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Workplace youngism: A scoping review of ageism towards younger workers

Abstract

Workplace ageism research has primarily focused on older workers, in spite of the fact that ageism can also target younger workers. Given the growing body of research on workplace youngism (ageism toward younger workers) and its need for assessment and synthesis, we conducted a scoping review aimed at mapping the range and characteristics of the workplace youngism literature. Unlike previous reviews, we focused exclusively on younger individuals in the workplace. A search of peer-reviewed literature identified 108 articles published between 1976 and 2022, containing 143 empirical studies from 21 countries, including 58,158 participants in total. The review is guided by three broad research questions: 1) How has workplace youngism been assessed?, 2) What are the main theories and conceptual approaches used to investigate workplace youngism?, and 3) What are the main antecedents and consequences of workplace youngism? For each research question, we summarize what is known and well-supported by evidence, identify disagreements and gaps in the literature, and propose directions for future research. This scoping review highlights the need for research on workplace youngism to broaden the range of methodological designs used, develop instruments specifically assessing ageism toward younger workers, and extend the research to a wider range of national and cultural contexts. In addition, future research should investigate prescriptive age stereotypes towards younger workers, consider the perspective of middle-aged workers, pay greater attention to consequences of workplace youngism for the enablers, and extend the intersectional identities investigated.

Keywords: ageism, youngism, younger workers, scoping review.

Introduction

Increased life expectancy and declining fertility rates in many countries are causing rapid shifts in the age composition of the world population. The postponement of retirement in many jurisdictions has increased the likelihood of younger and older workers interacting at work and in many cases competing for scarce material and symbolic resources (North & Fiske, 2012). Age diversity and age dissimilarity were associated, respectively, with increased age discrimination climate (Kunze et al., 2011) and challenges in knowledge sharing in the workplace (Lu & Zhou, 2024). As up to four generations may coexist in contemporary organizations - commonly identified as Baby Boomers, Generation X, Millennials, and Generation Z (Cvenkel, 2020), understanding age-based attitudes in the workplace (ageism; Nelson, 2009; World Health Organization, 2021) and intergenerational relations in organizations (North & Fiske, 2015) becomes increasingly important. Changes in the workforce composition not only impact older workers but also increase pressure on younger workers, who tend to be underpaid (e.g., Wood et al., 2008) and report experiencing age discrimination during different phases of their employment (Snape & Redman, 2003).

When people categorize one another into broad age categories such as ‘younger worker’ or ‘older worker’ they also tend to make implicit inferences about abilities, competencies, and skills (Bytheway, 2005). For example, people may be judged or they may see themselves as ‘too young’ or ‘too old’ to pursue particular job activities or roles (Swift et al., 2018). A consequence of age categorization is that it might lead to and perpetuate ageism. Ageism encompasses stereotypes (how individuals think about age groups), prejudice (how they feel about a particular age group), and discrimination (how they act) toward others or oneself based on age (World Health Organization, 2021). Even though most individuals will experience all age categories, from infancy to old age, ageism is the most prevalent and socially accepted form of discrimination, more so than sexism or racism (Abrams et al., 2011; Nelson, 2002). The prevalence of ageism is even more pronounced for the youngest age group (15 to 24 years of age) as shown in the representative data of the European Social Survey: 50 percent reported having experienced either blatant or subtle (e.g., being ignored or

patronized) forms of discrimination because of their age (Abrams et al., 2011). Whether explicit or implicit, ageism can influence behavior, decisions, and interactions with targetted groups in ways that can be perceived as unfair and derogatory.

Although the social psychological literature has provided important insights into ageist perceptions, attitudes, and behaviors, the lion's share has focused on how older people are perceived. In fact, people can also be judged as 'too young' in specific life domains and for specific work tasks, a reality largely neglected in past research (Posthuma & Campion, 2009; Truxillo et al., 2015). Even though Palmore (1999) defined ageism as "prejudice or discrimination against or in favor of an age group" (p. 4) almost 25 years ago, relatively little research has been dedicated to what some now refer to as 'youngism' (e.g., Francioli & North, 2021). This is also reflected in the literature reviews and meta-analyses that summarize findings about workplace ageism (e.g., Bae & Choi, 2022; Bal et al., 2011; Cebola et al., 2021; Finkelstein et al., 2015; Ng & Feldman, 2012; Perry & Parlamis, 2006; Posthuma & Campion, 2009; Truxillo et al., 2015), most of which focus on ageism towards older workers. A notable exception is the scoping review by de la Fuente-Núñez et al. (2021) which summarizes ageism studies targeting individuals under the age of fifty; however, it does not focus on the workplace domain.

Though still at an early stage, the importance of youngism research has been increasingly recognized in recent years. For example, The Global Report on Ageism (World Health Organization, 2021) has dedicated an entire chapter to reviewing the scale, impact, and determinants of ageism against younger people. Studies found that younger people are perceived by older people as using too much slang, having poor communication skills, and being difficult, entitled, and self-focused (e.g., Agrawal, 2017; Deal et al., 2010; Stein, 2013). In the work domain, research has started to show the negative consequences of ageism targeting younger workers, who report not feeling valued, receiving belittling comments, being perceived as less competent, and receiving fewer development opportunities (Raymer et al., 2017). The age discrimination that younger workers feel

is associated with lower job satisfaction and work engagement (Jelenko, 2020), as well as higher work-life interference (Rabl & Kühlmann, 2009).

In spite of recent empirical findings regarding ageism against younger workers, many fundamental aspects have been operationalized in very different ways, or entirely overlooked. For example, because the boundaries that define 'old' and 'young' age groups are fluid (Baltes et al., 1980; Bytheway, 2005), there has been little agreement on how to define "younger" workers based on chronological age (Ashbaugh & Fay, 1987; Finkelstein et al., 2012; McCarthy et al., 2014). This is further complicated by different conceptualizations of age, including the notion of a subjective age (i.e., how old individuals feel). In terms of validated measurement instruments, ageism scales tend to focus on older people (Ayalon et al., 2019), and existing workplace ageism scales focus on older workers (e.g., França et al., 2017; Furunes & Mykletun, 2010; King & Bryant, 2017; Rego et al., 2017), or assess perceived discrimination in general by any age (Marchiondo et al., 2016).

Because ageism is often influenced by beliefs regarding certain age groups, stereotypes are particularly important to understand mechanisms that lead to age discrimination (e.g., Lamont et al., 2015). Stereotypes refer to generalized beliefs about social categories that people belong to and are used to differentiate groups from one another (Nelson, 2009). Stereotypes can be descriptive (e.g., "younger workers *are* less loyal"), prescriptive (e.g., "younger workers *should* show respect for older workers"), or metastereotypes (e.g., "*other age groups believe* that younger workers are more creative"). Age stereotypes can be positively valenced as well as negatively valenced. Because of their important role, also as a basis for the development of interventions aimed at reducing ageism (e.g., Brasseur, 2008; Devine, 1989), it is crucial to ascertain what is known about stereotyping younger workers.

Purpose and objectives of the review

Despite its negative impacts on individuals and organizations, and calls for further research on workplace youngism (de la Fuente-Núñez et al., 2021; Finkelstein et al., 2015; Truxillo et al., 2015), the emerging literature on workplace youngism is in need of assessment and synthesis.

Therefore, we conducted a comprehensive review aimed at mapping the extent, range, and characteristics of the literature on ageism toward younger adults in the workplace domain. Although a scoping review on ageism against younger populations was recently published (de la Fuente-Núñez et al., 2021), it did not focus on the workplace domain, used very broad age categorization (i.e., younger populations were defined as under 50), and was limited in scope by the keywords used. Hence, there is an urgent need for a review focusing on the workplace and ageism against younger workers, as conventionally defined.

The purpose and objectives of the present review are to systematically summarize, categorize, and assess the existing literature about ageism towards younger workers (workplace youngism) while being guided by three broad research questions: 1) How has workplace youngism been assessed?, 2) What are the main theories and conceptual approaches used to investigate workplace youngism?, and 3) What are the main antecedents and consequences of workplace youngism? For each question, we summarize what is known and well-supported by evidence, identify areas where there is less agreement in the findings, and highlight important areas that have been less addressed or not addressed at all.

Methods

Scoping reviews are especially helpful for emerging and heterogeneous research fields, such as workplace youngism. Scoping reviews are well-suited to mapping and categorizing the findings and range of research in an area, identifying knowledge gaps, and overviewing concepts in existing literature. In addition, scoping reviews may provide more detailed findings in particular areas of study (e.g., Arksey & O'Malley, 2005; Colquhoun et al., 2014). The current review comprised five phases: 1) formulating the research questions, 2) identifying relevant studies, 3) selecting among the studies, 4) charting the data, and 5) collating, summarizing, and reporting the results (Arksey & O'Malley, 2005). Before initiating our literature search, a protocol for the scoping review was registered in Open Science Framework (available at https://osf.io/ytsa5/). Information was

summarized and reported in accordance with PRISMA-ScR reporting standards (Tricco et al., 2018) and Peters et al. (2015) guidelines.

Information sources

An initial limited search of EBSCO host was undertaken to identify articles on the topic. The words in the titles and abstracts of relevant articles, and the index terms used to describe the articles were used to develop a full search strategy for electronic resources in Education and Psychology, Social Sciences, and Business and Economics. The following databases were searched: Web of Science, Scopus, and EBSCO host (including Academic Search Complete, Business Source Complete, APA PsycArticles, APA PsycInfo, Psychology and Behavioral Sciences Collection). The databases were selected to be comprehensive and to cover a broad range of disciplines. The search string used was: ageism OR agism OR "age discrimination" OR "age stereotypes" OR “age prejudice” OR "age bias" OR “age attitudes” AND work OR workplace OR "human resources" OR employment OR organi?ation* AND young* OR Millennials OR “Generation Y” OR “Generation Z”.

Eligibility criteria

Studies were considered eligible for inclusion if they:

- were published between January 1969, the year in which Butler first coined the term ageism in his seminal article (Butler, 1969), and August 5, 2022;
- focused on the topic of youngism;
- included younger workers as a population of interest in the study (as targets of ageism);
- related to the work or organizational context;
- were written in English;
- were published in peer-reviewed journals and contained empirical data obtained from primary sources. Our objective was to summarize and organize empirical findings, so we excluded opinion pieces, theses, book chapters, theoretical discussions, literature reviews, and articles describing laws and policies.

In order to fully map the state-of-the-art, both quantitative and qualitative research designs were deemed eligible for inclusion.

Screening studies

All identified records were collated and uploaded into the reference management software Mendeley and duplicates were removed. Titles and abstracts were screened by two independent reviewers against the inclusion criteria of the review, using the software Rayyan to manage the process of screening and selecting studies for inclusion. At this stage, key papers were selected and their references were checked to identify additional relevant articles. The same approach used for titles and abstracts screening was followed for the full text of selected articles. At both stages, disagreements between the reviewers (30% for the titles and abstracts screening stage and 25% for the full-text screening stage) were resolved through discussion with a third independent reviewer.

Data extraction

Data were extracted from papers included in the scoping review using a data extraction template in SPSS. The coding scheme was pilot-tested by two independent reviewers, and modifications were incorporated into the coding scheme.

The extraction variables included general information on each study (e.g., publication year, journal of publication, study country, study design, sample size and other demographic characteristics of the sample) and specific information related to the three broad research questions, such as: 1) age categories and terminology used to define younger workers, age group membership of participants in relation to the targets (ingroup or outgroup), scales used to measure workplace youngism, how studies examined workplace youngism (exclusively or in comparison with older workers); 2) theories and ageism dimensions (behavioural, cognitive and affective) used to investigate workplace youngism; and 3) antecedents and consequences of workplace youngism, their classification in three levels of analysis (intrapersonal, interpersonal, and contextual) and the perspective or role of participants (enablers – i.e., those who generally carry out, support or sustain discriminatory practices - or targets of ageism).

Quantitative and mixed-methods studies were coded for all the extraction variables. Qualitative studies (*n* = 21) were coded for all extraction variables, except for the antecedents and consequences of workplace youngism.

Data collation and summarizing

Figure 1 shows the PRISMA flowchart, with the number of records excluded at each stage of the process. In our database search, 699 records were identified. After removing duplicates, 356 records were screened. Of these, 124 full-text articles met the criteria for eligibility and 32 additional records were identified through reference checking. After screening the 156 full-text articles, 48 articles were excluded (the most common reasons being not related to the work context, and not directly focused on ageism) and the remaining 108 articles were subjected to extraction and synthesis.

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Results

The selected articles contained a total of 143 studies, published between 1976 and 2022, and from 21 countries, with the largest number of studies conducted in the US (42.6 %), UK (11.3%), and Germany (8.5%). In terms of methodological approaches, most of the studies were quantitative (*n*= 111), followed by qualitative (*n* = 21) and mixed methods (*n* = 11). Among the quantitative studies, 70 were experimental, 35 were cross-sectional, four were longitudinal, and two were quasi-experimental.

The selected studies included data from 58,158 participants in total. Participant mean age, specified in 111 studies, was 34.73 years (*SD* = 10.91; range = 19–70 years), and 52.0% were female. When specified, samples were mostly composed of workers (55.6%), or university and college students (23.9%). The sector in which participants worked was not specified in 59.9% of studies and

the professional group to which they belonged was not mentioned in 74.0% of studies. Table 1 presents the 108 publications and the main characteristics of their studies.

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How has workplace youngism been assessed?

In this section, we present findings regarding how younger workers' age and ageism toward younger workers have been measured, how younger workers are referred to as a social group, and the extent to which ageism toward younger workers has been investigated in studies focusing exclusively or primarily on younger workers.

Age categories and terminology defining younger workers and workplace youngism

The age of younger workers as a target of ageism was measured or presented in the selected studies in a variety of ways: age ranges were used in 57 studies and specific ages were used in 49 studies. In 42 studies, the target age was not specified; rather, a target's age was conveyed via photos (Luoh & Tsaur, 2011; Luoh & Tsaur, 2013), video resumes (Perry et al., 1996), or other textual descriptors of younger workers.

Among the 57 studies using age range to categorize younger workers as targets of ageism, the most frequent age ranges used were "35 years or lower" (*n* = 9), "30 to 18" (*n* = 7), "34 to 18" (*n* = 6), and "34 years or lower" (*n* = 5). The most frequent lower age limit was 18 years (*n* = 18), and the most frequent upper age limit was 34 years old (*n* = 15). The lowest age limit was 16 years old, in two studies comparing characteristics of jobs practiced by 16- and 17-year-olds with jobs practiced by workers aged 18 and above in the hospitality sector in North Wales (Lucas & Keegan, 2007; 2008). The highest age limit for younger workers was 49 years old, in two studies (Forte & Hansvick, 1999; Henry & Desmette, 2015) that categorized younger workers as 49 and below and older workers as 50 and above, thus not acknowledging the middle-aged group. Three additional studies followed a similar approach in dividing workers into only two groups (younger and older), albeit with lower

upper ranges for younger workers: 40 (Bellas, 2001; Duncan & Loretto, 2004) and 35 (Heywood et al., 1999).

Of the 49 studies indicating specific ages, 45 used experimental methodologies; for example, simulations or scenario studies were used to investigate how younger workers are perceived, evaluated, or treated. Among studies defining specific ages for younger workers, the most frequently used age was 28 years, followed by 29 and 30 years. Hypothetical targets of ageism toward younger workers, mostly described using specific ages, were used in 41.2% of the studies (*n* = 59), among which 55 were experimental. Interestingly, in most of these studies (*n* = 31) the target was male, whereas in only seven studies were the targets specified as female. In four studies both genders were considered, in 12 studies gender was not specified, and in four studies gender was experimentally manipulated. Table 2 presents the main characteristics of the 55 experimental vignette studies on workplace youngism using hypothetical targets.

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Younger workers were referred to by a variety of labels. The majority of studies (*n* = 136) used the terms “young” or “younger”. Five studies used generational labels, such as “millennials” (e.g., Earl & Taylor, 2016) or “generation Y” (e.g., Helaß et al., 2022). Only three articles used specific terms to refer to ageism against younger people or younger workers. Francioli & North (2021) referred to ageism towards younger adults in general as *youngism*. In referring specifically to workplace ageism toward younger workers, Rabl and Triana (2013) used *reverse age discrimination* and Raymer et al. (2017) used *reverse ageism* and *adultism*. Because for many years, ageism was exclusively associated with older people, these new terms are important to differentiate “a phenomenon documented by a growing body of research” (Raymer et al., 2017, p. 149).

Age group membership of participants

There were also wide variations in the age groups of study participants, in whether study participants were of the same or different age from the actual or hypothetical targets of ageism, and in whether participants from multiple age groups were included in the sample.

Most studies (*n* = 71) included in their sample younger and older participants. In four studies, participants were younger and middle-aged (Avolio & Barrett, 1987; Erber & Long, 2006; Luoh & Tsaur, 2011; Luoh & Tsaur, 2013), and a single study included a sample with younger, middle-aged, and older workers (Finkelstein et al., 2013). While 39 studies included only younger participants, two studies included only older participants (Kleissner & Jahn, 2020b; Marchiondo et al., 2016), and a single study included only middle-aged participants (Marchiondo et al., 2016). Studies in which the age or age group of participants was not specified included a documental analysis (Bennington, 2001), several field experiments involving fictitious applications (e.g., Albert et al., 2011; Berde & Mágó, 2022; Drydakis et al., 2018) and studies in which only the mean age of participants was reported (e.g., Cox & Beier, 2014; Drehmer et al., 1992).

These findings show that our knowledge regarding ageism toward younger workers is disproportionately based on studies using younger worker samples, with fewer studies bringing the perspective of older and, especially, middle-aged participants. Among the few studies involving specific samples of middle-aged workers is Finkelstein et al.´s (2013) study which used a sample of 247 younger, middle-aged, and older workers to compare the content of descriptive stereotypes and metastereotypes toward different age groups, and by different age groups. Marchiondo et al. (2016) used a middle-aged sample in one of three studies (the other two studies used samples of younger workers and older workers, respectively) when they developed and tested the WADS – Workplace Age Discrimination Scale.

Scales and implicit measures of workplace youngism

In total, in the studies four scales were used which exclusively measured ageism toward younger workers. In two cases (Raymer et al., 2017; Ryan et al., 2015), the scales focused specifically on younger workers. The Generational Stereotypes Index (Raymer et al., 2017) consists of 33

positive and negative items/descriptors of Millennial workers (sample items are “Service-oriented” and “Constantly needs praise”). Although the measure was not factor analyzed, a selection of items was made after workers from several generations indicated their level of agreement with the initial items proposed. Ryan et al. (2015) used an eight-item Metastereotype Consciousness Scale, adapted from Pinel’s (1999) Stigma Consciousness Questionnaire, to measure the extent to which younger workers are conscious of being stereotyped on the basis of age. A sample item is “I never worry that my behaviors will be viewed as stereotypical of younger workers”. They found that younger workers feel self-conscious about being age-stereotyped and that this affects how they feel, think, and behave at work.

While the other two scales (Finkelstein et al., 2020; Marchiondo et al., 2016) are either general enough to include older age groups or specifically include subdimensions for older age groups, they were used in studies with exclusively younger worker samples. The nine-item Workplace Age Discrimination Scale (WADS, Marchiondo et al., 2016) was developed to assess perceived age discrimination for any age. Sample items are: “I have been passed over for a work role/task due to my age” and “Someone has delayed or ignored my requests due to my age”. The metastereotypes scale (Finkelstein et al., 2020) was developed to assess positive and negative metastereotypes for both younger and older workers. The scale has four subdimensions, measuring positive and negative metastereotypes for both younger workers and older workers. For younger workers, the positive metastereotype items are energetic/enthusiastic, ambitious, innovative/creative, and tech-savvy, and the negative metastereotype items are inexperienced, lazy/unmotivated, immature, and unreliable. For the older workers, positive age meta-stereotype items are experienced, knowledgeable, mature, and responsible/conscientious, and negative age meta-stereotype items are technophobic, slow, out of touch, and narrow-minded.

Ten studies, reported in four articles (Kleissner & Jahn, 2020b; Malinen & Johnston, 2013; Silvestre et al., 2017; and Zaniboni et al., 2019), used an implicit instrument (i.e., Implicit Association Test, Greenwald et al., 1998) to assess ageism toward younger workers. All four cited publications

reported differences between the results obtained with implicit and explicit measures. For example, Silvestre et al.´s (2017) study examined the affective states of younger workers subjected to paternalistic stereotypes using explicit and implicit self-reports. While explicit measures revealed mainly positive affect, implicit measures revealed the presence of a negative affective state. Kleissner and Jahn (2020b) examined the assessment of work-related evaluations of younger and older workers using explicit and implicit measures. Whereas explicit measures of general age preferences showed no clear age preference, implicit measures revealed stable preferences - younger workers were rated higher on performance and adaptability and older workers were rated higher on reliability and warmth. Interestingly, they also found that older workers were rated higher on competence than younger workers in their sample when implicit measures were used. Finally, Zaniboni et al. (2019) and Malinen and Johnston (2013) compared reactions to resumés from younger and older workers and found a negative bias against older workers using implicit measures, but not using explicit measures.

Younger workers as a comparison group for studying ageism

Ageism toward younger workers has tended to be investigated in relation to ageism toward other age groups, with younger workers serving as a comparison group for studying ageism mainly toward the old. Most of the selected studies (*n* = 124) examined ageism towards younger and other age groups: 119 studies examined ageism towards younger and older workers, two studies examined ageism towards younger and middle-aged workers (Luoh & Tsaur, 2011; Luoh & Tsaur, 2013), and three studies examined ageism towards younger, middle-aged and older workers (Finkelstein et al., 2013; Schloegel et al., 2018a; Schloegel et al., 2018b). Only 15 studies focused exclusively on ageism toward younger workers.

Among the large number of studies examining both older and younger workers, some studies did so by using older worker stereotypes as a reference (e.g., McCann & Keaton, 2013; Rosen & Jerdee, 1976; Weiss & Maurer, 2004). In Rosen and Jerdee's (1976) classic study on age discrimination, replicated by Weiss and Maurer (2004), six scenarios describing incidents that

reflected older worker stereotypes (e.g., resistance to change, lack of creativity) were used to compare personnel decisions (e.g., promotion decisions) regarding younger and older targets. McCann and Keaton (2013) developed the Worker Perception of Stereotypes (WPS) survey, informed by Posthuma and Campion´s (2009) review of older worker age stereotypes, to compare age stereotypes and communication perceptions of older and younger workers in the US and Thailand.

Other studies examining older and younger workers compared perceived work-related attributes (e.g., Gibson et al., 1993; Kleissner & Jahn, 2020; Krings et al., 2011; Principi et al.,2015; Rauschenbach et al., 2012), personality traits (e.g., Bertolino et al., 2013; Truxillo et al., 2012), and performance (e.g., Bertolino et al., 2013; Erber & Long, 2006; Rupp et al.,2006).

What are the main theories and conceptual approaches used to investigate workplace youngism?

Main theories used to investigate workplace youngism

The research on ageism toward younger workers was theoretically grounded (i.e., a specific theory was used to frame the investigation of ageism or the operationalization of study variables) in 87 studies. The most frequently used theoretical frameworks were the social identity approach, the stereotype content model, social role theory/role congruity theory, and dual process theory. Among these, the social identity approach, including social identity theory (Tajfel & Turner, 1979) and self-categorization theory (Turner et al., 1987), was the most frequently used, in 21 studies in total. According to social identity theory, social behavior is partly determined by a person's group memberships, with individuals generally evaluating more positively groups to which they belong. Most studies adopting the social identity approach (Tajfel & Turner, 1979; Turner et al., 1987) tested the ingroup bias effect (i.e., the tendency to evaluate members of one's ingroup more positively than members of outgroups) on perceived attributes of younger and older workers (Bertolino et al., 2013; Finkelstein & Burke, 1998; Forte & Hansvick, 1999; Gibson et al., 1993; Kleissner & Jahn, 2020a; Principi et al., 2015). Studies also investigated the effect of ingroup biases on preferences for hiring older versus younger candidates (Gioaba & Krings, 2017; Krings et al., 2011; Lee et al., 2015;

Rego et al., 2018), and on performance expectations for younger, middle-aged, and older workers in the agile software development industry (Schloegel et. al, 2018a).

Although the ingroup bias effect was generally supported, several studies found interesting exceptions. Finkelstein and Burke (1998) found that when the target age was made highly salient and participants identified highly with their age groups, older individuals rated their own age group lower in terms of economic worth. Lee et al. (2015) found that the tendency to favour one's ingroup in hiring decisions can be overridden by self-interest; for example, in situations where the person being evaluated was expected to pose a competitive threat. Luoh and Tsaur (2011) found that perceived service quality in fine dining restaurants was rated more highly for younger versus middle-aged workers, regardless of respondent age. Forte and Hansvick (1999) asked participants to rate two age groups (49 and under vs. 50 and over) on a range of positive work attributes, and although the two age groups were each rated positively on different attributes, the ingroup bias was only displayed by older participants. Kleissner and Jahn (2020a) found in a sample of 380 German nurses that although ingroup bias was found in the case of both the younger and the older groups, it was far stronger for older nurses than for younger nurses.

The stereotype content model (SCM; Fiske et al., 2002; Cuddy et al., 2011) (*n* = 17) was the second most frequently adopted theoretical framework. The SCM proposes that people evaluate individuals and groups based on two dimensions of social judgments: warmth and competence. The model was used in studies comparing younger and older workers or candidates in the assessment of work-related attributes (Kleissner & Jahn, 2020a; 2020b) or hiring decisions (Krings et al., 2011), and in studies examining the endorsement of age stereotypes by older and younger workers (Tresh et al., 2019) or the content of younger workers' metastereotypes (Ryan et al., 2015). In most studies, younger workers were rated higher in competence but lower in warmth than older workers (Kleissner & Jahn, 2020a; 2020b; Krings et al., 2011; Tresh et al., 2019). Similar results were obtained for younger workers' metastereotypes of competence and warmth, with the former rated slightly higher than the latter (Ryan et al., 2015).

Tresh et al. (2019) found that endorsing age-based competence and warmth stereotypes (i.e., that older workers are higher in warmth and lower in competence than younger workers) affected the self-rated leadership potential differently for younger workers than for older workers, and also for men versus women. Ryan et al. (2015) found that endorsing positive warmth metastereotypes (i.e., that workers above 30, the outgroup, considered workers aged 18 to 30 to be high in warmth) positively influenced impression management behaviors of younger workers, but not mood or attitudes toward older colleagues. Conversely, Krings et al. (2011) found that younger candidates were rated higher than older workers both in competence and warmth and that these judgments mediated the relationship between candidate age and selection bias in a recruitment situation.

Social role theory and role congruity theory (Eagly, 1987; Eagly & Karau, 2002) (*n* = 12) and dual process theory (*n* = 11), including the implicit ageism framework (Levy & Banaji, 2002), were the next most frequently used approaches. Social role theory proposes that people develop stereotypes of social groups, such as younger workers, based on behaviors they observe from members of that group. Role congruity theory points out that these stereotypes may conflict with requirements for success in other social roles. Diekman and Hirnisey (2007) in three studies examined role incongruity as a source of age bias in hiring decisions and found that the tendency to prefer younger over older workers applied more to a dynamic than a stable company and was mediated by perceptions of adaptability. Ruggs et al. (2014) used social role theory to examine interactive age and gender effects on evaluations of job applicants and found that male (vs. female) applicants were rated as more suitable for technological positions, and that for both males and females, older (vs. younger) applicants were viewed as less suitable for technological positions.

Dual process theories, including the implicit ageism framework, propose that social judgments can come from conscious, explicit processes and from unconscious, implicit processes. Work-related evaluations of younger and older workers (Kleissner & Jahn, 2020b), and reactions to

resumés from younger and older workers (Malinen & Johnston, 2013; Zaniboni et al., 2019) differed depending on whether implicit or explicit measures were used.

Main ageism dimensions used to investigate workplace youngism

Articles were analyzed in terms of the dimensions of youngism that were investigated. The tripartite model from social psychology (Levy & Banaji, 2002) proposes three components to attitudes: cognitive, affective, and behavioral. Applied to ageism, these three components manifest as stereotypical beliefs, prejudicial feelings, and discriminatory behavior toward a target individual or age group. In the selected studies, the behavioral (discrimination) and cognitive (stereotypes) dimensions were the most frequently investigated, with 98 studies and 92 studies, respectively. Only 35 studies investigated the affective (prejudice) dimension.

Behavioural dimension.

The behavioral dimension of youngism was examined in 98 studies. Around half of these studies used experimental methodologies (*n* = 52), frequently in the context of personnel decisions (e.g., hiring, promotion, and training decisions), in which behavior was self-reported. The remaining studies mostly assessed perceived age discrimination and used correlational, longitudinal, mixed-methods, or qualitative methods.

In the context of personnel decisions, the results are mixed regarding which age groups are discriminated against on the basis of age. A number of studies show a preference for younger workers (Abrams et al., 2016; Gioaba & Krings, 2017; Kleissner & Jahn, 2020b; Perry et al.,1996; Perry & Bourhis, 1998; Rosen & Jerdee's, 1976; Zaniboni et al., 2019). In other studies, the decision was equally likely to favor younger and older workers (Kessler et al., 2020; Perry et al., 2017; Riach et al.,2010). In Riach et al. (2010), written job applications from a younger and an older candidate were used to test for age discrimination in hiring, for positions of a "new graduate", a waiter, and a retail manager. While younger applicants were more likely to be selected for the new graduate and retail manager jobs, older workers were more likely to be selected for the retail manager position. In two vignette studies, Perry et al. (2017) explored the impact of job candidate age and generational

membership on hiring-related perceptions and outcomes. They found that younger candidates, whether described as 29 years old or as Gen-Y/Millennial, were considered as suitable for a job and recommended for the same starting salary as candidates described as Baby Boomers. Interestingly, when age instead of generation – 60 years old instead of Baby Boomer – was used to describe older applicants, these candidates fared worse in terms of hiring outcomes. Kessler et al. (2020) also showed that although there was no overall preference for younger versus older psychotherapists, younger psychotherapists were more likely to be selected to resolve 'young problems' (cyberbullying, paternalizing parents, lovesickness), and older psychotherapists more likely to resolve more universal problems.

Younger workers have also been shown to be discriminated against in favor of middle-aged workers (Luoh & Tsaur, 2013; Richardson et al., 2013), or in favor of older workers (Erber & Long, 2006). In a study by Richardson et al. (2013), a hypothetical job applicant was evaluated more highly in terms of work-related competencies and more likely to be hired for an IT position if they were middle-aged, versus younger or older. Luoh and Tsaur (2013) showed that even when candidates had the same qualifications, middle-aged applicants were more likely to be selected for a tour guide position than younger applicants. Erber and Long (2006) experimentally tested if younger and older employees who forget to do tasks or accomplish them too slowly are judged similarly. In the case of older targets, forgetting to do a task or accomplishing it too slowly was attributed to poor memory ability and mental difficulty. In the case of younger targets, however, it was attributed to a lack of effort and attention. Finally, there was a tendency for participants to give higher work evaluations to older employees, and to be more likely to recommend older employees for a promotion and raise.

A number of studies reported the existence of perceived age discrimination by younger workers (Bellas, 2001; Bennington, 2002; Jelenko, 2020; Loretto et al., 2000; Rabl, 2010; Rabl & Kühlmann, 2009; Raymer et al., 2017). Raymer et al. (2017) analyzed narratives of workplace age discrimination and found that 28 percent of young employees (Millennials) reported experiencing age discrimination. Five central themes were identified in the situations described by younger

workers: (1) lack of training and leadership development opportunities, (2) perceptions of incompetence due to looking and/or sounding young, (3) lack of respect for their skills and abilities, (4) belittling comments and "advice," and (5) justifying the existence of reverse age discrimination.

Several additional studies showed a U-shape distribution of the frequency of age discrimination, with both younger and older workers reporting more frequent age discrimination on the basis of age. For example, Marchiondo et al. (2016) examined perceived discrimination in three groups of younger (18-30), middle-aged (31–49), and older workers (50 years or above). Results indicated that younger workers reported experiencing the highest rates of age discrimination, followed by older workers, and then middle-aged workers. According to Snape and Redman (2003), in a survey study using a UK representative sample of 613 participants, respondents below the age of 30 reported higher levels of experienced age discrimination because of their age than did the over-40s and the over-50s. Younger workers reported age discrimination mainly in situations involving job applications and promotions.

The U-shaped distribution was also found in studies focusing on age discrimination reported by female workers. For example, Gee et al. (2007) longitudinally examined perceived age discrimination among a nationally representative US sample of 7,225 working women. Results indicated that reports of age discrimination were high when women were in their 20s, dropped to their lowest levels around age 35, and then steadily rose and peaked between ages 35-55. The authors concluded that the primary driver of perceived age discrimination for US women was age – not cohort or historical period. Duncan and Loretto (2004) explored experiences and perceptions of age discrimination across age categories and by gender. Results indicated that younger workers (16-34 years old) and older workers (45 years or above) were most likely to report negative treatment because of their ages. Moreover, women across all age groups were more likely than men to report experiencing ageist attitudes related to appearance. Additionally, ageist perceptions about older individuals' sexuality were evident, including stereotypes portraying older workers as asexual or as no longer considering sexuality a relevant aspect of their lives. Interestingly, 70% of the participants

who provided details regarding their experiences reported discrimination because of younger age, with common types of negative treatment being "Pay and/or benefits" (21%); "Negative attitudes" (18%); "Too young for promotion" (16%); "Job deployment restricted" (12%); and "Youthful appearance" (4%).

Cognitive dimension.

The cognitive dimension of ageism was investigated in terms of both descriptive stereotypes and metastereotypes. Metastereotypes were investigated in only four studies, though other cognitive variables (e.g., work-related attributes, communication styles, skills, performance expectations) were focused on in additional studies. There were no studies investigating prescriptive age stereotypes towards younger workers. Descriptive stereotypes were the most widely investigated cognitive dimension. In 76 studies in total, younger and older workers were compared in terms of work-related attributes, personality traits, and performance.

Work-related attributes were investigated in a number of studies focused on the cognitive dimension of ageism (Forte & Hansvick, 1999; Gibson et al., 1993; Kleissner & Jahn, 2020; Krings et al., 2011; Lee et al., 2015; Principi et al.,2015; Rauschenbach et al., 2012). For example, Kleissner and Jahn (2020) found that older nurses were perceived as more competent, less physically strong, and less adaptable, whereas younger nurses were seen as less reliable and less warm. Gibson et al. (1993) found that, among 21 work-related attributes, older workers were better rated on individual initiative, stability, and experience, and younger workers were better rated on potential for development. According to Principi et al. (2015), younger workers were better evaluated by HR managers, in relation to older workers, in terms of what they termed “hard qualities” (willingness to learn, psychical health and stamina, new technology skills, creativity, flexibility), whereas younger workers were evaluated more poorly in terms of what they termed “soft qualities” (loyalty, management skills, social skills, reliability, ability to cope with stress), with the two types of qualities identified using factor analysis. Forte and Hansvick (1999) reported that older workers were rated more favorably on eight work-related attributes (academic skills, attendance, getting along with

coworkers, willingness to take directions, work ethics, high productivity, salary expectations, and supervisory skills), while younger workers were rated more favorably in only four (computer skills, stamina, and energy, flexibility, and learn quickly). Lee et al. (2015) found that younger candidates were seen as more creative and older candidates were seen as more stable. In a series of five experiments using different recruitment scenarios, Oh et al. (2025) also found that younger individuals were consistently seen as more creative than older individuals.

Personality traits were focused on in a number of studies. For example, Truxillo et al. (2012) and Bertolino et al. (2013) both experimentally investigated how older and younger workers are perceived in terms of Big Five personality traits. Older workers were rated more highly than younger workers on conscientiousness and agreeableness. Younger workers were rated more highly than older workers on neuroticism (Bertolino et al., 2013; Truxillo et al., 2012) and in terms of extraversion and openness to experience (Truxillo et al., 2012).

Effects on performance were also investigated in several studies focused on the cognitive dimension of ageism (Bertolino et al., 2013; Erber & Long, 2006; Luoh & Tsaur, 2011; 2013; Rupp et al.,2006; Schloegel et. al, 2018a; 2018b). Bertolino et al. (2013) compared perceptions of older and younger workers in terms of their task and contextual performance. While differences were non-significant for task performance, older workers were rated higher than younger workers both on OCB-I (organizational citizenship behavior directed toward peers) and OCB-O (organizational citizenship behavior directed toward the organization). Luoh and Tsaur (2011) compared younger and middle-aged workers with regard to perceptions of service quality in dining restaurants and tour leaders' performance (Luoh & Tsaur, 2013). In the former study, middle-aged servers received higher ratings in terms of what they termed "tangibles", such as their professional appearance and presentation, as well as reliability, while younger servers received higher ratings in responsiveness, assurance, and empathy. In the latter study, middle-aged tour leaders were better evaluated than their young counterparts for all three role components showing significant differences (instrumental, interactional, dealing with emergency). Schloegel et al. (Schloegel et. al, 2018a;

2018b) compared developer performance expectations regarding younger, middle-aged, and older workers in the agile software development industry and found a significant bias in performance expectations favoring middle-aged employees over younger and older employees.

While the above studies looked at younger workers and older workers in terms of the same (older worker) stereotypes, or directly compared younger workers to older workers, 10 studies specifically focused on younger worker stereotypes. Among the ten studies, two studies analyzed metastereotypes only (Finkelstein et al., 2020; Lamont et al., 2021), seven studies analyzed descriptive stereotypes only (Abrams et al., 2016; Bennington, 2001; Brooke & Taylor, 2005; Earl & Taylor, 2016; Helaß et al., 2021; Meinich & Sang, 2018; Raymer et al., 2017) and a single study analyzed both descriptive stereotypes and metastereotypes (Finkelstein et al., 2013). The younger worker stereotypes were identified in these studies using a variety of methods: reviews of the literature (e.g., Raymer et al., 2017), interviews and focus groups (e.g., Helaß et al., 2021), online surveys with both qualitative and quantitative questions (e.g., Finkelstein et. al, 2013), and factorial analysis (e.g., Finkelstein et. al, 2020).

We used the following procedure for coding the content of stereotypes and metastereotypes in studies. We started by identifying the stereotypes mentioned in each study, either presented as single descriptors (e.g., innovative) or as small sentences (e.g., unable to delay gratification). We then content analyzed the descriptors and grouped the ones with equivalent meanings (e.g., unable to delay gratification and impatient). Overall, 107 younger worker descriptors were identified in the eight studies focused on descriptive stereotypes: 65 (61%) positive characteristics, 41 (38%) negative characteristics, and one neutral characteristic. The most frequent positive characteristics related to the following categories: tech savvy (*n* = 7), innovative/creative (*n* = 7), fast/dynamic (*n* = 6), ambitious (*n* = 6), energetic/enthusiastic (*n* = 6), and seeking learning and development (*n* = 4). The most frequent negative characteristics related to the following categories: self-centered (*n* = 6), over-confident (*n* = 6), lacks professionalism (*n* = 5), impatient (*n* = 3), and low cooperation (*n* = 3). The only neutral characteristic was “extrovert”.

Younger worker metastereotypes were investigated in three studies. Finkelstein et al. (2020) developed and validated a scale with four positive (energetic/enthusiastic, ambitious, innovative/creative, and tech-savvy) and four negative (inexperienced, lazy/unmotivated, immature, and unreliable) metastereotypes. These items were based on earlier research (Finkelstein et. al, 2013) which examined separately the stereotypes that younger workers believed were held by middle-aged and older people, respectively. They identified 16 categories of stereotypes that younger workers believed to be held by middle-aged people about them (e.g., irresponsible, naïve, unfocused), and 14 categories believed to be held by older people (e.g., selfish, dependent, impolite/unhelpful). Interestingly, of the 30 stereotypes that younger workers believed to be held by middle-aged and older people, only five were positive, indicating that metastereotypes experienced by younger workers were predominantly negative. More recently, Lamont et al. (2021) also found more negative than positive metastereotypes of younger workers, five versus one respectively, which included additional negative ones (antisocial, arrogant) and a single neutral one (unburdened). These results showed that younger workers held predominantly negative age-related metastereotypes, which are considerably more negative than the more balanced and mostly positive descriptive stereotypes actually held about younger workers.

Affective dimension.

The affective dimension of ageism (prejudice) has been focused on in only 35 studies, less than half the number for both behavioral and cognitive dimensions. Many of the studies focused on the affective dimension investigated intergenerational relations and perceived prejudice by younger workers (Brooke & Taylor, 2005; Fraher, 2017; Loretto et al., 2000; McClellan & Beggan, 2017; Pullins et al., 2011). Work-related attitudes towards younger and older workers (Guillén & Kunze, 2019; Kleissner & Jahn, 2020a; Malinen & Johnston, 2013; Perry et al., 2017), in terms of attitudes towards poorly performing younger and older workers (Cox & Beier, 2014; Erber & Long, 2006) were also investigated.

Five qualitative studies looked into intergenerational relations and perceived prejudice by younger workers. Pullins et al. (2011) examined intergenerational selling relationships and found that younger (Millennial) salespeople reported feeling frustrated with their inability to relate to older generations on an interpersonal level and the resulting need to adapt their selling strategies to older customers. Fraher (2017) found that after the retirement age for US airline pilots was changed from 60 to 65 years old, an antagonistic environment was created in which employees reported having to compete against other age groups for scarce resources. Junior pilots (the lower-paid employees) reported a toxic environment, in which they perceived senior pilots selling them out or "eating their young". Brooke and Taylor (2005) examined age-group dynamics in case studies of four organizations in Australia and the UK, in which covert assumptions about age groups in terms of their skills and abilities (e.g., younger workers were seen as more productive and more adaptable to new technology) generated tensions between different age groups. Loretto et al. (2000) assessed intergenerational tensions from the perspective of young people. In relation to employment policies, they found that while a small majority agreed that more attention should be paid to youth unemployment, only one-fifth felt that early retirement should be encouraged as a means of improving job prospects for young people. McClellan and Beggan (2017) compared younger and older librarians with regard to how they experience age-related stigma. Although both younger and older librarians reported feeling stigmatized (i.e., feeling uncomfortable or self-conscious about their age), only younger librarians reported instances of enacted stigma (i.e., where an observer made an explicit comment about a respondent's age).

Among the studies assessing attitudes towards younger and older workers, Perry et al. (2017) found no differences in how much participants liked 60-year-old, Baby Boomer, Gen-Y/Millennial, and 29-year-old job applicants. Similarly, Guillén and Kunze (2019) found no difference in levels of interpersonal liking that supervisors expressed for younger versus older employees. Kleissner and Jahn (2020a) found that when participants were asked to rate how cold or warm they perceived younger and older workers, older workers received higher ratings of warmth than younger

workers. In contrast, when Malinen and Johnston (2013) implicitly measured the association between younger versus older workers' age and the evaluative dimensions of good or bad, they found that stable and negative implicit attitudes towards older workers emerged.

Erber and Long (2006) found that when poor or slow performance was attributed to a lack of effort and attention (in the case of younger workers) versus being attributed to weak memory ability (in the case of older workers), participants demonstrated more anger and less sympathy. In another experimental study by Cox and Beier (2014), older participants were more likely than younger participants to attribute the poor performance of older targets to external (e.g., luck) and controllable (e.g., motivation) causes, whereas younger participants were more likely than older participants to attribute the poor performance of older targets to stable (e.g., ability) causes. In addition, attributing poor performance to controllable causes was positively associated with willingness to sanction the target. Finally, attributing poor performance to controllable and stable causes was negatively associated with believing the target should receive training and would be interested in and benefit from training.

What are the main antecedents and consequences of workplace youngism?

In this section, we present findings regarding the antecedents and consequences of ageism identified in the cited studies. We exclude from this analysis studies that did not specifically measure antecedents or consequences, including qualitative studies. The articles are classified under three levels of ageism expression: intrapersonal, interpersonal, and contextual levels, and also consider the perspective or role of study participants as enablers or targets of ageism. Additionally, we identify studies that have adopted an intersectional approach, assessed the prevalence of ageism toward younger workers in a given population, or addressed ageism toward younger workers through interventions.

Among the cited studies, 61 examined antecedents (i.e., causes, predictors, determinants) and 17 studies examined the consequences (i.e., outcomes) of ageism towards younger workers. In terms of antecedents, 36 studies included intrapersonal antecedents, 28 studies included

interpersonal antecedents, and 18 studies included contextual antecedents. Within the 61 studies, 53 studies examined antecedents from the perspective of the enabler of ageism, four studies took the target perspective, and four studies examined ageism from both target and enabler perspectives. Among the studies examining consequences of workplace youngism, six studies included intrapersonal consequences, ten studies included interpersonal consequences, and two studies included contextual consequences. Within the 17 studies, the target perspective was adopted in 14 studies, the enabler perspective in two studies, and a single study took both the enabler and the target perspective. Table 3 shows the categorization of studies by antecedents and consequences of workplace youngism, levels of ageism expression, and participant perspective.

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Antecedents of workplace youngism

Among the 61 studies examining antecedents of youngism, 41 were experimental and 20 were non-experimental studies (i.e., mixed methods or cross-sectional). Antecedents of ageism against younger workers were most frequently investigated at the intrapersonal (*n* = 36) and interpersonal (*n* = 28) levels and less frequently at the contextual level (*n* = 18).

The most frequently investigated antecedents of ageism at the intrapersonal level were participant chronological age (*n* = 18), participant age group (*n* = 12), and participant gender or sex (*n* = 12). At the interpersonal level, the most frequently investigated antecedents were ageism towards older workers (*n* = 7), frequency of contact with older/younger co-workers (*n* = 5), and target gender or sex (*n* = 4). The most frequently investigated antecedents of ageism at the contextual level were organization size (*n* = 4), organization sector (*n* = 3), culture/country of origin (*n* = 3), and job age type (*n* = 3), defined as the extent to which a job is seen as suitable for specific age groups.

At the intrapersonal level, among the few studies looking at antecedents from the target perspective, Tresh et al. (2019) examined the effects of participant age and gender on self-rated leadership potential, moderated by the endorsement of gender (agentic vs. communal) and age (competence vs. warmth) stereotypes. Results indicate that for older women the endorsement of competence stereotypes and for older men the endorsement of warmth stereotypes were associated with lower self-rated leadership potential. The endorsement of communal stereotypes was marginally associated with higher self-rated leadership potential for younger men and older women.

At the interpersonal level, frequency of contact has been investigated as an antecedent in several studies. Schloegel et al. (2018b) found that lower contact frequency with both younger and older workers was related to stereotyping against each of these age groups, in terms of lower performance expectations. Diekman and Hirnisey (2007) examined role incongruity as a source of age bias in hiring decisions and found that frequency of contact with younger and older workers did not predict perceived hireability.

At the interpersonal level, studies have investigated as an antecedent of ageism status-incongruent supervisory relationships, in which a supervisor is younger than their subordinate, through the assessment of subordinate-supervisor relationship duration, subordinate evaluation of supervisor leadership, and subordinate-supervisor age difference. Collins et al. (2009) examined the effect of subordinate expectations on supervisor leadership effectiveness and performance. They found that older workers expected less from their younger supervisors than did younger workers, and in turn, rated the leadership effectiveness and performance of these younger supervisors lower than was the case for younger subordinates of younger supervisors. In addition, older workers expected less from their younger supervisors than did younger or older workers with older supervisors, and rated their younger supervisors' leadership behavior lower than did younger or older workers with older supervisors. In a study examining "anti-stereotypical" Y-O dyads, Van Der Heijden (2016) found that directional age difference (i.e., how much younger the supervisor is than

the subordinate) related to lower supervisor ratings of occupational expertise from their subordinates. This negative effect of status incongruence was strengthened by the longer duration of the dyadic relationship between employee and supervisor.

At the contextual level, country/national culture and organization sector were investigated as antecedents of ageism. For example, McCann and Keaton (2013) assessed younger workers' perceptions of older and same-age worker stereotypes and communication in the US and Thailand. Results indicated that younger Thai workers perceived both younger and older Thai workers as exhibiting more avoidant communication than their counterparts from the US. Overall, both negative and positive age stereotypes were more strongly endorsed in the Thai sample. Schloegel et al. (2018b) investigated the impact of culture on age-related performance expectations in two software development companies in China, Germany, Poland, and Bulgaria. Results showed that age stereotypes toward older employees were more negative in Eastern Europe and China than in Germany, while stereotypes toward younger employees were more negative in Germany than in China and Eastern Europe.

Regarding the organizational sector, Mulders (2020) found that organizations in the industrial sector were more likely (than organizations in the public or services sector) to offer younger workers a permanent contract. Principi et al. (2015) investigated human resources managers' perceptions of the characteristics of older and younger workers and found that younger workers in the public sector (compared to industry and services sectors) are judged more positively in terms of "soft qualities", a term they used to encompass loyalty, management skills, social skills, reliability, and ability to cope with stress. In a set of three experimental studies, Diekman and Hirnisey (2007) examined the effects of age (younger versus older) and company sector (stable versus dynamic) on hiring decisions. They found that the younger candidate was preferred over the older candidate for the dynamic company, whereas for the stable company the older candidate was marginally preferred.

Consequences of workplace youngism

Among the 17 studies examining consequences of youngism, four were experimental and 13 were non-experimental studies. Consequences of ageism against younger workers were most frequently investigated at the interpersonal (*n* = 10) and intrapersonal levels (*n* = 6) and less frequently at the contextual level (*n* = 2).

The most frequently investigated consequences of ageism against younger workers at the intrapersonal level were negative (*n* = 5) and positive (*n* = 4) emotions. For example, using survey data from 281 workers, Ryan et al. (2015) analyzed the influence of age-related stereotyping processes on younger workers' mood, attitudes, and impression management behaviors at work. They found that when younger workers are more self-conscious about being age stereotyped, they are less likely to be satisfied with older co-workers, which is partly explained by the negative mood associated with feeling self-conscious about being age-stereotyped.

In a daily diary study across one work week, with 185 employees from different organizations in the US, Finkelstein et al. (2020) examined reactions (threat, challenge, or boost) to the activation of both positive and negative age meta-stereotypes. Two unexpected results were highlighted by the authors: 1) younger respondents reported more negative age meta-stereotypes than older respondents, and 2) regardless of the age of the respondent, perceiving negative meta-stereotypes by older workers was related to challenge reactions while perceiving negative meta-stereotypes by younger workers was related to threat reactions.

The most frequently investigated consequences of ageism at the interpersonal level were affective commitment to the organization (*n* = 2), intergroup contact quality with younger co-workers (*n* = 2), job satisfaction (*n* = 2), turnover intentions (*n* = 2), behaviors toward co-workers (*n*=2), and organizational identification (*n* = 2). Overall, higher perceptions of age discrimination among younger workers were associated with lower levels of affective organizational commitment (Rabl & Triana, 2013; Snape & Redman, 2003) and job satisfaction (Jelenko, 2020; Marchiondo et al., 2016), as well as higher turnover intentions (Marchiondo et al., 2016). Moreover, in one of the few studies investigating the consequences of workplace youngism from the enabler

(of ageism) perspective, Paleari et al. (2019) found that the more employees endorsed youngism (or oldism), the more they experienced negative interactions with younger workers over time. This negatively affected behaviors toward all co-workers and, albeit less significantly, their vitality at work and organizational identification. Employees who held ageist attitudes also enacted more counterproductive work behaviors, such as complaining.

The most frequently investigated consequence of ageism at the contextual level was work-life/life-work interference (*n* = 2). In a survey of 1255 German employees, Rabl and Kühlmann (2009) found that younger workers face higher work-life interference and lower life-work interference than their older colleagues and that the higher the perceived age discrimination, the higher the work-life and the life-work interference for both younger and older workers.

Table 4 presents the antecedents and consequences of experimental studies according to levels of ageism expression.

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Intersectionality

Sixteen studies adopted an intersectional approach, with most of those examining intersections between age and sex/gender (*n* = 11), followed by age and ethnicity (*n* = 3). Two studies examined the intersection of age with both sex and ethnicity.

Among the studies looking at age and sex/gender, findings from five qualitative studies indicated that younger women were more prominently targeted with ageism, compared to younger men or older women (Granleese & Sayer, 2006; Kanagasabai, 2016; Kelan, 2014; McClellan & Beggan, 2017; Worth, 2016). Granleese and Sayer (2006) conducted 48 in-depth interviews to explore UK employees' perceptions about gender and age in higher education and to explore the role of physical attractiveness (defined as "lookism"). Results indicated that female academics and non-academics in UK higher education experienced the triple jeopardy of gender, age, and

attractiveness in a different way than men. For female academics, especially young academics, being seen as attractive was reported to be counter-productive in the male-dominated world of academia. Although women of all age groups reported experiencing age discrimination, different age groups reported different types of discrimination, with younger women reporting discrimination on the basis of "age-related lack of experience".

Kanagasabai (2016) analyzed how young female journalists working in Indian English-language television newsrooms negotiated feminism concerning their profession. Participant observation, auto-ethnography, and in-depth interviews (with 17 women journalists in print and television based in three Indian metropolises) were used for data collection. Findings indicated that most female journalists agreed that ageism was more pronounced in television newsrooms, and some of them felt that ageism played out in subtler ways in print newsrooms as well. While senior women journalists viewed their younger colleagues as women who were not politically inclined, the younger reporters felt that they had to face greater competition and newer pressures in the absence of a support system. Similar to what Granleese and Sayer (2006) found, respondents reported that the television newsroom placed a lot of importance on how women look. While not dressing well would attract comments from senior colleagues about how it could be detrimental to one's professional growth, one could be branded unprofessional if dressed "too well," especially by older women colleagues.

Among the studies examining ethnicity, Drydakis et al. (2018) investigated in two experiments whether older people had worse access to vacancies (i.e., invitations to interviews) in the UK labor market than their younger counterparts, and whether ethnicity moderated the relationship between age and labor market outcomes. Results showed that older white and older black applicants had lower chances of receiving an invitation for an interview, with older black applicants worse off than older white applicants. Haefner (1977) tested whether ethnicity, sex, age, and competence influenced the extent to which participants recommended hiring a candidate.

Although participants made no distinction between black and white job candidates, they did recommend hiring males over females and younger individuals over older individuals.

Prevalence of ageism toward younger workers

Three studies used representative samples to examine the prevalence of ageism toward younger workers in a given population. Duncan and Loretto (2004) explored perceptions of age discrimination across age categories and by gender, using a representative sample of Finserv, a major UK financial services enterprise employing 9,000 staff. The sample was composed of 1,128 participants who closely matched the company's employee profile in terms of gender, employment status, and age. Results indicated that younger workers (16-34 years old) and older workers (45 years or above) were the groups most likely to report negative treatment because of age. In order to track patterns of perceived age discrimination as women age, Gee et al. (2007) used US data from the National Longitudinal Surveys of Mature Women (NLSMW) and Young Women (NLSYM). Women who had not worked for the five years previous to the date of admission in the study were dropped from the sample. The final nationally representative sample was divided into five five-year birth cohorts and composed of 7,225 women, which produced 18,210 person-period observations. Participants were surveyed once a year, with four observations within each cohort. Results indicated that reports of age discrimination in the workplace were high when women were in their 20s, dropped to their lowest levels at around age 35, and then steadily rose from age 35 and peaked at age 55. The authors concluded that the primary driver of perceived age discrimination was age – not cohort or historical period. Bellas (2001) examined the post-graduation labor market experiences of 8,837 recent college graduates for evidence of age-related barriers to employment. The study used data from the Baccalaureate and Beyond Longitudinal Study in the US, which tracked college graduates for twelve years, providing information about employment patterns, graduate education, and family formation. Bellas' (2001) study was cross-sectional, with a nationally representative sample of students, interviewed one year after graduation. Results indicated that older graduates

(those aged 40 and above) had fewer post-graduation job interviews and fewer job offers than younger graduates (those aged under 40).

Discussion

This scoping review systematically examined and summarized existing literature about ageism towards younger workers (workplace youngism). The findings were organized under three broad research questions: 1) How has workplace youngism been assessed?, 2) What are the main theories and conceptual approaches used to investigate workplace youngism?, and 3) What are the main antecedents and consequences of workplace youngism? Unlike previous reviews, we included a broader and specifically work-related range of search terms to identify relevant articles and focused exclusively on younger workers. In total, 108 articles published between 1976 and 2022 were selected for inclusion, containing 143 empirical studies. In this section, we summarize some of the main findings and propose directions for future research.

Previous research on ageism showed that the label or category used to refer to the target group influences the results in important ways (Van Rijswijk & Ellemers, 2002). In this review, we found that the terminology used to refer to younger workers and ageism toward younger workers was reasonably consistent, and notably more consistent than in the review reported by de la Fuente-Núñez et al. (2021) which focused on ageism toward young people in general. In the vast majority of the selected studies (*n* = 136), younger workers were referred to by their age category (i.e., as "young" and "younger"), rather than by other terminology, with only five studies using generational labels. An interesting exception is Francioli and North (2021), who in testing their scale for descriptive stereotypes toward younger individuals included all of the following in their description of the target group: today's young adults, millennials, people in their 20s, college students, and young professionals. Although there was a lack of consensus on the age range used to define younger workers, the most frequent upper limits for younger workers were between 30 and 35 years old and the most frequent lower limit was 18 years old. When a specific age was provided for a younger worker, usually as targets of ageism in experimental studies, the most frequently used age

boundary was 28 years. In most studies, ageism toward younger workers was not referred to using specific terminology, though a handful of studies did refer to reverse age discrimination (Rabl & Triana, 2013), reverse ageism and adultism (Raymer et al., 2017), and youngism (Francioli & North, 2021).

In terms of the samples used, although the selected studies were conducted in 21 countries, more than 60 percent were conducted in the US (42.6 %), UK (11.3%), or Germany (8.5%). Overall, participants were relatively young across the included studies, with an average age of 34.73 years. Around half of the studies (*n* = 71) sampled both younger and older participants, using them as comparison groups – a methodological issue we will further address below. A total of 39 studies included only younger participants and in most of these participants responded to questions regarding themselves as targets of ageism. Very few studies included middle-aged participants or focused exclusively on older participants. When specified, samples were mostly composed of workers (55.6%) or university and college students (23.9%). Only three studies used representative samples to examine the prevalence of ageism toward younger workers. Most studies (*n* = 93) focused on the perspective of individuals enabling and endorsing youngism, with only 34 studies taking the perspective of the target of youngism, and 16 studies investigating both perspectives. In the 59 studies that used vignettes with hypothetical targets of ageism, 31 studies presented a male target and 12 studies did not specify target gender.

In terms of methodological approaches, most studies were quantitative (*n* = 111), followed by qualitative (*n* = 21) and mixed methods (*n* = 11). Among the quantitative studies, 70 were experimental, and 35 were cross-sectional surveys. Interestingly, no studies using interventions to address ageism toward younger workers were found among the selected studies. Most studies assessed ageism using explicit measures, with only ten studies using implicit measures. More than three quarters of the studies (*n* = 119) examined ageism towards both younger and older workers, with younger workers frequently serving as a comparison group for older workers and evaluated using scales measuring attitudes and stereotypes toward older workers. Only four scales used in the

studies focused exclusively on ageism toward younger workers, with one scale adopting the enabler perspective (Raymer et al., 2017), and three scales adopting the target perspective (Finkelstein et al., 2020; Marchiondo et al., 2016; Ryan et al., 2015). Among the selected studies, sixteen studies adopted an intersectional approach, with the intersection between age and sex/gender being the most frequently investigated.

The research on ageism toward younger workers was theoretically grounded in most of the studies, with the social identity approach, the stereotype content model, the social role theory/role congruity theory, and the dual process theory being used most frequently. Most, but not all, studies adopting the social identity approach (Tajfel & Turner, 1979; Turner et al., 1987) confirmed the ingroup bias effect. Almost all of the studies that used the stereotype content model (SCM; Cuddy et al., 2011; Fiske et al., 2002) to compare younger workers/job applicants with older workers/job applicants found that the former were rated higher in competence but lower in warmth than the latter. Studies using social role theory and role congruity theory (Eagly, 1987; Eagly & Karau, 2002) confirmed that different jobs were perceived as more or less suited for workers of different ages; for example, that younger workers were preferred for technological positions and for organizations that were more dynamic. Studies using dual process theories, including the implicit ageism framework, compared results of implicit and explicit measures of ageism against younger workers and found important differences with implicit measures showing greater biases.

In terms of the main ageism dimensions used to investigate workplace youngism, the behavioral (discrimination) and cognitive (stereotypes) dimensions were the most frequently investigated, with 98 studies and 92 studies, respectively. Only 35 studies investigated the affective (prejudice) dimension. Studies using the behavioral dimension mainly examined personnel decisions, with some studies showing preferences for younger workers, but others favoring middle-aged and older workers. A number of studies also showed a U-shaped distribution, with both younger and older workers reporting more frequent age discrimination on the basis of age. In several studies, younger workers reported higher levels of experienced age discrimination than other age groups.

The cognitive dimension of ageism was investigated in terms of both descriptive stereotypes (*n* = 76) and metastereotypes (*n* = 4). Most studies examining descriptive stereotypes examined younger and older workers on the same dimensions or directly compared younger workers to older workers. However, ten studies specifically focused on younger worker stereotypes, with 61 percent of the younger worker descriptors in the eight identified studies relating to positive characteristics, 38 percent relating to negative characteristics, and one percent to neutral characteristics. Although younger worker metastereotypes were only investigated in four studies, Finkelstein et al. (2013) showed that of the 30 stereotypes that younger workers believed to be held by middle-aged and older people, only five were positive, indicating that metastereotypes experienced by younger workers were predominantly negative. There were no studies investigating prescriptive age stereotypes towards younger workers.

Among the selected studies, 61 examined antecedents of ageism toward younger workers, and 17 examined consequences. Most of the antecedents examined (*n* = 36) were at the intrapersonal level, with the most frequently investigated being chronological age, participant age group, and participant gender or sex. Most of the consequences of ageism toward younger workers were at the interpersonal level (*n* = 10), with the most frequent consequences including affective commitment to the organization, intergroup contact quality, job satisfaction, turnover intentions, behaviors toward co-workers, and organizational identification. Antecedents and consequences at the contextual level (*n* = 18 and *n* = 2, respectively) were investigated less frequently. The antecedents investigated included organization size, organization sector, and country/national culture, and the consequences investigated included work-life/life-work interference.

In regard to the role or perspective of study participants, in studies examining antecedents of ageism toward younger workers 53 studies took the enabler perspective, while only 4 studies took the target perspective. Among studies examining consequences of ageism toward younger workers, 14 studies took the target perspective and only 2 studies took the enabler perspective.

Future directions

The findings of this scoping review clearly show a number of important directions that can be pursued in future research on ageism toward younger workers.

First, research on ageism toward younger workers should be conducted in additional national contexts. As culture plays a significant role in shaping people´s beliefs, attitudes, and behaviors, it can be expected to also affect how people perceive and interact with different age groups. As a result, research findings from studies in one national context may not generalize to other contexts, especially those that vary along cultural dimensions. Given that more than 60 percent of the selected studies were from the US, UK, and Germany, additional national contexts should be investigated. In addition, future research should directly examine the effects of cultural characteristics on ageism toward younger workers, to address the dearth of research on cross-cultural similarities and differences in ageism (Kornadt et al., 2022). One useful theoretical framework that could guide research is Marcus and Fritzsche´s (2016) culturally anchored ageism (CAA) model, which proposes that the strength of social norms (tightness-looseness) and cultural values of individualism-collectivism influence work outcomes for older workers. This model can be easily extended to younger workers as well.

In addition, future research might examine the effects of other contextual variables, such as labor market characteristics, whether societies have a more or less aging population, or existing national legislation protecting working individuals from age discrimination. A prominent example of the latter is the Age Discrimination in Employment Act of 1967 (“ADEA” or “Act”) in the US, which is a federal law that prohibits age discrimination against employees 40 years of age or older. Although the legislation only protects older workers, as a consequence of the pressure that ageism also puts on younger workers, issues of “reverse age discrimination” (e.g., Cullen, 2003; Lacy, 2005) have been reported in the US. In these legal actions, younger employees claim that their employer treated older employees better, which brings into question the traditional interpretation of the "ADEA". In turn, age discrimination legislation in several Australian states prohibits all discrimination based on age - not just against those 40 years or over (Bennington, 2001). Future research should compare

different national legislation on age discrimination (for summaries of workplace age discrimination laws across the globe see http://www.agediscrimination.info/international), including which age groups are protected under them. Although legislation tends to protect against more overt forms of discrimination, it might have limited influence on more covert or subtle forms of discrimination, which is often how ageism takes place (Marchiondo, 2015; Wood et al., 2004). This should also be taken into consideration in future research on the topic.

Second, research on the cognitive dimension of ageism should also investigate prescriptive stereotypes toward younger workers. Descriptive stereotypes toward younger workers have been extensively investigated, and a handful of studies have also examined the metastereotypes of younger individuals. While prescriptive stereotypes have been investigated in the work context in regard to ethnicity and gender (e.g., Berdahl & Min, 2012; Heilman, 2001), none of the selected articles investigated prescriptive age stereotypes toward younger workers. Because prescriptive stereotypes refer to how people "should be", they can create pressure on the target group to act in certain ways, which perpetuates stereotypes and stereotypical behavior (Rudman et al., 2012), and can predict prejudice/discrimination even when descriptive stereotypes do not (Gill, 2004). Although too recent to be included in this review, the Workplace Ambivalent Youngism Scale developed and validated by Schmitz et al. (2023) has identified three dimensions (Humility-Deference, Loyalty-Belonging, and Vitality-Innovation) of prescriptive stereotypes toward younger workers that can be tested and built upon in future research.

Third, future research should specifically address ageism towards younger workers. In more than 80 percent of the studies, ageism towards younger workers was investigated in relation to ageism toward other age groups, and in many of these studies older worker stereotypes were used as a reference to compare younger and older workers. Although studies focused on types of ageism experienced primarily by older workers can provide some insight into age bias toward younger workers, they clearly should be complemented by research focused on specific types of ageism that younger workers encounter. It is also important that research identify and examine the effects of

specific workplace-related attributes, which might differ from attributes of younger individuals in general.

Fourth, future research should develop and apply additional instruments specifically focused on ageism toward younger workers, both from the perspective of the enabler and the target of ageism, given the lack of validated measures addressing ageism toward younger workers. Only two validated scales assessing ageism towards younger workers were used in the selected studies, both relating to metastereotypes (Finkelstein et al., 2020; Raymer et al., 2017), and relatively few studies used implicit measures (i.e., Implicit Association Test, Greenwald et al., 1998) to assess workplace youngism. On the one hand, implicit measures are not directly subject to social desirability and thus can reveal general attitudes and stereotypes even when these are deliberately not reported or inaccessible through explicit measures. On the other hand, there has been criticism regarding such measures in terms of insufficient evidence supporting construct validity (Schimmack, 2021). Fiedler et al. (2006) also pointed out five major problems regarding the IAT: the asymmetry of causal and diagnostic inferences, the viability of the underlying association model, the lack of a testable model underlying IAT-based inferences, the difficulties of interpreting difference scores, and the susceptibility of the IAT to deliberate faking and strategic processing. Nonetheless, given the differences found in levels of workplace youngism in the studies using implicit versus explicit measures, future research should also use implicit measures to assess ageism toward younger workers.

Fifth, research on workplace youngism should pay greater attention to middle-aged workers, an issue characteristic of ageism research more generally (Finkelstein et al., 2013). In the selected studies, middle-aged workers were seldom considered as an age group by itself, neither as potential targets of ageism nor as enablers of ageism. The few studies that specifically considered middle-aged workers found interesting results, including preferences for hiring middle-aged workers for specific professional roles (Luoh & Tsaur, 2013; Richardson et al., 2013) and higher performance expectations for middle-aged workers (Schloegel et al., 2018a; 2018b). In addition, stereotypes

towards younger workers held by middle-aged workers were found to be more negative and less positive than the stereotypes held by older workers (Finkelstein et al., 2013). Thus, ageism toward younger workers could play out differently when they are compared with and assessed by middle-aged workers, rather than by older workers.

Sixth, future research should pay greater attention to consequences of ageism toward younger workers. Among the selected articles, only 17 studies examined consequences of ageism toward younger workers, compared to 61 studies that examined antecedents. Of these 17 studies, only two examined consequences to enablers of youngism. Similar to what has been found for enablers of racism (e.g., Bowser & Hunt, 1981; Richeson & Shelton, 2003; Spanierman & Heppner, 2004), negative consequences may also exist for enablers of age discrimination. Indeed, Paleari et al. (2019) found that employees who held ageist attitudes toward younger workers reported lower levels of vitality at work and organizational identification, and higher levels of counterproductive work behaviors directed at all age groups (Paleari et al., 2019). Future research should address consequences of ageism against younger workers, especially from the perspective of ageism enablers.

Seventh, future research should investigate antecedents of ageism for targets of ageism. Although antecedents of workplace youngism have received significant research attention in our selected studies (*n* = 61), only four of these studies take the perspective of targets of ageism. For example, Tresh et al. (2019) examined the effects of participant age and gender on self-rated leadership potential, moderated by the endorsement of gender (agentic vs. communal) and age (competence vs. warmth) stereotypes. The endorsement of communal stereotypes was marginally associated with higher self-rated leadership potential for younger men and older women. Future research should investigate additional antecedents of workplace youngism from the target perspective, including individual differences and additional age stereotypes.

Eighth, further research should be conducted using an intersectional approach (Marcus, 2022), whereby the effect of overlapping social identities is considered. Inadequate attention to

intersectionality has been a concern of ageism scholars, as the effect of overlapping social identities can powerfully shape targets' experiences of discrimination (e.g., Marchiondo, 2015). Although sixteen studies in this review adopted an intersectional approach, only the intersections between age and sex/gender and between age and ethnicity were investigated. For example, Granleese and Sayer (2006) found that younger women are more prominently targeted with ageism, in relation to younger men or older women. Drydakis et al. (2018) found that older white and older black applicants had lower chances of receiving an invitation for an interview, with older black applicants even less likely than older white applicants. Other demographic factors that may intersect with age and lead to greater ageism toward younger workers should be examined, including education, social and economic status, and disability.

Ninth, although most of the selected studies addressed age-based categorizations using chronological age or age range, several studies used a generational approach. Generational approaches assign labels to specific cohorts (generally, people born in a given period) and associates these with behaviors, attitudes, and values, including at work. For example, a new generational label (Generation C) is on the rise, which asserts that those who experienced the Covid-19 pandemic during their formative years will tend to be insecure and socially inept at work (Patel, 2020, cited in Rudolph et al., 2021). It is important to note that in spite of its popular appeal, the generational approach is increasingly controversial from a scientific perspective, with numerous studies showing that intra-generational differences are greater than differences between generations. For example, a consensus report from the National Academies of Sciences, Engineering, and Medicine (NASEM, 2020) proposed that categorizations such as "Baby Boomers" or "Millennials" lack scientific robustness and should not be used, either in scientific research or in management practices. Another example is provided by Schröder (2024), empirically demonstrating that after accounting for age (as people grow old) and period effects (changes with historical time), generational effects on work motivation were absent.

As much as group categorizations can serve as convenient and powerful heuristics, they accentuate and perpetuate biases that can promote negative attitudes towards workers based on the generational label (e.g., Baby Boomers struggling with technology or Generation Z being entitled). Future research might investigate generational approaches more as a social construction and investigate their effects on age discrimination. A lifespan perspective that takes into consideration the person in context and their development paths at any age (Rudolph et al., 2021; Rudolph & Zacher, 2017) might also be considered. In terms of methodology, truly longitudinal and other sophisticated designs and analytic methods, such as multilevel models, should be used to disentangle generations from age and period effects (Schröder, 2024).

Finally, future research should use a broader range of methodologies to investigate ageism against younger workers. Among the 111 studies that use quantitative approaches, 70 were experimental and 35 were cross-sectional surveys. Only four were longitudinal studies, and only Gee et al. (2007) followed individuals over the lifespan, in that case using US data to track patterns of perceived age discrimination as women age. Only three studies used representative samples, of which one matched sample characteristics to the workforce of an organization. Interestingly, none of the selected studies investigated the effects of interventions designed to reduce ageism against younger workers. This is especially notable given the substantial research that has investigated workplace interventions to promote positive attitudes and reduce workplace discrimination toward older workers. In their recent review article, Sinclair et al. (2023) found that such interventions had positive effects, especially with regard to attitudes toward older workers measured explicitly and directly following the intervention. They identified four categories of interventions (de-biasing interventions, brief attitudinal interventions, age diversity workshop interventions, and structural or contextual interventions). In a similar vein, de Saint Priest and Krings' (2024) experimental research has shown that age diversity "nudges", conceptualized as behavioral interventions that steer people in a particular direction (e.g., "The company you work for cherishes age diversity in teams. It strongly encourages people to work in teams that are mixed in terms of age"), increased the selection rates

of older individuals and the perceived desirability of working in age-diverse teams. Sinclair et al. (2023) and de Saint Priest and Krings (2024) provide examples of interventions that could be adapted and investigated in the context of ageism toward younger workers.

Table 5 summarizes recommendations for future research on workplace youngism.

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Limitations

A limitation of this review lies in only selecting articles that were published in English. This may explain in part why the vast majority of studies selected were conducted in the US and Western European countries. Future research should review articles written in languages other than English. A further limitation is that we only considered articles for inclusion that contained empirical data from primary sources. Thus, a range of articles that could provide insight into ageism toward younger workers were not considered and analyzed, including theoretical articles, literature reviews, and legal and policy commentary. As only peer-reviewed articles were considered for inclusion, we may have overlooked studies contained in doctoral theses and other non-peer-reviewed publications.

An additional limitation of this review relates to the fact that the social psychological literature has acknowledged that workplace discrimination has evolved from more overt forms of discrimination to more subtle and covert behaviors, also referred to as modern discrimination (Marchiondo et al., 2018). The youngism literature has predominantly focused on blatant forms of discrimination. In contrast, research on racism and sexism has evolved to include the so-called modern forms of discrimination. These include *microaggressions*, defined as brief and commonplace daily verbal, behavioral, or environmental indignities that communicate hostility toward a social group and insults based on group membership (Sue et al., 2007). A related construct is *selective incivility*, defined as subtle, nonphysical manifestations of interpersonal mistreatment encompassing

low-intensity conduct that violates social norms, and which is targeted at devalued social groups or employees, such as women and racial minorities (Cortina, 2008). Subtle forms of workplace mistreatment are not limited to gender or ethnicity and can be based on other social dimensions (Cortina, 2008). The microaggressions framework has been used to explore ageism targeting older adults (Lewis et al., 2023), but its potential for revealing biases against younger individuals remains largely untapped. In a similar vein, in the work context Marchiondo et al. (2016) analyzed over two hundred stories of age discrimination and found that age discrimination is often subtle, elusive, and understated, both for younger and older workers. Thus, future research on workplace youngism should go beyond blatant discrimination and examine more subtle forms of discrimination.

A further limitation lies in the fact that although we identified and categorized a range of antecedents and consequences of workplace youngism, we did not differentiate among the roles they played in different studies. Future research should undertake a more fine-grained analysis regarding antecedents and consequences of ageism toward younger workers, in terms of their roles as independent variables, dependent variables, moderators, and mediators. We also did not include qualitative studies in our analysis of antecedents and consequences; future research should seek to do so.

Conclusion

With multiple age cohorts coexisting in many contemporary organizations, it becomes more important than ever to understand age-based attitudes in the workplace. Despite evidence showing that younger workers are discriminated and stereotyped against, research has tended to focus on ageism toward older workers. In summarizing and synthesizing findings from the nascent literature on workplace youngism - 108 articles and 143 empirical studies - we have highlighted areas of relative strength in the research and areas where much more work remains to be done. We hope that our overview of the literature and the specific research recommendations that we provide will inspire and guide future efforts to better understand and address ageism toward younger workers.

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Figure 1

PRISMA flowchart of the screening process and included studies

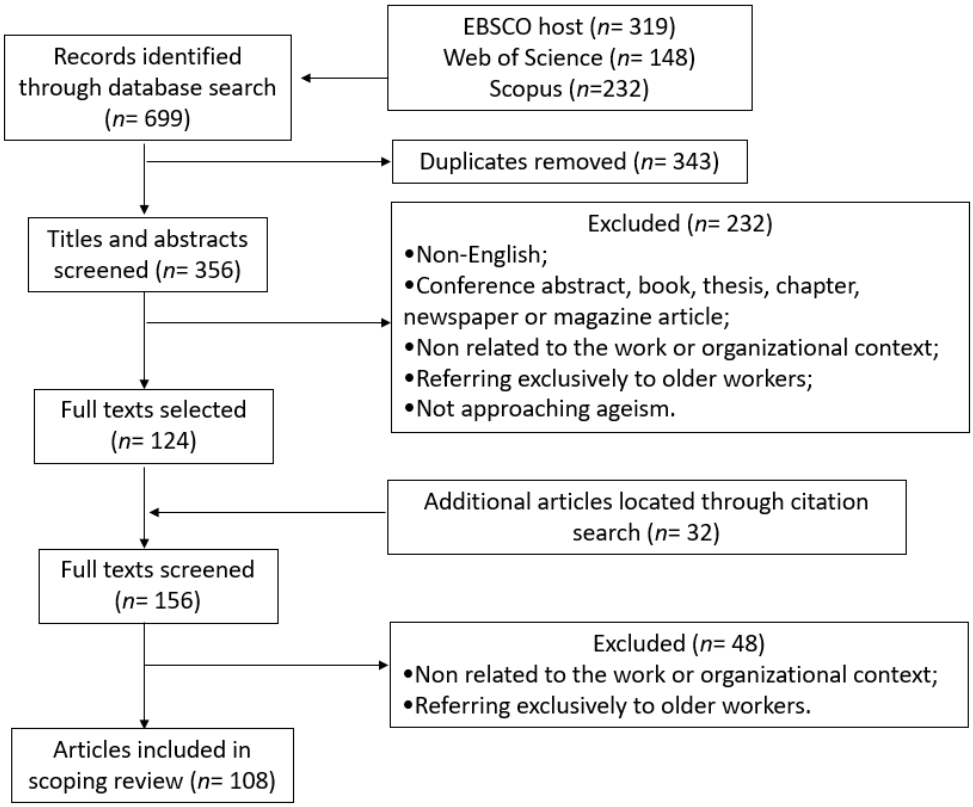


Table 1

The 108 publications and the main characteristics of their studies.

Author/Year	St/Sa	Study design	Country	*n*	Participant				Target age group	Ageism dimension
					M	Age group	Empl. status	Role		
Abrams et al. (2016)	St1	Experimental	USA	40	37	Y, O	Not specified	En	Y, O	Cgt, Bhv
	St2	Experimental	USA	80	35	Y, O	Not specified	En	Y, O	Cgt, Bhv
	St3	Experimental	USA	150	36	Y, O	Not specified	En	Y, O	Cgt, Bhv
Ahmed et al. (2012)		Experimental	Sweden	--	--	Not specified	Worker	En	Y, O	Bhv
Albert et al. (2011)		Experimental	Spain	--	--	Not specified	Worker	En	Y, O	Bhv
Angouri (2012)		Qualitative	UK	5	--	Not specified	Worker	En,Ta	Y	Aff
Avolio & Barrett (1987)		Experimental	USA	156	23	Y, MA	Student	En	Y, O	Cgt
Bellas (2001)		Cross-sectional	USA	8837	--	Y, O	Multiple	Ta	Y, O	Bhv
Bennington (2001)	St1	Qualitative	Australia	--	--	Not applicable	Not applicable	--	Y, O	Bhv
	St2	Qualitative	Australia	--	--	Y, O	Worker	En	Y, O	Aff, Bhv
	St3	Mixed methods	Australia	180	--	Not specified	Worker	En	Y, O	Cgt,Bhv
	St4	Qualitative	Australia	186	30	Y, O	Multiple	Ta	Y, O	Bhv
Berde & Mágó (2022)		Experimental	Hungary	--	--	Not specified	Worker	En	Y, O	Bhv
Bertolino et al. (2013)		Experimental	Italy	155	45	Y, O	Worker	En	Y, O	Cgt
Boateng & Adams (2016)		Qualitative	Canada	66	38	Y, O	Worker	Ta	Y	Bhv
Brooke & Taylor (2005)		Mixed methods	Several[1]	--	--	Y, O	Worker	En,Ta	Y, O	Cgt, Aff, Bhv
Chambers & Freeman (2020)		Qualitative	USA	7	--	Not specified	Worker	Ta	Y	Aff, Bhv
Chasteen et al. (2021)		Qualitative	Canada	589	--	Y, O	Not specified	Ta	Y, O	Bhv

Collins et al. (2009)		Cross-sectional	USA	319	--	Y, O	Worker	En	Y, O	Cgt
Cox & Beier (2014)		Experimental	USA	203	39	Not specified	Worker	En	Y, O	Cgt, Aff, Bhv
Crew (1984)		Experimental	USA	125	21	Y	Student	En	Y, O	Cgt
De Meulenaere et al. (2022)		Cross-sectional	Several[2]	4764	45	Y, O	Worker	Ta	Y, O	Bhv
Dedrick & Dobbins (1991)		Experimental	USA	124	--	Y	Student	En	Y, O	Cgt,Bhv
Diekman & Hirnisey (2007)	St1	Experimental	USA	41	19	Y	Student	En	Y, O	Cgt,Bhv
	St2	Experimental	USA	209	19	Y	Student	En	Y, O	Cgt,Bhv
	St3	Experimental	USA	108	19	Y	Student	En	Y, O	Cgt,Bhv
Dixon (2012)		Qualitative	USA	60	34	Y, O	Worker	En,Ta	Y, O	Cgt
Drehmer et al. (1992)		Experimental	USA	56	26	Not specified	Worker	En	Not specified	Bhv
Drydakis et al. (2018)		Experimental	UK	--	--	Not specified	Worker	En	Y, O	Bhv
Duncan & Loretto (2004)		Mixed methods	UK	1128	--	Y, O	Worker	Ta	Y, O	Bhv
Earl & Taylor (2016)		Mixed methods	Australia	25	--	Y, O	Worker	En,Ta	Y, O	Ctg, Aff
Erber & Danker (1995)		Experimental	USA	128	34	Y, O	Worker	En	Y, O	Ctg, Bhv
Erber & Long (2006)		Experimental	USA	167	25	Y, MA	Multiple	En	Y, O	Ctg, Aff, Bhv
Finkelstein & Burke (1998)		Experimental	USA	324	41	Y, O	Worker	En	Y, O	Ctg, Aff, Bhv
Finkelstein et al. (2000)		Qualitative	USA	324	41	Y, O	Worker	En	Y, O	Ctg, Aff, Bhv
Finkelstein et al. (2013)		Mixed methods	USA	247	--	Y, MA, O	Multiple	En,Ta	Y, MA, O	Ctg, Bhv
	Sa1		USA	125	21	--	Student	--	Y	--
	Sa2		USA	61	46	--	Worker	--	MA	--
	Sa3		USA	61	58	--	Worker	--	O	--
Finkelstein et al. (2020)		Longitudinal	USA	185	44	Y, O	Worker	Ta	Y, O	Ctg
Forte & Hansvick (1999)		Cross-sectional	USA	98	45	Y, O	Worker	En	Y, O	Ctg
Fraher (2017)		Qualitative	USA	43	--	Y, O	Multiple	En,Ta	Y, O	Aff
Francioli & North (2021)		Cross-sectional	USA	358	44	Y, O	Not specified	En	Y	Ctg, Aff

Gee et al. (2007)		Longitudinal	USA	7225	--	Y, O	Multiple	Ta	Y, O	Bhv
Gibson et al. (1993)		Cross-sectional	Canada	811	--	Y, O	Worker	En	Y, O	Ctg
Gioaba & Krings (2017)		Experimental	Switzerland	515	23	Y	Multiple	En	Y, O	Ctg, Bhv
Granleese & Sayer (2006)		Qualitative	UK	48	--	Y, O	Worker	Ta	Y, O	Ctg
Gringart et al. (2005)		Mixed methods	Australia	128	45	Not specified	Worker	En	Y, O	Ctg
Guillén & Kunze (2019)		Longitudinal	Not specified	305	45	Y, O	Worker	Ta	Y, O	Ctg, Aff, Bhv
Haefner (1977)		Experimental	USA	286	44	Not specified	Worker	En	Y, O	Bhv
Helaß et al. (2022)		Qualitative	Germany	50	47	Y, O	Worker	En,Ta	Y, O	Ctg, Bhv
Henry et al. (2015)		Cross-sectional	Belgium	321	41	Y, O	Worker	En	Y, O	Ctg
Heywood et al. (1999)		Cross-sectional	China	369	--	Not specified	Worker	En	Y, O	Bhv
Jelenko (2020)		Cross-sectional	Slovenia	1505	--	Y, O	Worker	Ta	Y, O	Bhv
	Sa1		Slovenia	755	--	--	--	--	Y	--
	Sa2		Slovenia	750	--	--	--	--	O	--
Kanagasabai (2016)		Qualitative	India	17	--	Y, O	Worker	En,Ta	Y, O	Aff
Kaufmann et al. (2017)	St1	Experimental	USA	383	35	Y, O	Multiple	En	Y, O	Ctg, Bhv
	St2	Experimental	Several[3]	264	43	Y, O	Worker	En	Y, O	Ctg, Bhv
Kelan (2014)		Qualitative	UK	32	--	Y	Worker	Ta	Y	Aff, Bhv
Kessler et al. (2020)		Experimental	Germany	79	23	Y	Not specified	En	Y, O	Bhv
Kleissner & Jahn (2020a)		Cross-sectional	Germany	380	42	Y, O	Worker	En	Y, O	Ctg, Aff
Kleissner & Jahn (2020b)		Experimental	Germany	196	--	O	Not specified	En	Y, O	Ctg, Aff, Bhv
	St1	Experimental	Germany	53	70	Y	Student	En	Y, O	Ctg, Aff, Bhv
	St2	Experimental	Germany	50	23	Y, O	Multiple	En	Y, O	Ctg, Aff, Bhv
	St3	Experimental	Germany	93	39	Y, O	Worker	En	Y, O	Ctg, Aff, Bhv

Kmicinska et al. (2016)		Experimental	Italy	242	38	Y, O	Worker	En	Y, O	Ctg
Krings et al. (2011)	St1	Cross-sectional	Switzerland	109	21	Y, O	Worker	En	Y, O	Ctg, Bhv
	St2	Experimental	Switzerland	101	22	Y	Student	En	Y, O	Ctg
	St3	Experimental	Switzerland	88	38	Y	Student	En	Y, O	Ctg, Bhv
Lahey (2008)		Experimental	USA	--	--	Not specified	Worker	En	Y, O	Bhv
Lamont et al. (2021)	St1	Quasi-experimental	UK	105	51	Y, O	Not specified	Ta	Y, O	Ctg
	St2	Quasi-experimental	UK	177	46	Y	Not specified	Ta	Y, O	Ctg
Lee et al. (2015)		Experimental	USA	121	31	Not specified	Not specified	En	Y, O	Ctg, Bhv
Levin (1988)		Experimental	USA	487	--	Y	Student	En	Y, O	Ctg
Loretto et al. (2000)		Mixed methods	UK	460	--	Y	Student	Ta	Y, O	Aff, Bhv
Lucas & Keegan (2007)		Mixed methods	UK	15	--	Not specified	Worker	En	Y	Cgt, Bhv
Lucas & Keegan (2008)		Mixed methods	UK	15	--	Not specified	Worker	En	Y	Cgt, Bhv
Luoh & Tsaur (2011)		Experimental	Taiwan	406	--	Y, MA	Not specified	En	Y, MA	Ctg
	Sa1		Taiwan	277	28	--	--	--	Y	--
	Sa2		Taiwan	129	47	--	--	--	MA	--
Luoh & Tsaur (2013)		Experimental	Taiwan	447	--	Y, MA	Not specified	En	Y, MA	Ctg
	Sa1		Taiwan	254	29	--	--	--	Y	--
	Sa2		Taiwan	193	48	--	--	--	MA	--
Lyons et al. (2014)		Cross-sectional	USA	129	37	Y, O	Unemployed	Ta	Y, O	Bhv
Malinen & Johnston (2013)	St1	Experimental	New Zealand	77	26	Y, O	Student	En	Y, O	Ctg, Aff
	St2	Experimental	New Zealand	50	22	Y	Student	En	Y, O	Aff
Marchiondo et al. (2016)	St1	Mixed-methods	USA	831		--	--	Ta	O	--
	Sa1		USA	96	56	--	--		O	--

	Sa2		USA	345	58	--	--		O	--
	Sa3		USA	390	55	--	--		O	--
	St2	Mixed-methods	USA	803		--	--	Ta	Y	--
	Sa1		USA	106	29	O	Worker		Y	Bhv
	Sa2		USA	294	25	Y	Worker		Y	Bhv
	Sa3		USA	403	25	MA	Worker		Y	Bhv
	St3	Quantitative	USA	1607		--	--	Ta	MA	--
	Sa1		USA	407	37	--	--	Ta	MA	--
	Sa2		USA	1200	--	Y, O	Worker		MA	Bhv
McCann & Giles (2007)		Cross-sectional	Several[4]	267	22	Y	Student	En	Y, O	Ctg, Bhv
McCann & Keaton (2013)		Cross-sectional	Several[5]	267	22	Y	Student	En	Y, O	Ctg, Bhv
	Sa1		USA	142	21	--	--	--	Y, O	--
	Sa2		Thailand	125	25	--	--	--	Y, O	--
McClellan & Beggan (2017)		Qualitative	USA	26	42	Y, O	Worker	Ta	Y, O	Aff, Bhv
Meinich & Sang (2018)		Qualitative	Norway	20	--	Y, O	Worker	En,Ta	Y, O	Ctg, Bhv
Mooney (2016)		Qualitative	New Zealand	31	--	Y, O	Worker	En,Ta	Y	Aff, Bhv
Mulders (2020)		Cross-sectional	Netherlands	960	52	Not specified	Worker	En	Y, O	Ctg, Bhv
Ograjenšek et al. (2009)		Cross-sectional	Slovenia	200	42	Not specified	Worker	En	Y, O	Ctg
Paleari et al. (2019)	St1	Cross-sectional	Italy	224	--	Y, O	Worker	En	Y, O	Ctg, Aff, Bhv
	St2	Longitudinal	Italy	94	--	Y, O	Worker	En	Y, O	Ctg, Aff, Bhv
Perry & Bourhis (1998)		Experimental	USA	81	--	Y	Student	En	Y, O	Ctg, Aff, Bhv
Perry et al. (2017)	St1	Experimental	USA	225	37	Y, O	Multiple	En	Y, O	Ctg, Aff, Bhv
	St2	Experimental	USA	125	28	Y, O	Student	En	Y, O	Ctg, Aff, Bhv
Perry et al. (1996)		Experimental	USA	131	21	Y	Student	En	Y, O	Ctg, Bhv

Petery et al. (2020)		Cross-sectional	USA	222	36	Y, O	Worker	En	Y, O	Ctg
Petit (2007)		Experimental	France	--	--	Not specified	Worker	En	Y, O	Bhv
Prazeres & Passos (2021)		Cross-sectional	Portugal	369	38	Y, O	Worker	Ta	Y, O	Bhv
Previtali & Spedale (2021)		Qualitative	Italy	13	49	Not specified	Worker	En,Ta	Y, O	Aff
Principi et al. (2015)		Cross-sectional	Italy	516	45	Y, O	Worker	En	Y, O	Ctg
Pullins et al. (2011)		Qualitative	USA	24	24	Y	Worker	Ta	Y	Ctg, Aff
Rabl (2010)		Cross-sectional	Germany	1255	45	Y, O	Worker	Ta	Y, O	Bhv
	Sa1		Germany	631	54	--	--	--	O	--
	Sa2		Germany	624	36	--	--	--	Y	--
Rabl & Kühlmann (2009)		Cross-sectional	Germany	1255	45	Y, O	Worker	Ta	Y, O	Bhv
	Sa1		Germany	631	54	--	--	--	O	--
	Sa2		Germany	624	36	--	--	--	Y	--
Rabl & Triana (2013)		Cross-sectional	Germany	1255	45	Y, O	Worker	Ta	Y, O	Bhv
	Sa1		Germany	631	54	--	--	--	O	--
	Sa2		Germany	624	36	--	--	--	Y	--
Rauschenbach et al. (2012)		Experimental	Germany	4181	42	Y, O	Worker	En	Y, O	Ctg
Raymer et al. (2017)		Mixed methods	USA	282	--	Y, O	Worker	En,Ta	Y	Ctg
Rego et al. (2017)		Cross-sectional	Several[6]	473	39	Not specified	Worker	En	Y, O	Bhv
	Sa1		Brazil	249	39			--	Y, O	
	Sa2		Portugal	224	40			--	Y, O	
Rego et al. (2018)		Cross-sectional	Brazil	201	42	Not specified	Worker	En	Y, O	Bhv
Riach & Rich (2010)	St1	Experimental	UK	--	--	Not specified	Worker	En	Y, O	Bhv
	St2	Experimental	UK	--	--	Not specified	Worker	En	Y, O	Bhv
	St3	Experimental	UK	--	--	Not specified	Worker	En	Y, O	Bhv

Richardson et al. (2013)		Experimental	Australia	154		Y, O	Multiple	En	Y, O	Ctg, Bhv
	Sa1		Australia	102	23	--	Student	--	Y, O	--
	Sa2		Australia	52	40	--	Worker	--	Y, O	--
Rosen & Jerdee (1976)		Experimental	USA	142	--	Y, O	Student	En	Y, O	Ctg, Bhv
Ruggs et al. (2014)		Experimental	USA	320	35	Y, O	Not specified	En	Y, O	Ctg
Rupp et al. (2006)		Experimental	USA	353	23	Y	Student	En	Y, O	
Ryan et al. (2015)		Cross-sectional	USA	281	25	Y	Worker	Ta	Y, O	Ctg
Schloegel et al. (2018a)		Cross-sectional	Not specified	464	38	Y, O	Worker	En	Y, MA, O	Ctg
Schloegel et al. (2018b)		Cross-sectional	Several[7]	457	39	Y, O	Worker	En	Y, MA, O	Ctg
Schwab & Heneman (1978)		Experimental	USA	35	34	Y, O	Worker	En	Y, O	Ctg, Bhv
Silvestre et al. (2017)	St1	Experimental	Belgium	68	21	Y, O	Worker	Ta	Y	Cgt, Aff
	St2	Experimental	Belgium	40	22	Y, O	Worker	Ta	Y	Cgt, Aff
	St3	Experimental	Belgium	132	22	Y, O	Worker	Ta	Y	Cgt, Aff
Singer (1986)		Experimental	New Zealand	170	--	Y	Student	En	Y, O	Cgt
Snape & Redman (2003)		Cross-sectional	UK	613	43	Y, O	Worker	Ta	Y, O	Bhv
Tresh et al. (2019)	St1	Cross-sectional	UK	252	--	Y, O	Worker	En,Ta	Y, O	Cgt
	Sa1		UK	126	56	--	--	--	O	--
	Sa2		UK	126	26	--	--	--	Y	--
	St2	Experimental	UK	189	41	Y, O	Worker	Ta	Y, O	Ctg
	Sa1		UK	96	55	--	--	--	O	--
	Sa2		UK	93	26	--	--	--	Y	--
Truxillo et al. (2012)	St1	Experimental	USA	142	26	Y, O	Multiple	En	Y, O	Ctg
	St2	Experimental	USA	310	24	Y, O	Multiple	En	Y, O	Ctg
Van Der Heijden (2016)		Cross-sectional	Netherlands	606	--	Not specified	Worker	En,Ta	Not specified	Cgt
	Sa1		Netherlands	303	41	Not specified	Worker	Ta	Not specified	--
	Sa2		Netherlands	303	43	Not specified	Worker	En	Not specified	--
Vasconcelos (2016)		Mixed methods	Brazil	8	--	Y, O	Worker	En,Ta	Y, O	Bhv

Weiss & Maurer (2004)		Experimental	USA	204	20	Y	Student	En	Y, O	Ctg, Bhv
Worth (2016)		Qualitative	Canada	33	--	Y	Multiple	Ta	Y	Ctg, Aff, Bhv
Zacher & Bal (2012)		Cross-sectional	Germany	256	--	Y, O	Worker	En,Ta	Y, O	Cgt
	Sa1		Germany	128	32	Y, O	Worker	En	Y, O	--
	Sa2		Germany	128	50	Y, O	Worker	Ta	Y, O	--
Zaniboni et al. (2019)		Experimental	Italy	110	37	Y, O	Not specified	En	Y, O	Ctg, Aff, Bhv

Note. St/Sa: St – study; Sa – sample. M: participant mean age. Empl. status: participant employment status. Participant age group: Y – younger workers; MA – middle-aged workers; O – older workers. Target age group: Y – younger workers; MA – middle-aged workers; O – older workers. Participant role: En – enabler; Ta – target. Ageism dimension: Cgt – cognitive dimension; Bhv – behavioral dimension; Aff – affective dimension.

[1] Australia, UK

[2] Austria, Belgium, France, Germany, Netherlands, UK

[3] Austria, Germany, Switzerland

[4] Thailand, USA

[5] Thailand, USA

[6] Portugal, Brazil

[7] China, Germany, Poland, Bulgaria

Table 2

Main characteristics of the 55 experimental vignette studies on workplace youngism using hypothetical targets.

Author/Year	Study	Target					
		Age manipulation		Other manipulation	Gender	Status	Job
		Younger	Older				
Abrams et al. (2016)	1	NA	NA	--	Neutral	Applicant	Not specified
	2	NA	NA	--	Neutral	Applicant	Not specified
	3	NA	NA	--	Neutral	Applicant	Not specified
Ahmed et al. (2012)		31	46	--	Male	Applicant	Sales and hospitality
Albert et al. (2011)		26	38	--	Both	Applicant	Multiple
Avolio & Barrett (1987)		32	59	--	Male	Employee	Not specified
Berde & Mágó (2022)		34	60	--	Female	Applicant	Multiple
Cox & Beier (2014)		27	62	--	Male	Employee	Clerk
Crew (1984)		30	60	--	Male	Employee	Not specified
Dedrick & Dobbins (1991)		30	60	--	Male	Employee	Business and finance
Diekman & Hirnisey (2007)	1	28	58	--	Male	Applicant	Not specified
	2	35	65	--	Male	Applicant	Not specified
	3	28	58	--	Male	Applicant	Human resources
Drehmer et al. (1992)		NA	NA	--	Not specified	Employee	Business and finance
Drydakis et al. (2018)		28	50	--	Male	Applicant	Multiple
Erber & Danker (1995)		32	62	Gender	Manipulated	Employee	Not specified
Erber & Long (2006)		29.5	58	Job	Male	Employee	Manipulated

Finkelstein & Burke (1998)		28	59	--	Neutral	Applicant	Clerk
Gioaba & Krings (2017)		29	51	--	Male	Applicant	Sales and hospitality
Haefner (1977)		25	55	Gender	Manipulated	Applicant	Not specified
Kaufmann et al. (2017)	1	30	50	Gender	Manipulated	Applicant	Sales and hospitality
	2	30	50	Gender	Manipulated	Applicant	Sales and hospitality
Kessler et al. (2020)		NA	NA	--	Female	Employee	Health
Krings et al. (2011)	2	29	50	--	Male	Applicant	Sales and hospitality
	3	29	50	--	Male	Applicant	Sales and hospitality
Lahey (2008)		40	57.3	--	Female	Applicant	Not specified
Lee et al. (2015)		25	50	Job	Not specified	Applicant	Manipulated
Levin (1988)		25	73	--	Male	Applicant	Not specified
Luoh & Tsaur (2011)		NA	NA	--	Female	Employee	Sales and hospitality
Luoh & Tsaur (2013)		NA	NA	--	Male	Employee	Sales and hospitality
Perry & Bourhis (1998)		22	58	Job	Not specified	Applicant	Manipulated
Perry et al. (2017)	1	29	60	--	Male	Applicant	Sales and hospitality
	2	29	60	--	Male	Applicant	Sales and hospitality
Perry et al. (1996)		NA	NA	Job	Female	Applicant	Manipulated
Petit (2007)		25	37	--	Both	Applicant	Clerk
Rauschenbach et al. (2012)		24	62	--	Both	Employee	Clerk
Riach & Rich (2010)	1	21	39	--	Female	Applicant	Not specified
	2	27	47	--	Male	Applicant	Sales and hospitality

	3	27	47	--	Female	Applicant	Sales and hospitality
Richardson et al. (2013)		NA	NA	--	Male	Applicant	Technology
Rosen & Jerdee (1976)	1	NA	NA	--	Male	Employee	Clerk
	2	32	61	--	Male	Employee	Other
	3	29	58	--	Male	Applicant	Business and finance
	4	23	52	--	Male	Employee	Clerk
	5	34	62	--	Male	Employee	Not specified
	6	30	60	--	Male	Employee	Technology
Ruggs et al. (2014)		20	60	--	Both	Applicant	Not specified
Rupp et al. (2006)		31	63	--	Neutral	Employee	Other
Schwab & Heneman (1978)		24	61	--	Not specified	Employee	Clerk
Weiss & Maurer (2004)	1	NA	NA	--	Male	Employee	Clerk
	2	32	61	--	Male	Employee	Other
	3	29	58	--	Male	Applicant	Business and finance
	4	23	52	--	Male	Employee	Clerk
	5	34	62	--	Male	Employee	Not specified
	6	30	60	--	Male	Employee	Technology
Zaniboni et al. (2019)		28	53	--	Male	Applicant	Business and finance

Note. NA: Not Applicable.

Table 3

Antecedents and consequences of workplace youngism, levels of ageism expression, and participant perspective

Variable role		Levels of ageism expression			Participant perspective	
	Nr. of studies	Intrapersonal	Interpersonal	Contextual	Enabler	Target
Antecedents	61	36	28	18	53	4
Consequences	17	6	10	2	2	14

Table 4

Antecedents and consequences of experimental studies according to levels of ageism expression.

Variable role	Antecedent/Consequence and Level			References
	Intrapersonal	Interpersonal	Contextual	
Antecedents	Participant age			Bertolino et al. (2013), Cox & Beier (2014), Finkelstein & Burke (1998), Krings et al. (2011), Lee et al. (2015), Malinen & Johnston (2013), Truxillo et al. (2012), Zaniboni et al. (2019)
	Participant age group			Kleissner & Jahn (2020b), Luoh & Tsaur (2011), Luoh & Tsaur (2013), Rauschenbach et al. (2012), Schwab & Heneman (1978)
	Participant age group identification			Finkelstein & Burke (1998)
	Participant cognitive busyness			Perry et al. (1996)
	Participant conscientiousness			Kmicinska et al. (2016)
	Participant occupation			Kleissner & Jahn (2020b)
	Participant ethnicity			Crew (1984)
	Participant sex/gender			Kleissner & Jahn (2020b), Levin (1988), Malinen & Johnston (2013), Tresh et al. (2019), Zaniboni et al. (2019)
	Participant working experience			Krings et al. (2011), Zaniboni et al. (2019)
		Age salience		Finkelstein & Burke (1998)
		Age stereotype domain		Gioaba & Krings (2017)

Antecedents *cont.*	Frequency of contact with older people/workers		Diekman & Hirnisey (2007), Zaniboni et al. (2019)
	Frequency of contact with younger workers		Zaniboni et al. (2019)
	Impression management level		Gioaba & Krings (2017)
	Job information		Avolio & Barrett (1987), Finkelstein & Burke (1998)
	Low-status role		Abrams et al. (2016)
	Mental imagery intervention		Malinen & Johnston (2013)
	Participant ageism toward older people		Diekman & Hirnisey (2007), Perry et al. (1996), Rupp et al. (2006)
	Salience of appearance for the job		Kaufmann et al. (2017)
	Target capability		Kaufmann et al. (2017)
	Target competence		Haefner (1977)
	Target facial age appearance		Kaufmann et al. (2017)
	Target job experience		Schwab & Heneman (1978)
	Target performance		Dedrick & Dobbins (1991)
	Target professional category		Singer (1986)
	Target ethnicity		Drydakis et al. (2018), Haefner (1977)
	Target sex/gender		Erber & Danker (1995), Haefner (1977), Kaufmann et al. (2017)
		Benefit time frame	Avolio & Barrett (1987)
		Company context	Diekman & Hirnisey (2007)

Antecedents *cont.*		Job age-type	Erber & Long (2006), Perry & Bourhis (1998), Perry et al. (1996)
		Job interdependence	Lee et al. (2015)
		Job requirements	Krings et al. (2011), Lee et al. (2015)
		Participant US region	Levin (1988)
		Service quality scenario	Luoh & Tsaur (2011)
		Type of problem	Kessler et al. (2020)
		Work context	Erber & Danker (1995)
Consequences	Positive and negative emotions		Silvestre et al. (2017)
		Job Appeal	Tresh et al. (2019)
		Job Fit	Tresh et al. (2019)

Note. Antecedents and consequences are presented at the citation/publication level.

Table 5

Summary of recommendations for future research on workplace youngism.

Main issues to address	Observations	Recommendations
1. Focus directly on younger workers	(1) in more than 80 percent of the studies, ageism towards younger workers was investigated in relation to ageism toward other age groups (2) only four scales used in the studies focused exclusively on ageism toward younger workers	(1) investigate the specific types of ageism that younger workers encounter (2) develop and apply additional implicit and explicit measures specifically focused on workplace youngism
2. Increase methodological range	(1) among the 111 quantitative studies, 70 were experimental, 35 were cross-sectional surveys and only four were longitudinal studies (2) only three studies used representative samples to examine the prevalence of workplace youngism (3) no studies using interventions to address ageism toward younger workers were found	(1) use a broader range of research methods and analytical approaches to investigate ageism against younger workers (e.g., longitudinal, diary, intervention, and prevalence studies)
3. Consider youngism from different perspectives and approaches	(1) 93 studies focused on the perspective of endorsers, with only 34 studies taking the perspective of the target, and 16 studies investigating both perspectives (2) only 16 studies adopted an intersectional approach, investigating the intersection between age and sex/gender or ethnicity (3) 59 studies used vignettes with hypothetical targets of ageism. In 31 studies the target was male, whereas in only seven studies the target was female (4) there were no studies investigating prescriptive age stereotypes toward younger workers (5) very few studies considered middle-aged workers as an age group by itself, either as potential targets or as enablers of ageism	(1) investigate the perspective of the targets of workplace youngism (2) conduct research using an intersectional approach, and going beyond sex/gender or ethnicity (3) investigate prescriptive age stereotypes towards younger workers (4) use a lifespan perspective in ageism research and consider middle-aged workers as a specific age group when researching workplace youngism
4. Explore antecedents and consequences	(1) 61 studies examined antecedents of ageism toward younger workers and 17 examined consequences	(1) investigate consequences of workplace youngism, especially from the perspective of enablers

more systematically	(2) among studies examining antecedents, 53 took the enabler perspective, while only four studies target perspective (3) among studies examining consequences, 14 took the target perspective and only 2 took the enabler perspective	(2) investigate additional antecedents of workplace youngism from the target perspective
5. Acknowledge context	(1) more than sixty percent of the studies were conducted in the USA, UK, or Germany (2) the contextual level of ageism expression was the least frequently investigated among the cited studies for antecedents and consequences of workplace youngism	(1) consider additional national contexts, beyond WEIRD (Henrich et al., 2010) countries in research, including cross-country/cultural comparisons (2) investigate contextual level variables (e.g., industry, organization size) relating to workplace youngism