflict. *Journal of Comparative Family Studies*, 39(1). <https://doi.org/10.3138/jcfs.39.1.97>
- Thorsen, S., Rugulies, R., Løngaard, K., Borg, V., Thielen, K., & Bjorner, J. B. (2012). The association between psychosocial work environment, attitudes towards older workers (ageism) and planned retirement. *International Archives of Occupational and Environmental Health*, 85(4), 437–445. <https://doi.org/10.1007/s00420-011-0689-5>
- UNECE. (2019). *Combating ageism in the world of work. UNECE Policy Brief on Ageing*. Retrieved from www.unece.org/pau/welcome.html
- United Nations (UN). (n.d.). Goals 10. Retrieved from <https://sdgs.un.org/goals/goal10>
- United Nations (UN). (2015a). Agenda 2030. Retrieved from https://www.unric.org/pt/images/SDG_brochure_PT-web.pdf
- United Nations (UN). (2015b). The 2030 Agenda for Sustainable Development. Retrieved March 11, 2019, from <https://sustainabledevelopment.un.org/post2015/transformingourworld>
- United Nations (UN). (2019a). *World Population Ageing 2019. Economic and Social Affairs United Nations*. Retrieved from http://link.springer.com/chapter/10.1007/978-94-007-5204-7_6
- United Nations (UN). (2019b). *World Population Ageing 2019. Economic and Social Affairs, Population Division*. Retrieved from <http://link.springer.com/chapter/10.1007/978-94->

007-5204-7_6

- United Nations (UN). (2019c). *World Population Prospects 2019. Department of Economic and Social Affairs. World Population Prospects 2019*. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/12283219>
- United Nations Economic Commission for Europe (UNECE). (2019). Active Ageing Index 2018, *Analytical*(October). Retrieved from <https://unece.org/population/active-ageing-index>
- Unson, C., & Richardson, M. (2013). Insights into the experiences of older workers and change: Through the lens of selection, optimization, and compensation. *Gerontologist*, 53(3), 484–494. <https://doi.org/10.1093/geront/gns095>
- Urbancová, H., & Fejfarová, M. (2017). Factors influencing age management in organisations in the Czech Republic. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 65(1), 347–356. <https://doi.org/10.11118/actaun201765010347>
- van der Horst, M. (2019). Internalised ageism and self-exclusion: Does feeling old and health pessimism make individuals want to retire early? *Social Inclusion*, 7(3), 27–43. <https://doi.org/10.17645/si.v7i3.1865>
- Vendramin, P. (2009). Age Diversity and Intergenerational Relations at the Workplace. *4th Conference Young People & Societies in Europe and around the Mediterranean*, (March), 1–10.
- Wainwright, D., Crawford, J., Loretto, W., Phillipson, C., Robinson, M., Shepherd, S., ... Weyman, A. (2019). Extending working life and the management of change. Is the workplace ready for the ageing worker? *Ageing and Society*, 39(11), 2397–2419. <https://doi.org/10.1017/S0144686X18000569>
- Wanner, R. A., & McDonald, L. (1983). Ageism in the Labor Market : Estimating Earnings Discrimination Against Older Workers. *Journal of Gerontology*, 38(6), 738–744.
- Wiley, C. (1997). What motivates employees according to over 40 years of. *International Journal of Manpower*, 18(3), 263–280. <https://doi.org/10.1108/01437729710169373>
- Wilson, G., & Roscigno, V. J. (2017). Race, ageism and the slide from privileged occupations. *Social Science Research*, 69, 1–39. <https://doi.org/10.1016/j.ssresearch.2017.09.009>
- Wolfram, H. J. (2017). Modern prejudice and strength of conjunction error: Overestimating proportions of minority employees. *Equality, Diversity and Inclusion*, 36(5), 417–436. <https://doi.org/10.1108/EDI-03-2017-0056>
- Worth, N. (2016). Who we are at work: millennial women, everyday inequalities and insecure

work. *Gender, Place and Culture*, 23(9), 1302–1314.
<https://doi.org/10.1080/0966369X.2016.1160037>

Yamada, Y., Sugisawa, H., Sugihara, Y., & Shibata, H. (2005). Factors relating to organizational commitment of older male employees in Japan. *Journal of Cross-Cultural Gerontology*, 20(3), 181–190. <https://doi.org/10.1007/s10823-006-9002-6>

ZAJAÇ, M. (2015). Intergenerational relations in contemporary organization, 162–167. <https://doi.org/10.17626/DBEM.ICoM.P00.2015.p030>

Appendixes

A1

SLR

Summary of the selected studies

Appendix A

Summary of the 58 studies selected

Reference & Place	Sample (n)
Ahmed, Andersson, & Hammarstedt, 2012; Sweden	466 (Employers in the hiring process)
Allen, Armstrong, Riemenschneider, & Reid, 2006; USA	39 (Women IT employees)
Amorim, Fischer, & Fevorini, 2019; Brazil	RAIS's databases at the Ministry of Labour and Employment (MTE [by its Portuguese acronym]), 2015. 150 (ranked companies in the MEPT survey) MEPT – PROGEP/FIA
Bowman, McGann, Kimberley, & Biggs, 2017; Australia	80 ((Mature-age - 45 to 73 years old -either under-employed or involuntarily without paid work)
Brodmerkel & Barker, 2019; Australia	22 (Experienced advertising creatives)
Carral & Alcover, 2019; Spain	209 (Health sector employees aged between 55 and 67 years)
Challe, 2017; France	Sample dimensions not available ((The median age ((30-49 years old) and the senior age (50 to 59 years old)) – 2 populations - from French labour force surveys, 1982-1989; 1990-1999; 2000-2011 and 2007-2011
Clendon & Walker, 2016; New Zealand	3,273 (Nurses aged over 50, online survey) 46 (Nurses aged over 50)
Cortina, Kabat-Farr, Leskinen, Huerta, & Magley, 2013; USA	369 (Employees of a municipality) 653 (Law enforcement agency)
Desmette & Gaillard, 2008; Belgium	352 (French-speakers' workers)
Dixon, 2012; USA	60 (Workers or who had work outside home)
Drydakis, MacDonald, Chiotis, & Somers, 2017; UK	894 (Two fictitious White British male applicants, one 28- year-old and other 50- year-old) 898

Reference & Place	Sample (n)
	(Two fictitious Black British background male applicants, one 28-year-old and other 50- year-old)
Duncan & Loretto, 2004; UK	1,128 (Financial employees)
Furunes & Mykletun, 2010; Norway	1,001 (Primary and secondary school teachers)
Gringart et al., 2012; Australia	163 (Nursing recruiters)
Handy & Davy, 2007; New Zealand	12 (Women who were made redundant after age 40) 5 (Five agency staff)
Harnois & Bastos, 2018; USA	3,724 (English and Spanish speaking, non-institutionalized adults, economically active, across three years (2006, 2010, 2014))
Iweins, Desmette, & Yzerbyt, 2012; Belgium	187 (Hospital French-speaking employees, aged less than fifty) 58 (French-speaking workers)
Iweins, Desmette, Yzerbyt & Stinglhamber, 2013; Belgium	129 (Financial French-speaking employees aged less than fifty) 187 (Hospital French-speaking employees, aged less than fifty)
Jyrkinen & Mckie, 2012; Finland & Scotland	8 (Senior women managers)
Jyrkinen, 2014; Finland	15 (Senior women managers)
Kanagasabai, 2016; India	17 (journalists)
Kaye & Alexander, 1995; USA	164 (Part-time employed older adults)
King & Ryant, 2017; USA	256 (Staff members of a non-profit seniors housing and service organization) 573 (Employees of non-profit seniors housing and service organizations) 597

Reference & Place	Sample (n)
	(workers who interacted with multiple co-workers daily)
Krekula, 2019; Sweden	11 (Men workers, aged 56 to 74, in manual and managerial capacities at a foundry)
Lagacé et al., 2015; Canada	154 (Government web pages)
Lagacé, Van de Beeck, & Firzly, 2019; Canada	415 (Employees fluent in French)
Loretto, Duncan, & White, 2000; UK	460 (students with work experience)
Lössbroek & Radl, 2019; The Netherlands and Germany	2,517 (European Sustainable Workforce Survey)
Lucas, 1993; UK	43 (Hospitality workers)
Macdonald & Levy, 2016; USA	800 (Workers)
Malinen & Johnston, 2013; New Zealand	77 (Business students having work experience)
McGann et al., 2016; Australia	4,852 (HILDA Survey)
McMullin & Marshall, 2001; Canada	Archival data: industry representative surveys; 79 (Employees, retired, and displaced garment workers (Canada))
McVittie, McKinlay, & Widdicombe, 2003; UK	12 (Human resources managers)
Meinich & Sang, 2018; Norway	20 (BB, X and Y employees of Technical industries)
Ojala, Pietilä, & Nikander, 2016; Finland	23 (67 interviews of middle- and working-class men)
Paleari, Brambilla, & Fincham, 2019; USA	475 (Employees) 172 (Employees at two times (T1 and T2) separated by a 3-month interval)
Raymer et al., 2017; USA	282

Reference & Place	Sample (n)
	(Millennials, Xers, and Boomers employed in the non-profit and human services sector)
Redman & Snape, 2002; UK and Hong Kong	316 (Teachers)
Rego et al., 2018; Portugal and Brazil	201 (Brazilian managers)
Riach, 2007; UK	8 (Recruitment texts)
Rupp, Vodanovich, & Credé, 2006; USA	353 (Undergraduate student workers)
Shippee, Wilkinson, Schafer, & Shippee, 2019; USA and Canada	3,289 (National Longitudinal Survey of Mature Women (1967–2003), (response variables on any occasion between 1989 and 2003” for depressive symptoms) 3,296 (National Longitudinal Survey of Mature Women (1967–2003), (response variables on any occasion between 1989 and 2003” for life satisfaction))
Soidre, 2005; Sweden	- (employees aged 55–64 years)
Solem, 2016; Norway	1,003 (Norwegian Senior Policy Barometer 2013 (employees)) 751 (Managers)
Spedale, Coupland, & Tempest, 2014 UK	1 Text of a Final judgment of an Employment Tribunal court case
Stypinska & Turek, 2017; Poland	1,000 (Men and women aged 45–65 years, economically active)
Thorsen et al., 2012; Denmark	3,122 (Danish employees 50 years and older)
Unson & Richardson, 2013; USA and New Zealand	30 (workers over 55 years old)
Urbancová & Fejfarová, 2017; Czech Republic	549 (Albertina database of organisations)
van der Horst, 2019; Netherlands	1,067 (English Longitudinal Study of Ageing (waves 7 (2014/2015) and 8 (2016/2017))
Wainwright et al., 2019;	5

Reference & Place	Sample (n)
UK	(Case study: Members of five large organisations of Local government (51), Manufacturing (44), Extractive industry (21), Hospitality (30), Transport (31)).
Wanner & Mcdonald, 1983; USA	- (National Longitudinal Surveys of Labour Market Experience: (Employees (men) aged 45 to 59 in 1966)
Wilson & Roscigno, 2017; USA	1,908 (A three-year cohort of non-self-employed full-time workers aged 55 and over)
Wolfram, 2017; UK	409 (Black female older employees) (There are 2 studies but only the study of ageism was considered)
Worth, 2016; Canada	33 (Millennial women)
Yamada, Sugisawa, Sugihara, & Shibata, 2005; Japan	995 (Men aged 55 to 64 years)

A2

Statistical tests

NADS

Table 2.1 - Component matrix

	Component 1
N1_Os trabalhadores mais perto da reforma/aposentação são deixados para trás em casos de promoção ou recrutamento interno	0,844
N2_Os trabalhadores mais perto da reforma/aposentação não têm oportunidades iguais de formação durante o horário de trabalho	0,774
N3_São preferidos trabalhadores mais jovens quando são implementados novos equipamentos, atividades ou métodos de trabalho	0,694
N4_Os trabalhadores mais perto da reforma/aposentação participam com menos frequência em avaliações de desenvolvimento com os seus superiores que os trabalhadores mais jovens	0,843
N5_Os trabalhadores mais perto da reforma/aposentação têm menos aumentos salariais que os trabalhadores mais jovens	0,733
N6_Não se espera que os trabalhadores mais perto da reforma/aposentação, comparativamente com os mais jovens, participem igualmente nos processos de mudança e novos métodos de trabalho	0,621

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Table 2.2 - Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,427	57,114	57,114	3,427	57,114	57,114
2	,881	14,678	71,792			
3	,541	9,009	80,801			
4	,503	8,383	89,184			
5	,362	6,036	95,220			
6	,287	4,780	100,000			

Extraction Method: Principal Component Analysis.

WICS

All variables

Table 2.3 - Varimax rotated factor solution

	Component					
	1	2	3	4	5	6
LGS1_Os colegas de trabalho que não são da minha geração não estão interessados em fazer amigos de outras gerações_recoded	0,270	-0,016	0,625	0,317	-0,046	0,156
LGS2_Os colegas de trabalho que não são da minha geração queixam-se mais que os da minha idade_recoded	0,000	0,029	0,780	-0,053	-0,026	0,067
LGS3_Os colegas de trabalho que não são da minha geração costumam falar sobre coisas que não me interessam_recoded	0,284	0,161	0,627	0,175	0,104	0,035
LGS4_Os colegas de trabalho que não são da minha geração costumam trabalhar de forma diferente dos colegas da minha idade	0,102	0,122	0,637	-0,199	0,094	0,002
PIA1_Eu sinto-me confortável quando colegas de trabalho que não são da minha geração tentam conversar comigo	0,043	0,082	-0,055	0,776	0,165	0,109
PIA2_Eu gosto de interagir com colegas de trabalho de diferentes gerações	0,148	0,065	0,048	0,737	0,165	0,153
PIA3_Os meus colegas de trabalho que não são da minha geração são indivíduos interessantes e únicos	-0,269	0,206	0,243	0,195	0,546	0,201
PIA_ As pessoas trabalham melhor com pessoas da mesma idade_recoded	-0,203	-0,307	-0,430	-0,450	0,010	0,182
CI1_Com que frequência conversa com colegas de trabalho que não são da sua geração?	0,306	0,685	0,081	0,146	0,186	0,041
CI2_Com que frequência conversa com colegas de trabalho que não são da sua geração sobre assuntos além do trabalho?	0,098	0,842	0,135	-0,024	0,169	-0,029
CI3_Com que frequência fala com colegas de trabalho que não são da sua geração sobre as vossas vidas pessoais?	-0,061	0,766	0,197	-0,084	0,009	0,234
CI4_Com que frequência faz refeições com colegas de trabalho que não são da sua geração durante o período laboral?	-0,061	0,657	-0,049	0,230	-0,067	-0,007
IGLT1_Eu acredito que o meu ambiente de trabalho é saudável para pessoas de todas as idades	0,113	0,189	-0,011	0,147	-0,018	0,851
IGLT2_Os trabalhadores de todas as idades são respeitados no meu local de trabalho	0,167	-0,047	0,184	0,096	0,310	0,737
IGLT3_Eu sou capaz de comunicar eficazmente com trabalhadores de diferentes gerações	0,395	0,140	0,044	0,240	0,494	0,207
IGLT4_Trabalhar com colegas de diferentes idades aumenta a qualidade da minha vida profissional	0,110	0,037	-0,039	0,110	0,850	0,027
RILT1_Os meus colegas de trabalho fazem com que os mais velhos sintam que deveriam aposentar-se	0,669	0,030	0,281	0,028	0,176	0,071

	Component					
	1	2	3	4	5	6
RILT2_Eu sinto pressão dos trabalhadores mais jovens para me demitir_recoded	0,792	0,083	0,001	0,268	0,129	-0,032
RILT3_Eu sinto pressão dos trabalhadores mais velhos para me demitir_recoded	0,809	0,013	0,123	0,112	0,009	0,110
RILT4_No meu local de trabalho, os trabalhadores qualificados mais jovens, tendem a ser esquecidos nas promoções_recoded	0,592	0,065	0,226	-0,130	-0,232	0,171

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Table 2.4 - KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0,765
Bartlett's Test of Sphericity	Approx. 1565,138 Chi-Square
	df 190
	Sig. 0,000

Table 2.5 - Reliability Statistics

Cronbach's Alpha	N of Items
0,754	20

DWQ

Table 2.6 - Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3,424	2,715	4,350	1,635	1,602	0,165	31
Item Variances	1,192	0,638	1,592	0,954	2,496	0,057	31

Table 2.7 - Cronbach's Alpha

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0,939	0,940	31

Factorial Analize

Table.2.8 - KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,914
Bartlett's Test of Sphericity	Approx. Chi-Square	4623,025
	df	465
	Sig.	0,000

Table 2.9 - Communalities

	Initial	Extraction
At my work, I am protected from risks to my physical health.	1,000	0,682
I believe that I will have a retirement without financial worries (government or private pension system).	1,000	0,597
I consider the average number of hours I work per day to be adequate/ appropriate.	1,000	0,605
I have everything necessary at work to ensure that my health and safety are protected.	1,000	0,646
I feel that I am protected if I become unemployed (unemployment insurance, government/social benefits, social programmes, etc.).	1,000	0,684
I feel that my family is protected through my private insurance and/ or state benefits.	1,000	0,779
What I earn through my work allows me to live my life with dignity and independence.	1,000	0,770
I feel that I am protected if I become ill (social security or equivalent, NHS, public aid, health insurance, etc.).	1,000	0,731
What I receive for my work allows me to provide for the well-being of those who depend on me.	1,000	0,844
What I get out of my work allows me to live with a personal feeling of well-being.	1,000	0,830
At my work, there is trust among people.	1,000	0,494
My work contributes to ensuring the success of future generations.	1,000	0,483
Through my work I can develop myself professionally.	1,000	0,612
I have choices in the work that I do, which allows me to either work for others or work for myself.	1,000	0,635
My work schedule allows me to manage my life well.	1,000	0,801
In general, decision-making processes about my work are fair.	1,000	0,634
I think that I have prospects for improving my salary/benefits.	1,000	0,636
My work/job allows me to have time for my family/personal life.	1,000	0,794
My work contributes to my personal and professional fulfilment.	1,000	0,600
I have all the resources and support that I need to work safely.	1,000	0,781
At my work/job, I am treated with dignity.	1,000	0,692
I am free to think and express my opinions about my work.	1,000	0,719
Overall, the environmental conditions in my work are safe and acceptable (temperature, noise, humidity, etc.).	1,000	0,676

	Initial	Extraction
At my work, I am accepted for who I am (regardless of sex, age, ethnicity, religion, political orientation, etc.).	1,000	0,662
Currently, I think there are work/job opportunities for an individual like me.	1,000	0,613
I think that I have opportunities to advance professionally (promotions, skills development, etc.).	1,000	0,671
I consider the pace of my work/job to be appropriate.	1,000	0,631
At work, everyone can participate fairly in making decisions.	1,000	0,601
The work that I do contributes to creating value for others (i.e. company, organization, enterprise, customer/client, society, etc.).	1,000	0,606
I consider the work I do to be decent.	1,000	0,605
The financial earnings from my work are fair.	1,000	0,669

Extraction Method: Principal Component Analysis.

Table 2.10 - Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11,340	36,580	36,580	11,340	36,580	36,580	3,484	11,238	11,238
2	2,431	7,843	44,424	2,431	7,843	44,424	3,278	10,573	21,811
3	1,777	5,732	50,156	1,777	5,732	50,156	3,188	10,284	32,095
4	1,505	4,855	55,011	1,505	4,855	55,011	3,131	10,100	42,195
5	1,370	4,418	59,429	1,370	4,418	59,429	2,646	8,534	50,729
6	1,260	4,064	63,493	1,260	4,064	63,493	2,614	8,431	59,160
7	1,102	3,554	67,048	1,102	3,554	67,048	2,445	7,888	67,048
8	0,895	2,886	69,934						
9	0,780	2,517	72,451						
10	0,707	2,282	74,732						
11	0,653	2,108	76,840						
12	0,636	2,051	78,891						
13	0,610	1,966	80,858						
14	0,568	1,834	82,691						
15	0,539	1,738	84,429						
16	0,498	1,608	86,037						
17	0,479	1,546	87,583						
18	0,440	1,421	89,003						
19	0,403	1,299	90,302						
20	0,356	1,149	91,452						
21	0,323	1,041	92,492						
22	0,311	1,002	93,494						
23	0,298	0,961	94,455						
24	0,291	0,939	95,394						

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
25	0,269	0,868	96,262						
26	0,251	0,808	97,071						
27	0,238	0,766	97,837						
28	0,220	0,710	98,547						
29	0,187	0,604	99,151						
30	0,148	0,478	99,629						
31	0,115	0,371	100,000						

Extraction Method: Principal Component Analysis.

Table 2.11 - Rotated Component Matrix^a

	Component						
	1	2	3	4	5	6	7
At my work, I am protected from risks to my physical health.	0,200	0,759	0,069	0,109	0,214	0,012	0,059
I believe that I will have a retirement without financial worries (government or private pension system).	0,254	0,438	0,103	0,168	0,488	0,078	-0,240
I consider the average number of hours I work per day to be adequate/ appropriate.	0,053	0,204	0,618	0,268	0,326	-0,014	0,018
I have everything necessary at work to ensure that my health and safety are protected.	0,121	0,674	0,282	0,112	0,218	0,184	0,064
I feel that I am protected if I become unemployed (unemployment insurance, government/social benefits, social programmes, etc.).	0,137	0,114	0,208	-0,009	0,760	0,131	0,121
I feel that my family is protected through my private insurance and/ or state benefits.	0,208	0,095	0,173	0,044	0,812	0,075	0,173
What I earn through my work allows me to live my life with dignity and independence.	0,795	0,144	0,048	0,104	0,294	0,072	0,108
I feel that I am protected if I become ill (social security or equivalent, NHS, public aid, health insurance, etc.).	0,314	0,199	0,178	0,285	0,689	0,065	0,035
What I receive for my work allows me to provide for the well-being of those who depend on me.	0,830	0,245	0,057	0,124	0,231	0,078	0,130
What I get out of my work allows me to live with a personal feeling of well-being.	0,826	0,243	0,093	0,148	0,185	0,102	0,117
At my work, there is trust among people.	0,310	0,299	0,218	0,505	0,047	0,057	0,000
My work contributes to ensuring the success of future generations.	0,164	0,195	0,200	0,009	0,263	0,182	0,526
Through my work I can develop myself professionally.	0,060	0,223	0,187	0,311	0,213	0,376	0,491
I have choices in the work that I do, which allows me to either work for others or work for myself.	0,076	0,009	-0,089	0,003	0,164	0,748	0,187

	Component						
	1	2	3	4	5	6	7
My work schedule allows me to manage my life well.	0,153	0,151	0,825	0,107	0,133	0,143	0,158
In general, decision-making processes about my work are fair.	0,381	0,283	0,408	0,354	0,041	0,340	-0,012
I think that I have prospects for improving my salary/benefits.	0,097	0,293	0,172	0,002	-0,039	0,707	0,099
My work/job allows me to have time for my family/personal life.	0,192	0,046	0,825	0,073	0,153	-0,012	0,215
My work contributes to my personal and professional fulfilment.	0,234	0,171	0,406	0,132	0,061	0,244	0,520
I have all the resources and support that I need to work safely.	0,214	0,732	0,156	0,158	0,106	0,237	0,288
At my work/job, I am treated with dignity.	0,163	0,515	0,241	0,486	0,035	0,125	0,298
I am free to think and express my opinions about my work.	0,140	0,153	0,167	0,761	0,077	0,141	0,205
Overall, the environmental conditions in my work are safe and acceptable (temperature, noise, humidity, etc.).	0,362	0,627	0,067	0,236	0,006	0,193	0,233
At my work, I am accepted for who I am (regardless of sex, age, ethnicity, religion, political orientation, etc.).	-0,032	0,221	0,026	0,732	0,083	0,077	0,250
Currently, I think there are work/job opportunities for an individual like me.	0,201	0,013	0,152	0,397	0,101	0,616	0,039
I think that I have opportunities to advance professionally (promotions, skills development, etc.).	0,061	0,257	0,207	0,310	0,087	0,616	0,273
I consider the pace of my work/job to be appropriate.	-0,026	0,229	0,579	0,306	0,223	0,276	0,155
At work, everyone can participate fairly in making decisions.	0,270	-0,019	0,206	0,648	0,106	0,125	0,196
The work that I do contributes to creating value for others (i.e. company, organization, enterprise, customer/client, society, etc.).	0,082	0,033	-0,034	0,293	0,133	0,277	0,646
I consider the work I do to be decent.	0,034	0,099	0,171	0,243	-0,075	0,002	0,707
The financial earnings from my work are fair.	0,667	0,138	0,390	0,135	0,058	0,173	0,028

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

A3
Questionnaires

NADS, WICS & DWQ

Questionnaire applied

Estudo sobre o Trabalho

Apresentação

Este questionário destina-se a avaliar a perceção dos trabalhadores sobre vários aspetos relativos ao trabalho. É anónimo e confidencial e as respostas serão tratadas de forma agrupada. Apenas os elementos da equipa de investigação terão acesso às respostas. Os resultados obtidos serão utilizados apenas para fins académicos/científicos e respetivas publicações. Não há respostas certas ou erradas. Por isso solicitamos que responda de forma espontânea e sincera, o que poderá demorar cerca de 10 minutos. Este questionário é parte integrante de uma investigação no quadro do Doutoramento em Gestão, na Universidade de Évora.

Pode interromper a sua participação em qualquer momento, sem qualquer tipo de prejuízo. Caso pretenda obter uma síntese dos resultados após a publicação dos trabalhos poderá deixar o seu endereço de email com o estudante aplicador. Caso queira algum esclarecimento adicional, pode contactar o responsável pela recolha de dados (Nuno Rebelo dos Santos: nrs@uevora.pt; telefone: 964217152).

Esta investigação é realizada de acordo com o Código de Ética da Ordem dos Psicólogos Portugueses.

Agradecemos a sua participação.

Andreia Dionísio / Nuno Rebelo dos Santos / Manuela Jacob Cebola

Concordo em prosseguir na resposta às questões:

O estudante aplicador:

Data:

NADS (Furunes & Mykletun, 2010)

Este bloco de questões refere-se ao seu local de trabalho atual, a(s) empresa(s)/organização(ões) onde trabalha ou onde, eventualmente, exerça atividade de prestador(a) de serviços (profissionais independentes).

Responda conforme considera que cada afirmação se aplica mais ou menos à(s) empresa(s) ou organização(ões) onde exerce funções. No caso de várias, considere aquela que é mais decisiva sobre o modo como sente o seu local de trabalho. Utilize a escala de respostas:

1 (discordo totalmente) ... 5 (concordo totalmente):

Marque com um (X) a sua opção de resposta. Caso se engane, risque a opção enganada e faça uma cruz na nova resposta escolhida, colocando um círculo em torno dessa nova resposta. Relembramos que elas se referem à(s) empresa(s)/organização(ões) onde trabalhe ou onde, eventualmente, exerça atividade de prestador(a) de serviços como profissional independente.

1	Os trabalhadores mais perto da reforma/aposentação são deixados para trás em casos de promoção ou recrutamento interno	1	2	3	4	5
2	Os trabalhadores mais perto da reforma/aposentação não têm oportunidades iguais de formação durante o horário de trabalho	1	2	3	4	5
3	São preferidos trabalhadores mais jovens quando são implementados novos equipamentos, atividades ou métodos de trabalho	1	2	3	4	5
4	Os trabalhadores mais perto da reforma/aposentação participam com menos frequência em avaliações de desenvolvimento com os seus superiores que os trabalhadores mais jovens	1	2	3	4	5
5	Os trabalhadores mais perto da reforma/aposentação têm menos aumentos salariais que os trabalhadores mais jovens.	1	2	3	4	5
6	Não se espera que os trabalhadores mais perto da reforma/aposentação, comparativamente com os mais jovens, participem igualmente nos processos de mudança e novos métodos de trabalho.	1	2	3	4	5

WICS (King & Bryant, 2017)

Este bloco refere-se ao seu trabalho atual, ao local onde o realiza (empresa(s)/organização(ões) onde exerça funções) e aos seus colegas de trabalho.

Importa que nos dê a sua visão de como cada afirmação se aplica mais ou menos à sua situação ou dos seus colegas de trabalho na(s) empresa(s) ou organização(ões) onde exerce funções. Utilize a escala de respostas de 1 (discordo totalmente) a 4 (concordo totalmente):

Relembramos que as afirmações se referem a si e/ou aos seus colegas de trabalho, no seu trabalho atual e nos locais onde o realiza.

1.	Os colegas de trabalho que não são da minha geração não estão interessados em fazer amigos de outras gerações.*^	1	2	3	4
2.	Os colegas de trabalho que não são da minha geração queixam-se mais que os da minha idade*^	1	2	3	4
3.	Os colegas de trabalho que não são da minha geração costumam falar sobre coisas que não me interessam*	1	2	3	4
4.	Os colegas de trabalho que não são da minha geração costumam trabalhar de forma diferente dos colegas da minha idade *	1	2	3	4
5.	Eu sinto-me confortável quando colegas de trabalho que não são da minha geração tentam conversar comigo^	1	2	3	4
6.	Eu gosto de interagir com colegas de trabalho de diferentes gerações^	1	2	3	4
7.	Os meus colegas de trabalho que não são da minha geração são indivíduos interessantes e únicos ^	1	2	3	4
8.	As pessoas trabalham melhor com pessoas da mesma idade *	1	2	3	4

Nas próximas quatro questões utilize a escala de respostas de 1 (nunca) a 5 (muito frequentemente):

9.	Com que frequência conversa com colegas de trabalho que não são da sua geração?	1	2	3	4	5
10.	Com que frequência conversa com colegas de trabalho que não são da sua geração sobre assuntos além do trabalho?	1	2	3	4	5
11.	Com que frequência fala com colegas de trabalho que não são da sua geração sobre as vossas vidas pessoais?	1	2	3	4	5
12.	Com que frequência faz refeições com colegas de trabalho que não são da sua geração durante o período laboral?	1	2	3	4	5

Nas questões seguintes utilize a escala de respostas de 1 (discordo totalmente) a 4 (concordo totalmente):

13.	Eu acredito que o meu ambiente de trabalho é saudável para pessoas de todas as idades	1	2	3	4
14.	Os trabalhadores de todas as idades são respeitados no meu local de trabalho.	1	2	3	4
15.	Eu sou capaz de comunicar eficazmente com trabalhadores de diferentes gerações.	1	2	3	4
16.	Trabalhar com colegas de diferentes idades aumenta a qualidade da minha vida profissional.	1	2	3	4
17.	Os meus colegas de trabalho fazem com que os mais velhos sintam que deveriam aposentar-se. *	1	2	3	4
18.	Eu sinto pressão dos trabalhadores mais jovens para me demitir*	1	2	3	4
19.	Eu sinto pressão dos trabalhadores mais velhos para me demitir*	1	2	3	4
20.	No meu local de trabalho, os trabalhadores qualificados mais jovens, tendem a ser esquecidos nas promoções*	1	2	3	4

DWQ (Ferraro et al, 2018)

O Bloco seguinte refere-se ao seu trabalho atual e ao contexto e condições em que o realiza. Por 'contexto profissional' entenda o mercado de trabalho em geral (para alguém com as suas características profissionais), a(s) empresa(s)/organizaç(ões) onde eventualmente trabalhe, bem como a sua eventual atividade de prestador(a) de serviço (profissionais liberais).

Utilize a seguinte escala de respostas:

1=Não concordo nada; 2=Concordo pouco; 3=Concordo moderadamente; 4=Concordo muito; 5=Concordo completamente

Relembramos que as afirmações se referem ao seu trabalho atual e ao contexto profissional no qual o realiza.

1. No meu trabalho estou protegido(a) de riscos para a minha saúde física.	1	2	3	4	5
2. Tenho perspectivas de ter uma aposentação/reforma tranquila (pensão, previdência pública ou privada).	1	2	3	4	5
3. Considero adequada a quantidade média de horas que trabalho por dia.	1	2	3	4	5
4. Disponho de tudo o que preciso para manter a minha integridade física no meu trabalho.	1	2	3	4	5
5. Sinto que estou protegido(a) caso fique sem trabalho (subsídios sociais, programas sociais, etc).	1	2	3	4	5
6. Sinto a minha família protegida através do meu sistema de proteção social (público ou privado).	1	2	3	4	5
7. O que ganho com o meu trabalho permite-me viver com dignidade e autonomia.	1	2	3	4	5
8. Sinto que estarei protegido(a) no caso de ficar doente (segurança social, seguros de saúde, etc.).	1	2	3	4	5
9. O que recebo pelo meu trabalho permite-me oferecer bem-estar aos que dependem de mim.	1	2	3	4	5
10. O que ganho com o meu trabalho permite-me viver com um sentimento de bem-estar pessoal.	1	2	3	4	5
11. No meu trabalho existe confiança entre as pessoas.	1	2	3	4	5
12. O meu trabalho contribui para assegurar o futuro das novas gerações.	1	2	3	4	5
13. Através do meu trabalho desenvolvo-me profissionalmente.	1	2	3	4	5
14. Um(a) profissional como eu pode criar o seu próprio emprego.	1	2	3	4	5
15. O meu horário de trabalho permite-me gerir bem a minha vida.	1	2	3	4	5
16. Em geral, os processos de tomada de decisão relativos ao meu trabalho são justos.	1	2	3	4	5
17. Penso que tenho perspectivas de melhorar a minha remuneração/salário/benefícios.	1	2	3	4	5
18. O meu trabalho permite-me ter tempo para a minha família/vida pessoal.	1	2	3	4	5
19. O meu trabalho contribui para a minha realização (pessoal e profissional).	1	2	3	4	5
20. Disponho do que preciso para trabalhar com segurança.	1	2	3	4	5
21. Sou tratado(a) com dignidade no meu trabalho.	1	2	3	4	5
22. Sou livre para pensar e expressar o que penso sobre o meu trabalho.	1	2	3	4	5
23. Em geral, tenho condições ambientais seguras no meu trabalho (condições de temperatura, ruído, humidade, etc).	1	2	3	4	5
24. No meu trabalho sou aceite tal como sou (independentemente de género, idade, etnia, religião, orientação política, etc).	1	2	3	4	5
25. Atualmente, penso que há oportunidades de trabalho para um profissional como eu.	1	2	3	4	5
26. Acho que tenho possibilidades de progredir profissionalmente (promoções, desenvolvimento de competências, etc).	1	2	3	4	5
27. Considero adequado o ritmo que o meu trabalho exige.	1	2	3	4	5
28. Na minha atividade profissional existe a possibilidade de participação equilibrada nas decisões por parte de todos os envolvidos/implicados.	1	2	3	4	5
29. O trabalho que realizo contribui para criar valor (para minha empresa/organização/clientes/sociedade, etc).	1	2	3	4	5
30. Considero digno o trabalho que realizo.	1	2	3	4	5
31. O que ganho financeiramente com o meu trabalho é justo.	1	2	3	4	5

Complete por favor [dados para fins exclusivamente estatísticos]

<input type="checkbox"/> Sexo - <input type="checkbox"/> Masculino <input type="checkbox"/> Outro <input type="checkbox"/> Feminino	Idade: _____ anos	Há quantos anos trabalha na empresa/organização? _____ anos
4 Situação(ões) profissional(ais) (pode assinalar mais do que 1 situação) <input type="checkbox"/> Trabalhador do Estado <input type="checkbox"/> Trabalhador no setor privado	5 Qual o vínculo que mantém com a organização? <input type="checkbox"/> Prestador de serviços (recibos verdes) <input type="checkbox"/> Contrato a termo (certo ou incerto) <input type="checkbox"/> Contrato sem termo /efetivo(a)	6 No seu local de trabalho desempenha alguma função de chefia? <input type="checkbox"/> Sim <input type="checkbox"/> Não
7 Grau de Escolaridade <input type="checkbox"/> Sabe ler e escrever sem possuir a 4ª classe <input type="checkbox"/> 1º ciclo do ensino básico (ensino primário) <input type="checkbox"/> 2º ciclo do ensino básico (6º ano) <input type="checkbox"/> 3º ciclo do ensino básico (9º ano) <input type="checkbox"/> Ensino Secundário (12º ano) <input type="checkbox"/> Bacharelato <input type="checkbox"/> Licenciatura em curso <input type="checkbox"/> Pós-Graduação/Mestrado (pós Bolonha)/ Licenciatura Pré Bolonha <input type="checkbox"/> Licenciatura concluída (pós-Bolonha) <input type="checkbox"/> Mestrado Pré-Bolonha <input type="checkbox"/> Doutoramento	8 Setor de atividade da organização onde trabalha <input type="checkbox"/> Indústria Transformadora <input type="checkbox"/> Indústria Extrativa <input type="checkbox"/> Comércio por grosso e a retalho <input type="checkbox"/> Alojamento e restauração <input type="checkbox"/> Agricultura, pecuária, pescas <input type="checkbox"/> Construção <input type="checkbox"/> Produção-distribuição de eletricidade, gás e água <input type="checkbox"/> Transportes e armazenagem <input type="checkbox"/> Educação e ciência <p style="text-align: right;">(continua)</p>	9 Dimensão da organização onde trabalha <input type="checkbox"/> Tem até 9 colaboradores <input type="checkbox"/> Tem entre 10 e 50 colaboradores <input type="checkbox"/> Tem entre 51 e 250 colaboradores <input type="checkbox"/> Tem entre 251 e 500 colaboradores <input type="checkbox"/> Tem entre 501 e 1000 colaboradores <input type="checkbox"/> Tem mais de 1001colaboradores

	<input type="checkbox"/> Saúde humana e apoio social <input type="checkbox"/> Atividades imobiliárias, alugueres e serviços prestados às empresas <input type="checkbox"/> Artes e indústrias criativas <input type="checkbox"/> Tecnologia de informação e comunicações <input type="checkbox"/> Outra. Qual? _____	10 Tempo de trabalho na função atual <input type="checkbox"/> 3 meses <input type="checkbox"/> Mais de 3 e até 6 meses <input type="checkbox"/> Mais de 6 meses e até 1 ano <input type="checkbox"/> Mais de um ano
11 Indique, por favor, o seu vencimento líquido mensal (aquilo que recebe em média por mês)		
<input type="checkbox"/> Até 500 €	<input type="checkbox"/> Entre 2001 e 2500 €	
<input type="checkbox"/> Entre 501 e 1000 €	<input type="checkbox"/> Entre 2501 e 3000 €	
<input type="checkbox"/> Entre 1001 e 1500 €	<input type="checkbox"/> Entre 3001 e 3500 €	
<input type="checkbox"/> Entre 1501 e 2000 €	<input type="checkbox"/> Entre 3501 e 4000 €	
	<input type="checkbox"/> Mais de 4000 €	

Muito obrigado(a) pela sua colaboração

Original

Nordic Age Discrimination Scale (NADS)

(Furunes & Mykletun, 2010)

- 1 Elderly workers are passed over/left out in cases of promotion or internal recruitment
- 2 Elderly workers do not have equal opportunities for training during work time
- 3 Younger workers are preferred when new equipments, activities or working methods are introduced
- 4 Elderly workers less often take part in development appraisals with their superior than younger workers
- 5 Elderly workers have less wage increase than younger workers
- 6 Elderly workers are not expected to take part in change processes and new working methods to the same degree as their younger peers

Original
WICS Subscales and Items
 (King & Bryant, 2017)

* = reverse scored
 ^ = modification of FSA item

Lack of Generational Stereotypes (LGS)

- LGS1. Co-workers outside my generation are not interested in making friends outside their generation.*[^]
 LGS2. Co-workers outside my generation complain more than co-workers my age do.*[^]
 LGS3. Co-workers outside my generation usually talk about things that don't interest me*
 LGS4. Co-workers outside my generation tend to work differently than co-workers my age do*

Positive Intergenerational Affect (PIA)

- PIA1. I feel comfortable when co-workers outside my generation try to make conversation with me.[^]
 PIA2. I enjoy interacting with co-workers of different generations.[^]
 PIA3. My co-workers outside my generation are interesting and unique individuals.[^]
 PIA4. People work best when they work with others their same age*

Intergenerational Contact (IC)

- IC1. How often do you have conversations with co-workers outside your generation?
 IC2. How often do you have conversations with co-workers outside your generation relating to things other than work?
 IC3. How often do you talk with co-workers outside your generation about your personal lives?
 IC4. How often do you eat meals with co-workers outside your generation during the workday?

Workplace Generational Inclusiveness (WGI)

- WGI1. I believe that my work environment is a healthy one for people of all ages.
 WGI2. Workers of all ages are respected in my workplace.
 WGI3. I am able to communicate effectively with workers of different generations.
 WGI4. Working with co-workers of different ages enhances the quality of my work life.

Workplace Intergenerational Retention (WIR)

- WIR1. My co-workers make older workers feel they should retire.*
 WIR2. I feel pressure from younger workers to step down.*
 WIR3. I feel pressure from older workers to step down.*
 WIR4. In my workplace, qualified younger workers tend to be overlooked for promotions.*

Experimental Design Study

Apresentação

e

Consentimento Informado

Este questionário destina-se a avaliar a perceção sobre alguns aspetos relacionados com os trabalhadores e os locais de trabalho / mercado de trabalho. É anónimo e confidencial e as respostas serão tratadas de forma agrupada. Apenas os elementos da equipa de investigação terão acesso às respostas. Os resultados obtidos serão utilizados apenas para fins académicos/científicos e respetivas publicações. Não há respostas certas ou erradas. Por isso, solicitamos que responda de forma espontânea, sincera e objetiva, o que poderá demorar cerca de 5 minutos. Este questionário é parte integrante de uma investigação no quadro do Doutoramento em Gestão, na Universidade de Évora.

Esta investigação é realizada de acordo com o Código de Ética da Ordem dos Psicólogos Portugueses.

Agradecemos a sua participação.

Andreia Dionísio / Nuno Rebelo dos Santos / Manuela Jacob Cebola

Concordo em prosseguir na resposta às questões:

Job Vacancy

Por favor, leia com atenção.

O questionário debruça-se sobre a candidatura a um emprego para uma determinada função.

Estas são as informações / requisitos a concurso:

Vaga a Concurso

Especialista em Viticultura e Enologia (m/f):

- Planear e gerir as diferentes práticas vitícolas e enológicas exigidas;
 - Assegurar a produção e estágio dos Vinhos, desde a vindima até à expedição;
 - Criação de novos produtos;
 - Controlo de qualidade e acompanhamento sensorial e analítico;
- ⇒ Licenciatura em Enologia, Viticultura ou similar;
- ⇒ Mínimo 10 anos de experiência.

Obs. Estes são os CV já pré-selecionados e só contêm a informação mais relevante para esta fase da candidatura.

Sample 1/Condition A

Candidatura 1



Dados Pessoais

- ❖ Nacionalidade: Portuguesa
- ❖ Idade: 45 anos
- ❖ Sexo: Masculino

Experiência Profissional relevante para esta função

- 11 anos
- Gestão e controlo dos princípios técnico-científicos que regem o processamento do vinho;
 - Criação de novos vinhos;
 - Controlo de Qualidade e acompanhamento sensorial e crítico;
 - Acompanhamento e coordenação da produção e estágio dos Vinhos, desde a vindima até à sua expedição.

Habilitações Literárias

Mestrado em Engenharia de Viticultura e Enologia
Licenciatura em Engenharia Agronómica

Candidatura 2



Dados Pessoais

- ❖ Nacionalidade: Portuguesa
- ❖ Idade: 31 anos
- ❖ Sexo: Masculino

Experiência Profissional relevante para esta função

- 10 anos
- Planeamento, supervisão e coordenação da produção de vinhos provenientes de castas de uvas selecionadas;
 - Acompanhamento sensorial e analítico e controlo de qualidade;
 - Criação de novos produtos;
 - Coordenação e acompanhamento da produção e estágio dos vinhos, desde a vindima até à saída da Adega.

Habilitações Literárias

Mestrado em Engenharia de Viticultura e Enologia
Licenciatura em Agronomia

Candidatura 3



Dados Pessoais

- ❖ Nacionalidade: Portuguesa
- ❖ Idade: 63 anos
- ❖ Sexo: Masculino

Experiência Profissional relevante para esta função

- 13 anos
- Planeamento e gestão das diferentes práticas vitícolas e enológicas;
 - Acompanhamento sensorial e analítico;
 - Criação de novos vinhos;
 - Acompanhamento e coordenação da produção e estágio dos Vinhos, desde a vindima até à expedição;
 - Controlo de qualidade.

Habilitações Literárias

Mestrado em Engenharia de Viticultura e Enologia
Licenciatura em Agronomia

Candidatura 4



Dados Pessoais

- ❖ Nacionalidade: Portuguesa
- ❖ Idade: 54 anos
- ❖ Sexo: Masculino

Experiência Profissional relevante para esta função

- 11 anos
- Conceção, planeamento e gestão das diferentes práticas vitícolas e enológicas, em função de características pré-definidas;
 - Desenvolvimento de novos produtos;
 - Acompanhamento sensorial e crítico e Controlo de Qualidade;
 - Acompanhamento e coordenação da produção e estágio dos Vinhos, desde a vindima até à saída da Adega.

Habilitações Literárias

Mestrado em Viticultura e Enologia
Licenciatura em Engenharia Agronómica

Sample 2/Condition B

Candidatura 1



Dados Pessoais

- ❖ Nacionalidade: Portuguesa
- ❖ Idade: 63 anos
- ❖ Sexo: Masculino

Experiência Profissional relevante para esta função

- 12 anos
- Planeamento e gestão das diferentes práticas vitícolas e enológicas exigidas a cada ano;
 - Acompanhamento sensorial e analítico;
 - Criação de novos produtos;
 - Gestão e controlo da produção e estágio dos vinhos, ao longo de todo o processo;
 - Controlo de qualidade.

Habilitações Literárias

Mestrado em Viticultura e Enologia

Licenciatura Engenharia das Ciências Agrárias – ramo Agronomia

Candidatura 2



Dados Pessoais

- ❖ Nacionalidade: Portuguesa
- ❖ Idade: 45 anos
- ❖ Sexo: Masculino

Experiência Profissional relevante para esta função

- 10 anos
- Acompanhamento e gestão dos fatores naturais e tecnológicos que condicionam as características da cepa, da uva e do vinho;
 - Criação de novos vinhos e produtos;
 - Controlo de Qualidade e acompanhamento sensorial e crítico;
 - Acompanhamento e coordenação da produção e estágio dos Vinhos, desde a vindima até à sua expedição.

Habilitações Literárias

Mestrado em Engenharia de Viticultura e Enologia

Licenciatura em Agronomia

Candidatura 3



Dados Pessoais

- ❖ Nacionalidade: Portuguesa
- ❖ Idade: 31 anos
- ❖ Sexo: Masculino

Experiência Profissional relevante para esta função

- 10 anos
- Planeamento e gestão das diferentes práticas vitícolas e enológicas;
 - Acompanhamento sensorial e analítico;
 - Criação de novos vinhos;
 - Acompanhamento e coordenação da produção e estágio dos Vinhos, desde a vindima até à expedição;
 - Controlo de qualidade.

Habilitações Literárias

Mestrado em Engenharia de Viticultura e Enologia
Licenciatura em Agronomia

Candidatura 4



Dados Pessoais

- ❖ Nacionalidade: Portuguesa
- ❖ Idade: 54 anos
- ❖ Sexo: Masculino

Experiência Profissional relevante para esta função

- 11 anos
- Conceção, planeamento e gestão das diferentes práticas vitícolas e enológicas, em função de características pré-definidas;
 - Desenvolvimento de novos produtos;
 - Acompanhamento sensorial e crítico e Controlo de Qualidade;
 - Acompanhamento e coordenação da produção e estágio dos Vinhos, desde a vindima até à saída da Adega.

Habilitações Literárias

Mestrado em Viticultura e Enologia
Licenciatura em Engenharia Agronómica

Merit Award

Por favor, leia com atenção.

O questionário debruça-se sobre a candidatura a um prémio profissional de mérito. Estas são as informações / requisitos para as candidaturas:

Prémio Profissional de Mérito

Pessoal Docente

Condições

1. **O Prémio de Mérito** destina-se a reconhecer a excecional qualidade de ensino e trabalho de um professor/docente por cada Instituição de Ensino (Público ou privado) de determinado concelho;
2. Para efeitos, considera-se ano letivo o período compreendido entre 1 de setembro de 2021 e 31 de agosto de 2022;
3. Os premiados foram selecionados e designados pelas respetivas Escolas.

Importante:

Estamos na última fase de avaliação de cada bloco de candidaturas.

Cada uma das candidaturas foi já previamente avaliada por um júri composto por professores, direções escolares, associações de pais, associações de estudantes e representantes da entidade organizadora e promotora deste prémio.

Passadas já 2 fases de seleção, foram finalmente criados os grupos “vencedores” de cada ciclo de estudos (do pré-escolar ao ensino superior).

Nesta etapa, cada grupo “vencedor” contém os CV de cada candidato unicamente com a informação considerada relevante para esta fase decisória.

Este é o grupo final de candidaturas de docentes do 3º ciclo do ensino básico (7º, 8º e 9º anos).

Obs. Como os professores podem ter estado em mobilidade noutros concelhos ou ter feito algum ano sabático, essa experiência não conta, só contam os anos de experiência neste concelho, sendo que os últimos 5 têm de ser consecutivos.

Sample 1/Condition A

Candidatura A

✉

Dados Pessoais

Nacionalidade: Portuguesa
Idade: 63 anos
Sexo: Feminino

Competências Pessoais

- ✓ Paixão pelo ensino
- ✓ Relacionamento interpessoal
- ✓ Criatividade e inovação
- ✓ Trabalho em equipa

Experiência Profissional relevante para esta função, neste concelho

Experiência 10 Anos
Código de Grupo de Recrutamento 300

Habilitações Literárias

Licenciatura (docente profissionalizado)

Projetos	Avaliação feita pelo Júri
Escola (dentro da Instituição / Agrupamento)	Muito Bom
Nacionais (com outras escolas e/ou instituições)	Muito Bom
Internacionais (intercâmbio/visitas de estudo, etc.)	Bom

Candidatura B



Dados Pessoais

Nacionalidade: Portuguesa

Idade: 45 anos

Sexo: Feminino

Competências Pessoais

- ✓ Criatividade e inovação
- ✓ Paixão
- ✓ Trabalho em equipa
- ✓ Relacionamento interpessoal

Experiência Profissional relevante para esta função, neste concelho

Experiência 10 Anos

Código de Grupo de Recrutamento 420

Habilitações Literárias



Licenciatura (docente profissionalizado)

Projetos

Escola (dentro da Instituição / Agrupamento)
Nacionais (com outras escolas e/ou instituições)
Internacionais (intercâmbio / visitas de estudo, etc.)

Avaliação feita pelo Júri

Bom
Muito Bom
Muito Bom

Candidatura C  

Dados Pessoais

Nacionalidade: Portuguesa
Idade: 31 anos
Sexo: Feminino

Competências Pessoais

- ✓ Criatividade e inovação
- ✓ Relacionamento interpessoal
- ✓ Trabalho em equipa
- ✓ Paixão

Experiência Profissional relevante para esta função, neste concelho

Experiência 9 Anos
Código de Grupo de Recrutamento 500

Habilitações Literárias

Licenciatura (docente profissionalizado)

Projetos

	Avaliação feita pelo Júri
Escola (dentro da Instituição / Agrupamento)	Muito Bom
Nacionais (com outras escolas e/ou instituições)	Muito Bom
Internacionais (intercâmbio / visitas de estudo, etc.)	Bom

Candidatura D



Dados Pessoais

Nacionalidade: Portuguesa

Idade: 54 anos

Sexo: Feminino

Competências Pessoais

- ✓ Paixão
- ✓ Relacionamento interpessoal
- ✓ Trabalho em equipa
- ✓ Criatividade e inovação

Experiência Profissional relevante para esta função, neste concelho

Experiência 11 anos

Código de Grupo de Recrutamento 620

Habilitações Literárias



Licenciatura (docente profissionalizado)

Projetos

Avaliação feita pelo Júri

Escola (dentro da Instituição / Agrupamento)	Muito Bom
Nacionais (com outras escolas e/ou instituições)	Bom
Internacionais (intercâmbio/visitas de estudo)	Muito Bom

Sample 2/Condition B

Candidatura A  

Dados Pessoais

Nacionalidade: Portuguesa
Data de nascimento: 1991-06-25
Idade: 31 anos
Género: Feminino

Competências Pessoais

- ✓ Paixão pelo ensino
- ✓ Trabalho em equipa
- ✓ Relacionamento interpessoal
- ✓ Criatividade e inovação

Experiência Profissional relevante para esta função, neste concelho

Experiência 10 Anos
Código de Grupo de Recrutamento 300

Habilitações Literárias

Mestrado via ensino
Licenciatura

Projetos	Avaliação feita pelo Júri
Escola (dentro da Instituição / Agrupamento)	Muito Bom
Nacionais (com outras escolas e/ou instituições)	Muito Bom
Internacionais (intercâmbio/visitas de estudo, etc.)	Bom

Candidatura B



Dados Pessoais

Nacionalidade: Portuguesa
Data de nascimento: 1991-08-30
Idade: 31 anos
Género: Masculino

Competências Pessoais

- ✓ Criatividade e inovação
- ✓ Relacionamento interpessoal
- ✓ Trabalho em equipa
- ✓ Paixão

Experiência Profissional relevante para esta função, neste concelho

Experiência 9 Anos

Código de Grupo de Recrutamento 500

Habilitações Literárias

Mestrado via ensino
Licenciatura

Projetos

Avaliação feita pelo Júri

Escola (dentro da Instituição / Agrupamento)

Muito Bom

Nacionais (com outras escolas e/ou instituições)

Muito Bom

Internacionais (intercâmbio / visitas de estudo, etc.)

Bom



Dados Pessoais

Nacionalidade: Portuguesa
Data de nascimento: 1977-08-08
Idade: 45 anos
Género: Feminino

Competências Pessoais

- ✓ Criatividade e inovação
- ✓ Paixão
- ✓ Trabalho em equipa
- ✓ Relacionamento interpessoal

Experiência Profissional relevante para esta função, neste concelho

Experiência 10 Anos

Código de Grupo de Recrutamento 420

Habilitações Literárias

Mestrado via ensino
Licenciatura

Projetos Avaliação feita pelo Júri

Escola (dentro da Instituição / Agrupamento)	Bom
Nacionais (com outras escolas e/ou instituições)	Muito Bom
Internacionais (intercâmbio / visitas de estudo, etc.)	Muito Bom

Candidatura D



Dados Pessoais

Nacionalidade: Portuguesa
Data de nascimento: 1977-08-23
Idade: 45 anos
Género: Masculino

Competências Pessoais

- ✓ Relacionamento interpessoal
- ✓ Paixão
- ✓ Criatividade e inovação
- ✓ Trabalho em equipa

Experiência Profissional relevante para esta função, neste concelho

Experiência 11 Anos
Código de Grupo de Recrutamento 560

Habilitações Literárias

Licenciatura via ensino

Projetos

	Avaliação feita pelo Júri
Escola (dentro da Instituição / Agrupamento)	Muito Bom
Nacionais (com outras escolas e/ou instituições)	Muito Bom
Internacionais (intercâmbio / visitas de estudo, etc.)	Bom