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Workplace Age Discrimination and Social-psychological Well-being

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Abstract

The research literature on workplace inequality has given comparatively little attention to age discrimination and its social-psychological consequences. In this article, we highlight useful insights from critical gerontological, labor process, and mental health literatures and analyze the patterning of workplace age discrimination and its implications for sense of job insecurity, job-specific stress, and the overall mental health of full-time workers 40 years old and above, covered by the Age Discrimination in Employment Act (ADEA). Our analyses, which draw on two decades and five waves of the General Social Survey (2002–2018), reveal (1) the prevalence of self-reported workplace age discrimination and growing vulnerability particularly for those 60 years and above, (2) clear social-psychological costs when it comes to job insecurity, work-specific stress, and overall self-reported mental health, and (3) dimensions of status and workplace social relations that offer a protective buffer or exacerbate age discrimination's corrosive effects. Future research on age as an important status vulnerability within the domain of employment and the implications of unjust treatment for well-being and mental health are clearly warranted.

Keywords

stressful life events, discrimination, work stress, work

Research on inequality in employment has flourished over the prior two decades. This is especially true when it comes to racial/ethnic and gender vulnerabilities in discriminatory hiring (e.g., Pager 2007; Yavorsky 2019), gatekeeper biases (e.g., Correll, Benard, and Paik 2007; Pager and Quillian 2005), segregation and isolation (e.g., Stainback and Tomaskovic-Devey 2012), pay gaps (e.g., Mandel and Semyonov 2014), and unjust firing and layoffs (e.g., Byron 2010; Kalev 2014). Less attention, however, has focused specifically on age-specific discriminatory treatment and its consequences. This is unfortunate given that over half of workers over 40 report witnessing or personally experiencing age discrimination at work (AARP 2021).[1] Limited attention within organization and inequality research is even more troubling when one considers pertinent demographic shifts and growth in the full-time aging workforce (Moen, Kajola, and Schaefers 2017; Phillipson 2019), supposed legal protections for aging workers (Neumark and Stock 1999), and significant (if not increasing) susceptibilities to discriminatory hiring, firing, and harassment

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(U.S. Equal Employment Opportunity Commission [EEOC] 2018).

Critical gerontological research, with its explicit consideration of ageism within culture and across institutions (e.g., Calasanti 2016; Lain et al. 2019), along with studies linking discrimination to social-psychological well-being and mental health (e.g., Golden 2015; Pfeffer 2018; Schneider and Harknett 2019; Williams et al. 2019), can help fill existing voids. Such literatures explicitly point to precarity and risk that accrues to older individuals later in life (see Crystal, Shea, and Reyes 2017; Grenier et al. 2017; Standing 2012)—precarity and risk that are empirically observed in workplace audit and experimental research. This research points to persistent ageist stereotypes among employers (e.g., Duncan and Loretto 2004; Granleese and Sayer 2006; Harris et al. 2018; Loscocco and Kalleberg 1988; Mueller, Wallace, and Price 1992; Palmore, Branch, and Harris 2005) as well as specific vulnerabilities when it comes to career stagnation and disinvestment (Francioli and North 2021; Lain and Loretto 2016; Lassus, Lopez, and Roscigno 2015; North and Fiske 2015; Roscigno et al. 2007). Moreover, labor process research provides insights into status dynamics and social relations that can bolster or mitigate inequality and vulnerability (Egdell et al. 2020; Roscigno, Sauer, and Valet 2018; Tausig 1999).

Analyses of possible social-psychological and mental health implications of age discrimination are certainly warranted. Although some analyses explore the consequence of age discrimination on older workers' mental health and job satisfaction (see Marchiondo et al. 2019; Shippee et al. 2019; Vogt Yuan 2007), few studies to our knowledge have done so while also interrogating whether workplace status and relational processes magnify or undercut such associations. Our analyses, which draw on two decades and five waves of the General Social Survey and nearly 4,000 full-time workers between 40 and 70 years old, integrate insights from literatures above and contribute to inequality, work, and mental health research by (1) bridging distinct streams of research on workplace inequality and aging, (2) filling empirical gaps pertaining to unequal treatment and discrimination in employment, (3) extending analytic attention to the social-psychological and mental health consequences of unjust treatment, and (4) illustrating some contingent health consequences within the specific domain of employment.

AGE, STATUS VULNERABILITY, AND DISCRIMINATION

Classic social science work has long stressed the hierarchical status bases of social exclusion. More recent and general streams of empirical work likewise point to the consequences of status generalization for inequality (e.g., J. Berger et al. 1998; Correll 2004; Lovaglia et al. 1998; Melamed and Savage 2016; Webster and Driskell 1978). Elaboration within Status Characteristics Theory, for instance, underscores the ways in which status categories become salient during interaction (Doering and Thébaud 2017; Fisek, Berger, and Norman 1991; Foschi, Lai, and Sigerson 1994; Smith-Lovin, Skvoretz, and Hudson 1986) and how "general expectation states" generate advantage and disadvantage. Like race/ethnicity and gender, age is especially salient in this regard as it tends to be viewed as stable and essentialized, rooted in the body (Morning 2011; Prentice and Miller 2006).

Stratification and work scholars have taken such points seriously especially when it comes to race/ethnicity and gender. Audit and experimental streams of research (e.g., Correll et al. 2007; Pager 2007; Quadlin 2018), for instance, point to the ways in which status beliefs are employed by gatekeepers in a manner that disadvantages minorities and women in assessments of value and worth. Research further reveals the importance of such status distinctions once employed and relative to inequalities in mobility and pay (e.g., Budig and England 2001; Mandel and Semyonov 2014; McBrier and Wilson 2004), segregation (e.g., Fernandez and Fernandez-Mateo 2006; McDonald, Lin, and Ao 2009), and involuntary termination (Byron 2010; Kalev 2014; Zwerling and Silver 1992). But what of age as a status system—a system seen by some as having parallels to race, gender, and class inequality (in this regard, see especially Barrett 2022)?

We believe that analogous connections to status categorization can be made with respect to ageism—a point supported by growing evidence from surveys of employers and discrimination case analyses. In a meta-analysis of 43 articles

dealing with older workers and employment, for instance, Kelly Harris and colleagues (2018) find that just over half identified such negative perceptions, including assumptions regarding lower productivity, performance, and trainability (see also E. D. Berger 2009; Loretto and White 2006; McCann and Keaton 2013). The suggestion is that essentialized beliefs about age (i.e., aging bodies, brains, and capabilities) are invoked in ways that, on average, disadvantage older workers in the hiring process (Albert et al. 2011; Roscigno et al. 2007; Rosen and Jerdee 1976; Shah and Kleiner 2005) and during promotions, job assignments, and discriminatory layoffs (Henry and Jennings 2004; Kelley, Soboroff, and Lovaglia 2017; Lassus et al. 2015; Rothenberg and Gardner 2011). Moreover, as individuals grow older, their age becomes increasingly apparent to others, and the age gap relative to new recruits may increase. This potentially increases one's risk of stereotyping and discrimination exposure at the hands of coworkers and employers (Finkelstein, King, and Voyles 2015; Finkelstein, Ryan, and King 2013). In fact, this potential—that is, greater exposure to bias and discrimination—may be a "push" factor in early retirement (Brooke and Taylor 2005; Redman and Snape 2006).

Critical gerontologists have been quite clear on such matters pointing to age as a salient status vulnerability (Harris et al. 2018) and maybe even increasingly so owing to shifts in labor market opportunities and the growth in part-time, low-wage employment, declines in worker protections, austerity measures and reductions in social safety nets, and demographic changes that have extended work-lives (see Altmann 2015; Grenier et al. 2017; Phillipson 2019). While the specific form and precise onset of age discrimination may vary by context (e.g., beginning earlier in specific fields of employment), these literatures generally point to the fact that age is thoroughly embedded within culture, is enacted within the context of employment, and that vulnerabilities to mistreatment will consequently accrue as individuals age. Specifically,

> **Hypothesis 1:** The likelihood of workplace age discrimination will increase with age, and especially as individuals approach or even exceed (what is normatively speaking in the United States) retirement age.

SOCIAL-PSYCHOLOGICAL AND MENTAL HEALTH IMPLICATIONS

Although certainly important for job attainment and economic returns, ageism and age discrimination within the context of employment are also arguably consequential for social-psychological well-being and mental health. In this regard, prior research has generally established that the workplace is a major source of stress in modern societies. Over the second half of the twentieth century and in many industrialized countries, neo-liberal policies have led to deregulation of industry, reductions in union power, a decline in fringe and retirement benefits, and a shift of economic risk from employers and employees (Kalleberg 2009, 2018). Such declines in labor power along with irregular work scheduling, low wages, layoffs, bullying, economic insecurity, and work–family conflicts are far from rare and, in fact, contribute to an increasing burden of psychological distress, mental illnesses, and chronic diseases in the United States and other national contexts (Benach et al. 2014; Brand et al. 2007; Burgard and Lin 2013; Golden 2015; Meneton et al. 2018; Pfeffer 2018; Schneider and Harknett 2019; Tausig 1999).

Aging workers are hardly impervious in these regards, and ageism and related stereotypes of older workers (e.g., lower performance, lack of adaptability; Francioli and North 2021) may place them in even more vulnerable positions. Attitudes surrounding older workers—attitudes stemming from patterns of delayed retirement as well as cultural narratives surrounding what it means to age well, actively, or successfully (see especially Calasanti 2016; Dillaway and Byrnes 2009; Katz and Calasanti 2015)—play a part in exacerbating vulnerability and even tendencies toward self-blame in the face of unjust treatment. These two non-mutually exclusive possibilities, growing employment precarity and cultural framing about successful aging, do not ignore but rather recognize potential social-psychological impacts.

Ageism can directly harm aging workers' psychological well-being by evoking stress and undermining self-efficacy. Social-psychological theories of stress (Pearlin 1999, 2010) and self (George 1998) are especially instrumental to understanding such effects (Shippee et al. 2019). First, ageism is a stressor that arouses the adaptive

machinery of the individual (Pearlin 1999). If individuals are unable to adapt to or cope with the stressor, their mental health will be compromised. The acute arousal response to age discrimination may become chronic if individuals anticipate future mistreatment—mistreatment that produces a prolonged state of heightened agitation similar to what individuals who experience racial discrimination encounter (Williams et al. 2003).

Second, stress evoked by workplace age discrimination more than likely extends to other social domains and places aging workers in a consistent and elevated taxing condition (Ferraro and Shippee 2009). This represents an assault to the self (George 1998), can lead to negative self-labeling and self-worth (Cuddy et al. 2005), and is especially detrimental if the worker role is central to one's self-concept (Nelson 2005). Moreover, and to the extent that discrimination undermines psychosocial resources (e.g., self-esteem, self-efficacy, and social support; see Jex and Gudanowski 1992; Pearlin 2010), psychological distress, and depression can result (Garstka et al. 2004; House et al. 1988; Turner and Marino 1994). In this regard, Vogt Yuan (2007) found perceived age discrimination decreases sense of control and social support even though sense of control can, to some extent, buffer the relationship.

Building on these literatures, which point to the roles of precarity, and culture in vulnerability and possible mental health repercussions, we suspect that age-specific discriminatory treatment at one's current place of employment will intensify respondents' sense of job insecurity, job-specific stress, and poor mental health. Specifically,

> **Hypothesis 2:** Those who report experiencing age-based discrimination will be more likely to feel insecure in the current jobs, experience higher levels of job-specific stress and will be more likely to report poor overall mental health compared with their peers who do not experience age-specific workplace discrimination.

It is important to recognize, of course, that age discrimination's costs may be mitigated or exacerbated depending on other influential status attributes and workplace social-relational dynamics. Inequality and intersectional scholarship (e.g., Browne and Misra 2003; Calasanti 2016; Collins 2000; Harnois 2015), for instance, has drawn particular attention to the importance of race/ethnicity, gender and class positioning when it comes to workplace treatment and disadvantage. While marginalized statuses surrounding race and gender will likely magnify vulnerability to age discrimination and its possible effects, predictions regarding class positioning and occupational status in particular—another indicator included in our modeling—are less clear. Higher occupational positioning in the labor market typically lends itself to higher rewards and/or protective resources. Yet, closure pressures and mobility contests probably rise with occupation rank and thus result in increased vulnerability to discrimination (Roscigno 2019). Our analyses explore each possibility.

Labor process and critical gerontological literatures (e.g., Egdell et al. 2020; Lain et al. 2019) have likewise suggested that positive proximate relational dimensions of work-life (i.e., horizontal and vertical interactional relations) may be particularly important for sense of fairness, security, and social-psychological well-being (Roscigno et al. 2018). For this reason, we also explicitly consider supervisory and coworker relations. Predictions regarding possible variations by other dimensions of status and workplace social relations are as follows:

> **Hypothesis 3:** The impact of workplace age discrimination on social-psychological outcomes may be conditioned, to some degree, by other status attributes (i.e., race, gender, occupational status) and the character of workplace relations. Specifically, (3a) intersectional inequalities surrounding race/ethnicity and gender will arguably intensify the costs of age discrimination, while the effects of occupational status are unclear, and (3b) good horizontal and vertical social relations within workplaces will buffer individuals, at least to some degree, from age discrimination's mental health costs.

Prior workplace inequality research has paid comparatively less attention to age-based discrimination and its social-psychological and mental health consequences. Critical gerontological scholarship

helps fill existing gaps by underscoring the salience of age as an ongoing and important dimension of status vulnerability and inequality. Indeed, integrating insights from gerontology and aging studies especially, Anne E. Barrett (2022) makes the case that age is a key axis of inequality that, like race, class, and gender, has consequences for opportunity and experiences across social, political, and economic domains. We agree, build on such points below and, drawing on survey responses from aproximately 1,000 full-time workers, systematically analyze (1) workers' vulnerability to contemporary age-based discrimination; (2) the consequences for job insecurity, job-specific stress, and mental health; and (3) the extent to which other statuses (i.e., race/ethnicity, gender, occupational status) as well as relationships with coworkers and/or supervisors buffer or exacerbate any observed effects. Our results and accompanying discussion offer unique and, we believe, long-overdue attention to the topic of workplace age discrimination and its costs.

DATA AND MEASUREMENT

Our analyses draw from the 2002, 2006, 2010, 2014, and 2018 waves of the General Social Survey (GSS). The GSS is a full probability sample of English-speaking adults living in households in the United States (for a full description of the GSS, see Davis, Smith, and Marsden 2007). We limit our analyses to full-time workers between 40 and 70 years. Our lower bound is similar to that employed by the AARP (2021). Our upper bound aims to approximate retirement age and recognizes the normative expectation that individuals retire at 65 years; the Social Security Administration's rising age of full retirement (AARP 2022); and a larger share of individuals opting to retire after age 65 (especially between age 65 and 69; Bureau of Labor Statistics 2019). It also seeks to limit selection bias owing to exit in response to age discrimination. Analyses are also limited to workers for whom there is no missing data on key indicators, specifically workplace age discrimination, job insecurity, job-related stress, and mental health.

We also focus on those aged 40–70 given that those 40 and above are precisely the group covered by the Age Discrimination in Employment Act—that is, the central civil rights legislation set up to protect aging workers in the United States. For the sake of stability in our estimates, it is important to exclude those above 70 years (who are quite sparse in the GSS, reflecting only about 3 percent of full-time employed respondents). As we are specifically interested in those for whom employment is common and probably most consequential for mental health, we further restrict our analyses to those who are employed full time. These selection criteria result in samples of 3,779 (for analyses of age discrimination), 2,250 (for analyses of job insecurity), 3,776 (for analyses of job-related stress), and 3,756 (for analyses of mental health) across the two decades.

There is little in the way of missing data overall, with no indicator missing more than 10 percent of responses. We nevertheless use multiple imputation to deal with missing values on explanatory indicators and control variables. Multiple imputation accounts for statistical uncertainty in single imputations and, instead, replaces missing values across sample waves with predictions based on associations observed in the sample when generating imputed data sets. Results across the imputed data samples are pooled across waves. This helps account for variation within and between imputed data sets to arrive at unbiased standard errors of the coefficient estimates (D. B. Rubin 1987). Supplementary analyses, using a listwise deletion procedure, generate results that are consistent with those reported below.

Such data are limited to some extent given their cross-sectional character. They are, however, especially rich when it comes to indicators of age discrimination at one's current job, sense of job insecurity, and the extent to which respondents report work-related stress and poor mental health. These GSS data also afford other important status indicators such as race/ethnicity, gender and occupational positioning, and assessments pertaining to coworker and supervisor relations. Reasonable inferences regarding causality, particularly with respect to reports of age discrimination and its implications, can be made given prior research linking workplace experiences and inequalities to subjective well-being (e.g., B. A. Rubin and Brody 2011; Schieman and Glavin 2015; Schieman, Milkie, and Glavin 2009; Schneider and Harknett 2019). Some directional confidence is further afforded by literature pointing to the prevalence of organizational inertia (e.g., Hannan and Freeman 1977; Stevenson 1986) and the stability of workplace norms, interaction, and culture (Ely and Thomas 2001; Kerr and Slocum 1987; Vallas

2006).[2] We nevertheless draw causal interpretations with care.

Age Discrimination and Social-psychological Well-being

A key benefit of the GSS data lies in its rich indicators of workplace experiences across multiple waves and outcomes pertaining to social-psychological well-being. Table 1 displays the basic descriptive statistics of variables. The experience of *age discrimination* at one's current job, measured directly across five waves beginning in 2002 and every four years through 2018, is particularly central to our analyses. Respondents were asked, "Do you feel in any way discriminated against on your job because of your age?"

One key expectation surrounds the implications of workplace age discrimination for social-psychological well-being and mental health. We draw on three such outcomes. *Job insecurity*, a measure central to subjective well-being and precarity, is measured relatively straightforwardly from each respondent's agreement or disagreement with the statement, "Thinking about the next 12 months, how likely do you think it is that you will lose your job or be laid off?" Originally captured with a 4-point scale, we recoded this indicator dichotomously such that 0 reflects "not at all" to "not too likely," while 1 captures those respondents who feel that this is "fairly likely" to "very likely." Approximately 9 percent of respondents, according to our initial descriptive statistics, report feeling job insecure.

Job-related stress, with an overall mean of 2.1, is captured with respondents' replies to the statement, "How often do you find your work stressful?" Response categories range across five levels from 0 (*never*) to 4 (*always*). Those who did not answer or who answered "could not choose" have been excluded from our analyses. *Poor mental health*, our final and more general outcome of interest, is derived from the question "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" This indicator ranges from 0 to 30, with a mean of 2.9 days and a standard deviation of 6.5 days. These outcomes along with key predictors, discussed next, allow for analyses of (1) the patterning of age discrimination among this full-time employed 40- to 70-year-old sample; (2) the consequences for job-specific insecurity, stress, and mental health; and (3) potential variations depending on other dimensions of worker status and workplace social relations.

Age, Other Status Attributes, and Workplace Social Relations

Age is self-reported in the GSS. As noted previously, we limit our analyses to those 40–70 years who are covered by federal Civil Rights protections enshrined in the Age Discrimination in Employment Act and who are employed full-time. The average age of respondents in our resulting sample is 51.4 with a standard deviation of 7.4. We use the natural log function of age capture potential non-linearity with discrimination and our other outcomes.[3]

Gender is captured dichotomously, with 51.4 percent of the sample women and the remainder men. The GSS creates categorical race/ethnic distinctions (i.e., white, African American, and other) based on respondents' verbatim responses. The general clustering of "other" allows for a sizeable enough sample to include within the analyses. Across the waves considered, 12.7 percent and 8.1 percent of respondents, respectively, are African American and other, while the remainder identify as white. Our indicator of occupational status draws from the GSS measure SEI10 (range = 10.6–92.8)—a socioeconomic index based on the 2010 Census occupational classification, estimated across 539 occupational categories. It is calculated from both earnings (SEI10INC) and percentage of who had a college education or higher (SEI10EDUC) within occupational groups (Hout, Smith, and Marsden 2016) and provides a good indicator of occupational standing and class position (Morgan 2016). Occupational status in our sample has a mean of 49.8 with a standard deviation of 22.4.

Workplace social relations, which might amplify or mitigate age-specific vulnerabilities, are measured with two scales, one capturing horizontal (coworker) and the other reflecting vertical (supervisory) relations. *Good coworker relations*, a scale indicator (α = .6), ranges from 0 to 6. It is derived from two questions regarding whether "Coworkers can be relied upon when respondent needs help" (0–3, 3 = "very true") and "The people with whom respondent works take a personal interest in respondent" (0–3, 3 = "very true").

Table 1. Means and Variable Descriptions for Status, Workplace Relational Measures and Controls.

Variables	Variable description	M (SD)
Workplace outcomes		
Age discrimination	R feels discriminated against at their current job because of their age (0 = no; 1 = yes)	6.69%
Job insecurity	How likely R feels that they will lose their job and/or be laid off in the next year (0 = not likely; 1 = fairly to very likely)	8.91%
Job-related stress	How often R finds their current job stressful (0 = never to 4 = always)	2.07 (0.99)
Poor mental health	How many days in the last month was R's mental health (including stress, depression, and problems with emotions) not good.	2.93 (6.50)
Key status attributes and workplace relations		
Age	Respondent's age in years	51.38 (7.42)
African American	Derived from whether race R considers themselves black (0 = white; 1 = black)	12.65%
Other (non-white) race	Derived from race R considers themselves other (0 = white; 1 = Other)	8.05%
Female	Respondent's sex (0 = male; 1 = female)	51.11%
Occupational status	Occupational prestige indicator derived from GSS ranking (SEI10) of 539 occupational categories.	49.84 (22.41)
Good coworker relations	Scale index of whether coworkers take a personal interest in R and can be relied on when R needs help (range = 0–6; α = .6)	4.69 (1.27)
Poor relations with supervisor	Scale index (reverse coded) of whether R's supervisor is concerned with welfare of those under her/him and is helpful in getting the job done (range = 0–6; α = .7)	1.38 (1.48)
Controls		
Time with current employer	Number of years R has been with current employer	10.59 (9.79)
(Ln) Organizational size	(Ln) Number of people working at R's work site (recoded to category midpoints)	4.16 (2.14)
Sector (ref=Extractive and Other)		
Core	Employed in manufacturing, transportation, construction, communication trades	26.61%
High wage service	Employed in high-wage service sector (e.g., law, banking, insurance)	36.24%
Low wage service	Employed in low-wage service sector (e.g., retail, restaurants, personal services, etc.)	33.91%
Public sector (ref = Private)	Employed by federal, state, or local government (0 = no; 1 = yes)	19.84%
Urban	R resides in a large or relatively large urban locale (0 = no; 1 = yes)	56.08%
Rural	R resides in a rural locale (0 = no; 1 = yes)	10.83%
Region (ref = Midwest)		
Northeast	R resides in the Northeastern US (0 = no; 1 = yes)	16.86%
South	R resides in the Southern US (0 = no; 1 = yes)	27.15%
West	R resides in the Western US (0 = no; 1 = yes)	32.03%

(continued)

Table 1. (continued)

Variables	Variable description	M (SD)
GSS Year (ref = 2002)		
2006	Wave of the GSS	24.13%
2010	Wave of the GSS	17.40%
2014	Wave of the GSS	18.88%
2018	Wave of the GSS	16.11%

Note. GSS = general social survey.

When taken together, these questions effectively capture intergroup reliance and interpersonal integration, both of which are central to experiences of workplace fairness and justice (Roscigno et al. 2018).

Poor relations with one's supervisor are similarly captured with a two-component scale (α = 0.7) ranging from 0 to 6, derived from the following items (reverse-coded): "My supervisor is concerned with the welfare of those under him or her" (0–3, 3 = "not at all true") and "My supervisor is helpful to me in getting the job done" (0–3, 3 = "not at all true"). Prior work has demonstrated that such vertical dimensions of workplace experiences are important to one's sense of workplace dignity and injustice (e.g., Hodson 2001; Maume, Rubin, and Brody 2013; B. A. Rubin and Brody 2011).

Other Controls

Our models also importantly account for job tenure, organizational size, economic sector, urbanicity/rurality, region, and GSS wave. *Time at current job* (i.e., job tenure) is measured straightforwardly as the amount of time in years that the respondent has been working at the current place of employment. Specifically, individuals were asked, "How long have you worked in your present job for your current employer?" The mean for this indicator is 10.6 years with a standard deviation of 9.8. *Organizational size*, often equated in the literature with levels of bureaucracy, may capture the demographic implications for workplace experiences and social relations. It is derived from a question that asking "About how many people work at the location where you work?" Responses were coded in the GSS across seven size categories, and then recoded to midpoints (mean = 63.4) with the natural log version used within the following analyses.

The sectoral distinctions we consider (i.e., *core, high-wage service, low-wage service, public sector*) are consistent with conventional breakdowns in the labor markets literature and help account for potential effects associated with type of work. Specific sectors (i.e., core, high-wage service, and low-wage service) are captured with the GSS measure INDUS10, which includes relatively detailed three- and four-digit aggregate sector codes.[4] We also account for variations between public and private sector work, which may differ in terms of workplace protections (Byron 2010; Wilson, Roscigno, and Huffman 2013). Public sector is measured dichotomously with private sector as the referent, and was derived directly from the GSS measure WRKGOVT, which differentiates those who work for federal, state, or local government from those who are employed in the private sector.

We also control for *urbanicity/rurality* to account for potential spatial effects. Rural and urban residence are each coded dichotomously, with suburban as the referent. Regions include the Northeast, South, and West, with the Midwest serving as the referent. Finally, and given potential variations in reliability across GSS waves and the possibility that the salience of age and/or age discrimination may be variable across time, all models also control for the *GSS wave* being used. Recent analyses by Michael Hout and Orestes P. Hastings (2016) of core GSS items between 2006 and 2014 demonstrate significant reliability (i.e., over .85) overall, especially on demographics indicators, but somewhat less reliability when it comes to both the 2007–2009 recession period and indicators that have more subjective dimensions such as interpretations of inequality, broadly

speaking.[5] We control for each GSS wave in the models that follow to account for this.

ANALYTIC STRATEGY AND RESULTS

Our analyses proceed in two steps. First, we analyze the extent to which full-time workers between 40 and 70 report experiencing age-based employment discrimination, the character of that relationship, and whether other pertinent dimensions of status (i.e., gender, race/ethnicity, occupational status) and workplace relations mitigate or exacerbate age discrimination's likelihood directly or conditionally. Importantly, these models also account for job tenure, organizational, and spatial and temporal controls. We supplement our interpretations of discriminatory vulnerability with a visual plot of predicted probabilities across the age range of the respondents considered. Although analyses of age discrimination employ logistic regression, we reran models in linear regression as a robustness check. Results were similar to those we report below.

The second portion of our analyses highlights the implications for respondents' sense of job insecurity, job-related stress, and overall mental health. These models make use of logistic (for job insecurity) and linear regression (for job-related stress and mental health). Replication of logistic models revealed parallel findings when linear techniques were employed. Linear analyses of our largely ordinal outcome (i.e., job-related stress) likewise revealed similar results when ordinal logistic analyses were employed. Regarding all three of these outcomes, we offer supplemental analyses in the Supplemental Appendix—analyses that test for potential variations in the effects of age discrimination by gender, race/ethnicity, occupational status, and workplace relations. Significant interactions are reported in our discussion of results. Like our previous modeling, these models include controls surrounding job tenure, organizational size, sector, urbanicity/rurality, region, and GSS wave.

Vulnerability to Workplace Age Discrimination

Table 2 reports logistic regression estimates of age discrimination at one's current place of employment. Model 1 includes control variables specified earlier, while Model 2 introduces other core dimensions of status and workplace relational indicators. We also explore the possibility of conditional effects of age by, for instance, gender, coworker relations, and so on. As denoted by "ns" in Model 2, no statistically significant interactions were observed in this regard and, thus, non-significant interactions were removed altogether from the final modeling reported.

Models 1 and 2 of Table 2 reveal a strong, persistent, and statistically significant impact of age on the overall likelihood of experiencing age discrimination in one's current place employment. Indeed, the effect observed, if anything, only intensifies in magnitude once other dimensions of status and workplace relations are considered. For interpretability purposes, we report in Figure 1 this baseline, nonlinear impact of age as a predicted probability, derived from the log-odds coefficient reported in Model 1. On average, over 6.5 percent of those between 40 and 70 years old and working full time report experiencing age discrimination at their current jobs, with a significantly higher and increasing rate for those 55 and above. The predicted probability of employment-based age discrimination is between 4 and 11 percent for those between 40 and 50 years of age. The effect, however, becomes notably and exponentially larger, jumping to almost 22 percent by age 60 and then nearly 36 percent by age 70. Importantly, this pattern is evident across models and in the face of controls reported at the bottom of the table.

Among controls, job tenure is associated with a reduction in age discrimination while organizational size is associated with an increase. Those in core, high-wage and low-wage sectors report somewhat lower encounters with age discrimination compared with those in extractive and other sectoral domains, while public sector employees report a higher incidence compared with those in the private sector. Although not necessarily expected, this higher public sector incidence probably has to do with the career character of public sector employment and greater expectations of mobility with time (in this regard, see Byron 2010). It may also be a consequence of public sector reforms over the last two decades—reforms that have led to a contraction of opportunities and reductions in traditional public sector protections (Wilson et al. 2013).

Model 2 includes other dimensions of status, coworker cohesion, and poor supervision and, as noted earlier, the possibility of conditional associations. No conditional associations between age

Table 2. Log Odds Estimates (Standard Errors) of Likelihood of Experiencing Workplace Age Discrimination among Full-time Workers 40–70 Years Old by Key Status Attributes, Workplace Relations, and Controls.

	Age discrimination	
	(1)	(2)
Ln (Age)	4.442 (0.496)***	4.999 (0.523)***
Other status attributes and workplace relations		
Female		0.139 (0.148)
× Ln (Age)		ns
African American		−0.257 (0.221)
× Ln (Age)		ns
Other race/ethnicity		0.063 (0.234)
× Ln (Age)		ns
Occupational status		0.001 (0.003)
× Ln (Age)		ns
Good coworker relations		−0.351 (0.055)***
× Ln (Age)		ns
Poor relations with supervisor		0.240 (0.048)***
× Ln (Age)		ns
Controls		
Time with current employer	−0.021 (0.007)**	−0.024 (0.007)***
(Ln) Organizational size	0.098 (0.032)**	0.073 (0.034)*
Sector (ref = extractive and other)		
Core	−0.659 (0.283)*	−0.797 (0.291)**
High-wage service	−0.904 (0.278)***	−0.958 (0.290)***
Low-wage service	−0.743 (0.276)**	−0.839 (0.290)**
Public sector (ref = Private)	0.364 (0.175)*	0.354 (0.182)
Urban	−0.160 (0.143)	−0.165 (0.148)
Rural	−0.683 (0.274)*	−0.683 (0.284)*
Region (ref = Midwest)		
Northeast	−0.045 (0.205)	−0.089 (0.211)
South	−0.364 (0.193)	−0.413 (0.201)*
West	−0.051 (0.175)	0.028 (0.182)
GSS year (ref = 2002)		
2006	0.156 (0.186)	0.098 (0.192)
2010	−0.063 (0.209)	−0.186 (0.218)
2014	−0.209 (0.210)	−0.239 (0.217)
2018	−0.361 (0.227)	−0.386 (0.234)
−2 log-likelihood	1,764.573	1,626.904
Constant	−19.449	−20.370
Psuedo R^2	.077	.166
N	3,779	3,779

Source. GSS, 2002–2018.
Note. GSS = general social survey.
Two-tailed tests of significance: *$p < .05$. **$p < .01$. ***$p < .001$.

and gender, race/ethnicity, and occupational status, however, are observed in our analyses. This suggests, at least substantively, that men and women, African Americans and other racial/ethnic minorities, and white respondents, as well as those of high- and low-occupational status, have encounters with age discrimination at more or less equal levels.

Finally, and notable in Model 2, are strong effects of good coworker and poor supervisory

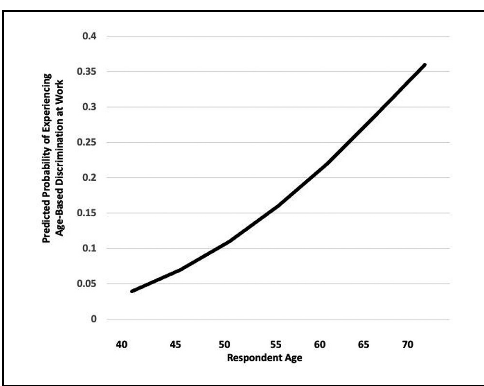

Figure 1. Impact of age on the probability of experiencing workplace age discrimination for those 40 to 70.

relations, and in expected directions. Good coworker relations seem to provide a protective buffer, reducing the likelihood of age discrimination in this 40- to 70-year-old sample of full-time workers. Poor supervisory relations, in contrast, magnify the likelihood of discriminatory experiences. This may be due to discrimination being perpetuated by immediate supervisors or a product of limited protections and age-targeted bullying in organizations with weak oversight. Both would be consistent with theory and analyses of the labor process, social justice appraisals, and outcomes pertaining to workplace stability (e.g., Roscigno et al. 2018).

Implications for Job Insecurity, Job-related Stress and Self-reported Mental Health

Table 3 considers the implications of age discrimination for sense of job insecurity, job-related stress, and poor mental health. Each of these three outcomes represents unique dimensions of social-psychological well-being that warrant attention above and beyond any tangible consequences of age discrimination (e.g., being fired, not being promoted, or not being hired). Model 1 reports the impact of age discrimination on each, while model 2 introduces other dimensions of status and workplace relations. Supplementary models, reported in Supplemental Appendix Table 1, interrogate possible interactions.

We find in Model 1 significant, strong, and consistently detrimental effects of age discrimination across each of the three social-psychological outcomes considered. That is, job insecurity, job-related stress, and poor mental health are significantly higher for those in our 40- to 70-year-old sample who report having experienced age-based discrimination at their current jobs. Importantly, such effects persist in the face of controls, reported at the bottom of the table, and do not appear to vary by age (denoted by the non-significance of interactions with age). Such findings speak to age discrimination's social-psychological implications and wider costs. Effects diminish moderately yet persist even when race/ethnicity, gender, occupational status, and workplace relations are accounted for in Model 2.

Given somewhat declining coefficient sizes for age discrimination across Models 1 and 2, we suspect that some of the age discrimination effect is probably tied especially to workplace relations and perhaps job tenure. Consistent and strong effects surrounding good coworkers and poor supervisors, reported in Model 2, are indeed noteworthy. Individuals in workplace contexts characterized by good coworker relations uniformly benefit and experience a protective buffer when it comes to job insecurity, job stress, and mental health. Conversely, those reporting poor relations with their immediate supervisors consistently report negative consequences for job security, stress levels, and mental health more generally. Our analyses in Table 3 suggest that the overall impact of horizontal and vertical relations is especially important.

We also ran supplementary models, reported in Supplemental Appendix Table 1, that explore whether or how the effects of age discrimination might vary depending on other dimensions of status and workplace relational dynamics, noted previously. No such interactions are observed when it comes to job insecurity—a finding that suggests uniformity in age discrimination's impact across status groups and relational contexts. When it comes to job-related stress and mental health, three significant interactions are observed and are thus worthy of further discussion.

First, although those of other racial/ethnic minority backgrounds generally report lower overall job-related stress compared with whites, their job-specific stress is significantly higher in workplace contexts where age discrimination is more prevalent. Second, and perhaps even more noteworthy, consistent conditional effects—effects reported in summary fashion in Figure 2a and 2b—are observed for poor supervisory relations.

Table 3. Log Odds and Linear Regression Estimates of Job-related Insecurity, Stress, and Poor Mental Health among Full-time Workers 40 to 70 Years Old by the Experience of Workplace Age Discrimination, Key Status, and Relational Variables and Controls.

	Job insecurity		Job-related stress		Poor mental health	
	(1)	(2)	(1)	(2)	(1)	(2)
Age discrimination	1.589	1.370	0.437	0.313	3.329	2.497
	(0.218)***	(0.228)***	(0.065)***	(0.064)***	(0.426)***	(0.430)***
Ln (Age)	0.057	0.368	−0.765	−0.683	−2.978	−2.532
	(0.571)	(0.584)	(0.117)***	(0.115)***	(0.770)***	(0.763)***
Age discrimination × Ln (Age)	Ns	ns	ns	ns	ns	ns
Other Status and workplace relational attributes						
Female		0.319		0.070		0.555
		(0.173)		(0.034)*		(0.223)*
African American		0.784		−0.277		−1.223
		(0.206)***		(0.049)***		(0.324)***
Other race/ethnicity		0.247		−0.159		−0.254
		(0.281)		(0.059)**		(0.393)
Occupational status		−0.006		0.006		−0.021
		(0.004)		(0.001)***		(0.005)***
Good coworker relations		−0.150		−0.068		−0.262
		(0.067)*		(0.015)***		(0.098)**
Poor relations with supervisor		0.128		0.075		0.439
		(0.056)*		(0.012)***		(0.083)***
Controls						
Time with current employer	−0.026	−0.026	0.011	0.009	−0.005	−0.005
	(0.009)**	(0.009)**	(0.002)***	(0.002)***	(0.011)	(0.011)
(Ln) Organizational size	−0.020	−0.040	0.029	0.019	−0.022	−0.013
	(0.039)	(0.040)	(0.008)***	(0.008)*	(0.051)	(0.051)
Sector (ref = Extractive and other)						
Core	0.712	0.714	0.058	0.065	0.165	−0.028
	(0.390)	(0.397)	(0.077)	(0.075)	(0.505)	(0.500)
High-wage service	−0.304	−0.295	0.145	0.079	0.277	0.370
	(0.393)	(0.409)	(0.074)*	(0.073)	(0.486)	(0.484)
Low-wage service	0.150	0.020	0.022	0.032	0.796	0.488
	(0.384)	(0.395)	(0.074)	(0.073)	(0.486)	(0.486)
Public sector (ref = Private)	0.136	−0.005	−0.057	−0.073	0.124	0.092
	(0.228)	(0.395)	(0.045)	(0.044)	(0.295)	(0.294)
Urban	0.030	−0.032	−0.004	0.027	0.037	−.060
	(0.170)	(0.175)	(0.035)	(0.035)	(0.222)	(0.231)
Rural	−0.257	−0.271	0.003	0.025	0.185	−0.007
	(0.285)	(0.292)	(0.057)	(0.056)	(0.373)	(0.372)
Region (ref = Midwest)						
Northeast	−0.079	−0.076	−0.005	−0.018	−0.582	−.612
	(0.279)	(0.285)	(0.050)	(0.050)	(0.335)	(0.332)
South	0.655	0.532	0.034	0.062	−0.152	−.080
	(0.221)**	(0.227)*	(0.045)	(0.044)	(0.294)	(0.292)
West	0.372	0.427	−0.062	−0.033	−0.476	−.382
	(0.221)	(0.227)	(0.043)	(0.043)	(0.283)	(0.283)
GSS Year (ref = 2002)						
2006	−0.746	−0.818	0.096	0.085	−1.168	−1.178
	(0.253)**	(0.258)**	(0.046)*	(0.045)	(0.303)***	(0.300)***
2010	0.268	0.135	0.104	0.086	0.070	.007
	(0.235)	(0.241)	(0.050)*	(0.049)	(0.331)	(0.328)
2014	−0.308	−0.415	−0.048	−0.038	−0.275	−.280
	(0.251)	(0.258)	(0.050)	(0.048)	(0.325)	(0.322)
2018	−1.279	−1.349	0.035	0.034	−0.257	−.146
	(0.314)***	(0.320)***	(0.052)	(0.051)	(0.340)	(0.337)
−2 Log-likelihood	1,228.713	1,177.674	–	–	–	–
Constant	−2.572	−3.147	4.718	4.394	14.735	14.691
Pseudo/Adjusted R^2	.131	.177	.034	.081	.021	.045
N	2,250	2,250	3,776	3,776	3,756	3,756

Source. GSS, 2002–2018.
Note. GSS = general social survey.
Two-tailed tests of significance: $*p < .05$. $**p < .01$. $***p < .001$.

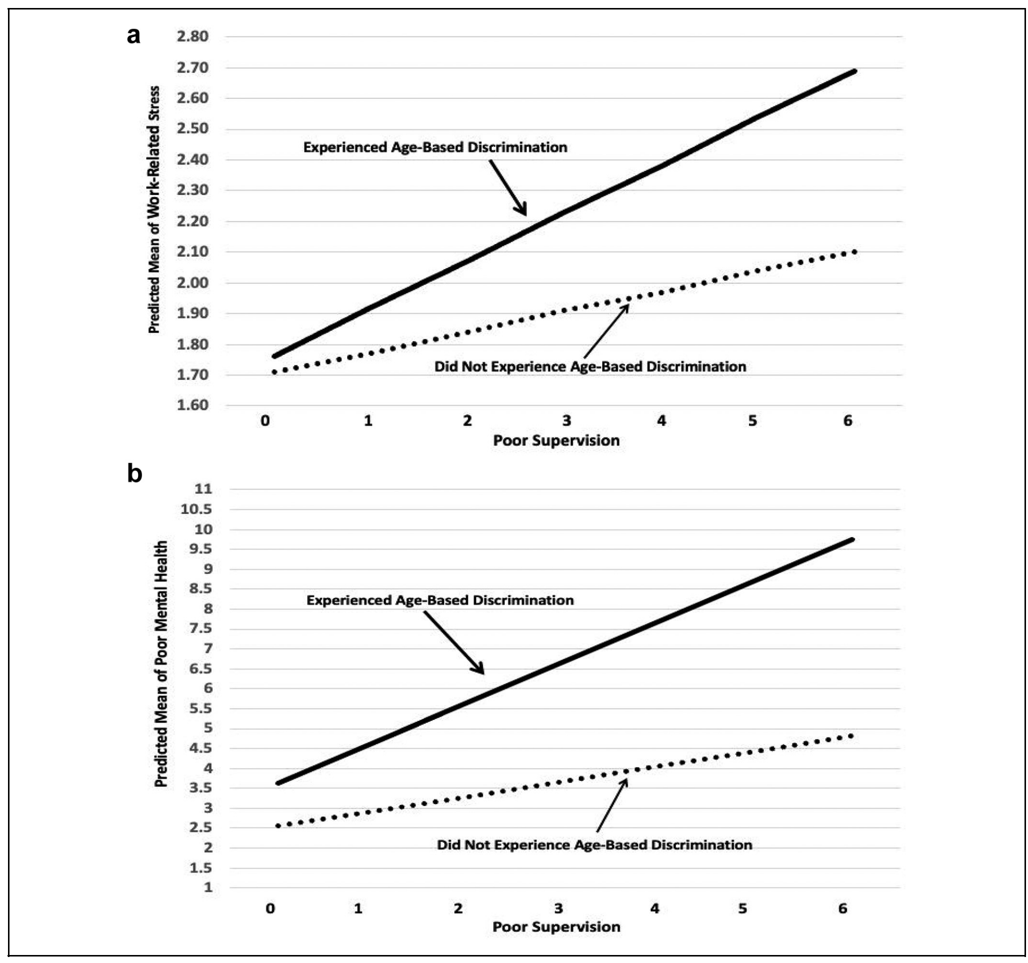

Figure 2. Conditional impact of poor supervisory relations on (a) work-related stress depending on whether respondent has experienced age discrimination in their current workplace and (b) mental health depending on whether respondent has experienced age discrimination in their current workplace.

These figures suggest that when age discrimination and poor supervision occur jointly, there is strong, negative, and compounding impact on job-related stress and mental health.

DISCUSSION AND CONCLUSION

Status vulnerability has been a core focus over the last two decades in sociology of work, organizations, and inequality scholarship (e.g., Grusky, Western, and Wimer 2011; Kalleberg 2009). Such themes likewise have received attention from critical gerontology scholars—scholars who have related, even more specifically, heighted vulnerabilities among aging persons in the United States and internationally (e.g., Calasanti 2016; Lewchuk, Clarke, and de Wolff 2008; Phillipson 2019; Vosko 2006). This article, with its analytic focus on workplace age discrimination and its implications for social-psychological well-being, helps bridge these literatures and their complimentary insights and empirically interrogate key relations.

Our analyses, which draw on nearly 4,000 full-time workers between 40 and 70 years of age and that employ a host of contextual controls, markers of status, and indicators of workplace social relations, provide several key insights that should be of interest to inequality, aging, workplace,

social-psychological, and mental health scholars. First, vulnerability to age discrimination in one's current job, captured in our analyses by self-reports, intensifies with age and in relatively uniform ways across gender, racial/ethnic, and occupational status groups. These other dimensions of status undoubtedly represent unique and important vulnerabilities in and of themselves—a fact denoted by the large literatures on gender inequality (Correll et al. 2007; Quadlin 2018; Yavorsky 2019), racial/ethnic inequality (Gaddis 2014; McBrier and Wilson 2004; Pager 2007), and stratification among high- and low-status workers (e.g., Crowley 2014; Kalleberg and Sørensen 1979; Roscigno 2019). The resilient, consistent, and relatively uniform impact of age on age-specific discrimination, however, points to a reality that has yet to be adequately incorporated into workplace inequality research in our view—namely, that age is a poignant dimension of status in and of itself. It is also an important axis of social closure within contemporary workplaces.

Beyond vulnerability to age discrimination, our discussion and predictions also highlighted several social-psychological consequences. Our findings in this regard are especially clear, consistent, and important. First, age discrimination undermines job security and intensifies both job-related stress and poor mental health. Second, with but few exceptions, such effects are largely consistent across gender, race/ethnicity, and occupational status. Third, age discrimination's impact appears to be at least partly conditional depending on proximate relations especially with one's supervisor(s). As noted earlier in Figures 2a and 2b, the deleterious impact of age discrimination on stress and mental health is exacerbated where immediate supervision is poor. This conditional effect, along with baseline effects for poor supervisors and good coworkers throughout, point to the importance of proximate workplace relations (vertical and horizontal) and their consequences for aging workers and their well-being.

Among other status attributes, although not particularly surprising given prior findings in social-psychological and mental health literatures, are the generally higher levels of self-reported stress and poor mental health observed in our results for women, and lower levels of self-reported stress and poor mental health for racial/ethnic minorities and African Americans in particular. Workers of higher occupational status—that is, workers who often work more hours, who receive higher returns and who have better safety nets and resources at their disposal, on average—report higher overall levels of job-related stress but better overall mental health.

We recognize and acknowledge, of course, that our use of cross-sectional data poses challenges especially when it comes to assessing the direction of the key relationships we have described. Alternative interpretations should certainly be considered. First and foremost, aging workers' inclination to recognize discrimination may stem from poor workplace relations or heighted stress to begin with, in which case, causality could arguably be reversed. However, it is somewhat difficult for us to conceive of a process wherein those with a heightened sense of insecurity, stress, or poor mental health would either somehow know or self-select into workplace environments where age discrimination is more common. Indeed, our interpretations are more consistent with prior research regarding discrimination's social-psychological impact (e.g., Williams et al. 2019; Williams et al. 1997) as well as what official complaints of workplace age discrimination show (EEOC 2018; Lain and Loretto 2016; Lassus et al. 2015).

Second, we also suspect that data limitations and our analyses result in an underestimate the age discrimination. This would arguably be the case in situations where those experiencing age discrimination are never hired in the first place or are pushed out of the job market altogether. Some work in this regard finds that workplace age discrimination relates to older workers' turnover and retirement decision (Redman and Snape 2006), while other longitudinal studies do not find such a connection (e.g., Marchiondo et al. 2019). Relatedly, age-specific discrimination in involuntary terminations and/or non-hiring may be more prevalent for women, minoritized persons, and those of low education. Although uniformity of age discrimination effects across racial/ethnic, gender, and occupational status groups within our findings is interesting, we remain reluctant (given data and measurement limitations) to discount the possibility of unique gendered, racialized, and/or class-based processes. We hope that future work will pursue such questions and pay particular attention to both a wider set of age-discriminatory experiences (i.e., hiring, termination, harassment, demotion, and promotion), connections to race/ethnicity, gender, and high-

and low-status occupational positions, and causal pathways.

Third, we acknowledge that that self-reported age discrimination, especially without reference to what precisely transpired, likely misses unique gendered, racialized, and/or occupationally specific processes. In this regard, some studies have called for a workplace age discrimination scale (Marchiondo et al. 2016), which may be helpful. The single item GSS item on which our analyses are based does not fully capture the complexity and character of workplace discrimination, to be sure. More detailed and nuanced survey items and analyses, but also first-hand qualitative analyses of discrimination experiences and secondary analyses of discrimination case files and related materials, would be especially useful in future work.

Finally, although we controlled for GSS year to help account for potential changes over time and possible biases across waves, our analyses are really not designed to capture changes in exposure to, or effects of, workplace age discrimination over time. We think it important to recognize that, beyond historical and structural shifts in employment precarity, changes in age vulnerability and discrimination may also result from changes in presence of (and viewpoints about) older workers stemming from delayed retirement, workers coming out of retirement (e.g., following the 2008 financial crisis), and/or a changing dominant cultural narratives of what it means to age well (i.e., discourse on "successful," "productive," or "active" aging; see especially Calasanti 2016; Dillaway and Byrnes 2009; Katz and Calasanti 2015). Such processes, which include cultural frames surrounding aging and what it means, may be extraordinarily important and a very fruitful avenue for future research.

Our analyses of age discrimination and findings regarding its social-psychological impact are long overdue and contribute in our view to more general relational conceptualizations of inequality within the work, organizations, and stratification literatures (see especially Tomaskovic-Devey and Avent-Holt 2019). Several key questions nevertheless remain and warrant further attention. How might those experiencing ageist encounters in the workplace confront and/or respond in ways that restore a sense of security? What are the stress and mental health consequences for those eventually pushed out of their current jobs and/or who attempt to find comparable reemployment? Given demographic trends noted at the outset as well as inadequate and declining labor force protections over the last two decades, we see these questions as particularly important to inequality, work, gerontology, and mental health research. Moreover, addressing them will elevate concerns regarding fairness and social justice—fairness and justice that often undergirds inequality, workplace, and gerontological scholarship.

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SUPPLEMENTAL MATERIAL

Supplemental material for this article is available online.

NOTES

1. Age discrimination was indeed cited in over one-fifth Equal Employment Opportunity Commission claims in 2020 (Equal Employment Opportunity Commission 2021). This places workplace age discrimination behind race (32.7 percent of claims) and gender discrimination (31.7 percent of claims).
2. In considering causal interpretation, it is also difficult to conceive of a process wherein those of a particular status or those with an inclination to perceive job insecurity, experience job-related stress, or report poor mental health would somehow self-select into workplace environments where age-specific discrimination is more common.
3. Initial analyses revealed that the natural log function of age better captured the patterning observed than either a direct measure of age or a squared term. It also produced the most reliable estimates. We also theoretically expected a curvilinear relationship at the outset and, specifically, that vulnerability to age discrimination would intensify with age.
4. Core sector includes industries such as construction, manufacturing, materials and food processing, communications, and transportation. High-wage service sector employment entails industries such as finance/banking, administration, wholesale sales, justice/law, management and scientific consulting.

Low-wage service sector employment includes retail sales, administrative and educational support services, health and related support services, childcare, food services, and other personal services. The referent excluded from the modeling includes extractive industries and others that do not fit into the designations above.

5. In this regard, Michael Hout and Orestes P. Hastings (2016) are referring the GSS questions regarding attributions respondents make surrounding race or gender inequality generally, not reports of whether an individual has personally experienced status-based discrimination—the core of our focus. Nevertheless, the caution they offer regarding variability across waves in the reliability of certain indicators is well heeded and reflected in our inclusion of these controls.

REFERENCES

AARP. 2021. “As Economy Improves, Age Discrimination Continues to Hold Older Workers Back.” doi:10.26419/res.00445.003.

AARP. 2022. “Is the Retirement Age Going Up?” Retrieved May 17, 2022 (https://www.aarp.org/retirement/social-security/questions-answers/is-the-full-retirement-age-going-up.html).

Albert, Rocío, Lorenzo Escot, and José Andrés Fernéndez-Cornejo. 2011. “A Field Experiment to Study Sex and Age Discrimination in the Madrid Labour Market.” *International Journal of Human Resource Management* 22:351–75.

Altmann, Ros. 2015. *A New Vision for Older Workers: Retain, Retrain, Recruit*. London, England: Department for Work and Pensions.

Barrett, Anne E. 2022. “Centering Age Inequality: Developing a Sociology-of-Age Framework.” *Annual Review of Sociology* 48:213–32.

Benach, J., A. Vives, M. Amable, C. Vanroelen, G. Tarafa, and C. Muntaner. 2014. “Precarious Employment: Understanding an Emerging Social Determinant of Health.” *Annual Review of Public Health* 35:229–53.

Berger, Ellie D. 2009. “Managing Age Discrimination: An Examination of the Techniques Used When Seeking Employment.” *Gerontologist* 49:317–32.

Berger, Joseph, M. Hamit Fisek, Robert Norman, and David Wagner. 1998. “Formation of Reward Expectations in Status Situations.” Pp. 121–53 in *Status, Power, and Legitimacy*, edited by Joseph Berger and Morris Zelditch, Jr. New Brunswick, NJ: Transaction.

Brand, Jennie E., John R. Warren, Pascale Carayon, and Peter Hoonakker. 2007. “Do Job Characteristics Mediate the Relationship between SES and Health? Evidence from Sibling Models.” *Social Science Research* 36:222–53.

Browne, Irene, and Joya Misra. 2003. “The Intersection of Gender and Race in the Labor Market.” *Annual Review of Sociology* 29:487–513.

Brooke, Libby, and Philip Taylor. 2005. “Older workers and employment: Managing age relations.” *Ageing and Society* 25:415–29.

Budig, Michelle J., and Paula England. 2001. “The Wage Penalty for Motherhood.” *American Sociological Review* 66:204–25.

Bureau of Labor Statistics. 2019. “Why Are Older People Working Longer?” Retrieved May 17, 2022 (https://www.bls.gov/opub/mlr/2019/beyond-bls/why-are-older-people-working-longer.htm).

Burgard, Sarah A., and Katherine Y. Lin. 2013. “Bad Jobs, Bad Health? How Work and Working Conditions Contribute to Health Disparities.” *American Behavioral Scientist* 57:1105–27.

Byron, Reginald A. 2010. “Discrimination, Complexity, and the Public/Private Sector Question.” *Work and Occupations* 37:435–75.

Calasanti, Toni. 2016. “Combating Ageism: How Successful is Successful Aging?” *The Gerontologist* 56:1093–101.

Collins, , and Patricia Hill. 2000. *Black Feminist Thought: Knowledge, Consciousness and the Politics of Empowerment*. New York: Routledge.

Correll, Shelley J. 2004. “Constraints into Preferences: Gender, Status and Emerging Career Aspirations.” *American Sociological Review* 69:93–113.

Correll, Shelley J., Stephen Benard, and In Paik. 2007. “Getting a Job: Is There a Motherhood Penalty?” *American Journal of Sociology* 112:1297–338.

Crowley, Martha. 2014. “Class, Control and Relational Indignity: Labor Process Foundations for Workplace Humiliation, Conflict and Shame.” *American Behavioral Scientist* 58:416–34.

Crystal, Stephen, Dennis G. Shea, and Adriana M. Reyes. 2017. “Cumulative Advantage, Cumulative Disadvantage, and Evolving Patterns of Late-life Inequality.” *The Gerontologist* 57:910–20.

Cuddy, Amy J C, Michael I Norton, and Susan T Fiske. 2005. “This old stereotype: The pervasiveness and persistence of the elderly stereotype.” *Journal of Social Issues* 61:267–85.

Davis, James A., Tom W. Smith, and Peter V. Marsden. 2007. *General Social Survey Cumulative Codebook: 1972–2006*. Chicago, IL: National Opinion Research Center.

Dillaway, Heather E., and Mary Byrnes. 2009. “Reconsidering Successful Aging: A Call for Renewed and Expanded Academic Critiques and Conceptualizations.” *Journal of Applied Gerontology* 28:702–22.

Doering, Laura, and Sarah Thébaud. 2017. “The Effects of Gendered Occupational Roles on Men’s and Women’s Workplace Authority: Evidence from Microfinance.” *American Sociological Review* 82:542–67.

Duncan, Colin, and Wendy Loretto. 2004. “Never the Right Age? Gender and Age-based Discrimination in Employment.” *Gender, Work and Organization* 11:95–115.

Egdell, Valerie, Gavin Maclean, Robert Raeside, and Tao Chen. 2020. “Age Management in the Workplace: Manager and Older Worker Accounts of Policy and Practice.” *Ageing & Society* 40:784–804.

Ely, Robin J., and David A. Thomas. 2001. “Cultural Diversity at Work: The Effects of Diversity Perspectives on Work Group Processes and Outcomes.” *Administrative Science Quarterly* 46:229–73.

Fernandez, Roberto M., and Isabel Fernandez-Mateo. 2006. “Networks, Race and Hiring.” *American Sociological Review* 71:42–71.

Ferraro, Kenneth F., and Tetyana P Shippee. 2009. “Aging and cumulative inequality: How does inequality get under the skin?” *The Gerontologist* 49:333–43.

Finkelstein, Lisa M., Eden B. King, and Elora C. Voyles. 2015. “Metastereotypes and Cross-age Interactions at Work: A Meta View of Stereotypes in the Workplace.” *Work, Aging, and Retirement* 1:26–40.

Finkelstein, Lisa M., Katherine M. Ryan, and Eden B. King. 2013. “What Do the Young (Old) People Think of Me? Content and Accuracy of Age-based Metastereotypes.” *European Journal of Work and Organizational Psychology* 22:633–57.

Fisek, M. Hamit, Joseph Berger, and Robert Z. Norman. 1991. “Participation in Heterogeneous and Homogeneous Groups: A Theoretical Integration.” *American Journal of Sociology* 97:114–42.

Foschi, Martha, Larissa Lai, and Kirsten Sigerson. 1994. “Gender and Double Standards in the Assessment of Job Applicants.” *Social Psychology Quarterly* 57: 326–39.

Francioli, Stephane P., and Michael S. North. 2021. The Older Worker: Gender and Age Discrimination in the Workplace. Pp. 215–35 in *Handbook of the Psychology of Aging*. K. Warner Schaie and Sherry L. Willis, editors. Academic Press.

Gaddis, S. Michael. 2014. “Discrimination in the Credential Society: An Audit Study of Race and College Selectivity in the Labor Market.” *Social Forces* 93: 1451–79.

Garstka, Teri A., Michael T Schmitt, Nyla R Branscombe, and Mary Lee Hummert. 2004. “How young and older adults differ in their responses to perceived age discrimination.” *Psychology and Aging* 19: 326–35.

George, Linda K. 1998. “Self and identity in later life: Protecting and enhancing the self.” *Journal of Aging and Identity* 3:133–52.

Golden, Lonnie. 2015. *Irregular Work Scheduling and Its Consequences*. Briefing Paper #394. Washington, DC: Economic Policy Institute.

Granlesse, Jacqueline, and Gemma Sayer. 2006. “Gendered Ageism and Lookism: A Triple Jeopardy for Female Academics.” *Women in Management Review* 21:500–17.

Grenier, Amanda, Chris Phillipson, Debbie L. Rudman, Stephanie Hatzifilalithis, Karen Kobayashi, and Patrik Marier. 2017. “Precarity in Late Life: Understanding New Forms of Risk and Insecurity.” *Journal of Aging Studies* 43:91–14.

Grusky, David, Bruce Western, and Christopher Wimer, eds. 2011. *The Great Recession*. New York: Russell Sage Foundation.

Hannan, Michael T., and John Freeman. 1977. “The Population Ecology of Organizations.” *American Journal of Sociology* 82:929–64.

Harnois, Catherine E. 2015. “Race, Ethnicity, Sexuality, and Women’s Political Consciousness of Gender.” *Social Psychology Quarterly* 78:365–86.

Harris, Kelly, Sarah Krygsman, Jessica Waschenko, and Debbie L. Rudman. 2018. “Ageism and the Older Worker: A Scoping Review.” *The Gerontologist* 58:e1–14.

Henry, Eleanor G., and James P. Jennings. 2004. “Age Discrimination in Layoffs: Factors of Injustice.” *Journal of Business Ethics* 54:217–24.

Hodson, Randy. 2001. *Dignity at Work*. Cambridge, England: Cambridge University Press.

House, James S., Karl R. Landis and Debra Umberson. 1988. “Social Relationships and Health.” *Science* 241:540–45.

Hout, Michael, and Orestes P. Hastings. 2016. “Reliability of the Core Items in the General Social Survey: Estimates from the Three-wave Panels, 2006–2014.” *Sociological Science* 3:971–1002.

Hout, Michael, Tom W. Smith, and Peter Marsden. 2016. “Prestige and Socioeconomic Scores for the 2010 Census Codes.” GSS Methodological Report No. 124. Retrieved November 1, 2018 (http://gss.norc.org/Documents/reports/methodological-reports/MR124.pdf).

Jex, Steve M., and David M Gudanowski. 1992. “Efficacy beliefs and work stress: An exploratory study.” *Journal of Organizational Behavior* 13: 509–17.

Kalev, Alexandra. 2014. “How You Downsize Is Who You Downsize: Biased Formalization, Accountability and Managerial Diversity.” *American Sociological Review* 79:109–35.

Kalleberg, Arne L. 2009. “Precarious Work, Insecure Workers: Employment Relations in Transition.” *American Sociological Review* 74:1–22.

Kalleberg, Arne L. 2018. *Precarious Lives: Job Insecurity and Well-being in Rich Democracies*. London, England: Polity.

Kalleberg, Arne L., and Aage B. Sørensen. 1979. “The Sociology of Labor Markets.” *Annual Review of Sociology* 5:351–79.

Katz, Stephen, and Toni Calasanti. 2015. “Critical Perspectives on Successful Aging: Does It ‘Appeal More than It Illuminates?’” *The Gerontologist* 55:26–33.

Kelley, Christopher P., Shane D. Soboroff, and Michael J. Lovaglia. 2017. "The Status Value of Age." *Social Science Research* 66:22–31.

Kerr, Jeffrey, and John W. Slocum. 1987. "Managing Corporate Culture through Reward Systems." *Academy of Management Executive* 1:99–108.

Lain, David, Laura Airey, Wendy Loretto, and Sarah Vickerstaff. 2019. "Understanding Older Worker Precarity: The Intersecting Domains of Jobs, Households and the Welfare State." *Ageing & Society* 39: 2219–41.

Lain, David, and Wendy Loretto. 2016. "Managing Employees beyond Age 65: From the Margins to the Mainstream?" *Employee Relations* 38:646–64.

Lassus, Lora, Steven Lopez, and Vincent J. Roscigno. 2015. "Aging Workers and the Experience of Job Loss." *Research in Social Stratification and Mobility* 41:81–91.

Lewchuk, Wayne, Marlea Clarke, and Alice de Wolff. 2008. "Working Without Commitments: Precarious Employment and Health." *Work, Employment & Society* 22:387–406.

Loretto, Wendy, and Phil White. 2006. "Employers' Attitudes, Practices and Policies towards Older Workers." *Human Resource Management Journal* 16:313–30.

Loscocco, Karyn A., and Arne L. Kalleberg. 1988. "Age and the Meaning of Work in the United States and Japan." *Social Forces* 67:337–56.

Lovaglia, Michael, Jeff Lucas, John Houser, Shane Thye, and Barry Markovsky. 1998. "Status Processes and Mental Ability Test Scores." *American Journal of Sociology* 104:195–228.

Mandel, Hadas, and Moshe Semyonov. 2014. "Gender Pay Gap and Employment Sector: Sources of Earnings Disparities in the United States, 1970–2010." *Demography* 51:1597–618.

Marchiondo, Lisa A., Ernest Gonzales, and Shan Ran. 2016. "Development and validation of the workplace age discrimination scale." *Journal of Business and Psychology* 31:493–513.

Marchiondo, Lisa A., Ernest Gonzales, and Larry J. Williams. 2019. "Trajectories of Perceived Workplace Age Discrimination and Long-Term Associations with Mental, Self-Rated, and Occupational Health." *Journals of Gerontology-Series B Psychological Sciences and Social Sciences* 74:655–63.

Maume, David J., Beth A. Rubin, and Charles J. Brody. 2013. "Race, Management Citizenship Behavior, and Employees' Commitment and Well-being." *American Behavioral Scientist* 58:309–30.

McBrier, Debra, and George Wilson. 2004. "Going Down: Race and Downward Occupational Mobility in a Changing Economy." *Work and Occupations* 31:238–322.

McCann, Robert M., and Shaughan A. Keaton. 2013. "A Cross Cultural Investigation of Age Stereotypes and Communication Perceptions of Older and Younger Workers in the USA and Thailand." *Educational Gerontology* 39:326–41.

McDonald, Steve, Nan Lin, and Dan Ao. 2009. "Networks of Opportunity: Gender, Race, and Job Leads." *Social Problems* 56:385–402.

Melamed, David, and Scott V. Savage. 2016. "Status, Faction Sizes, and Social Influence: Testing the Theoretical Mechanism." *American Journal of Sociology* 122:201–32.

Meneton, Pierre, Nicolas Hoertel, Emmanuel Wiernik, Cédric Lemogne, Céline Ribet, Sébastien Bonenfant, Joël Ménard, Marcel Goldberg, and Marie Zins. 2018. "Work Environment Mediates A Large Part of Social Inequalities in the Incidence of Several Common Cardiovascular Risk Factors: Findings from the Gazel Cohort." *Social Science & Medicine* 216:59–66.

Moen, Phyllis, Erik Kajola, and Kate Schaefers. 2017. "Organizational Change around an Older Workforce." *The Gerontologist* 57:847–56.

Morgan, Stephen L. 2016. "A Coding of Social Class for the General Social Survey." GSS Methodological Report No. 125. Retrieved November 1, 2018 (http://gss.norc.org/Documents/reports/methodological-reports/MR125.pdf).

Morning, Ann. 2011. *The Nature of Race: How Scientists Think and Teach about Human Difference*. Berkeley, CA: University of California Press.

Mueller, Charles W., Jean E. Wallace, and James L. Price. 1992. "Employee Commitment: Resolving Some Issues." *Work & Occupations* 19:211–36.

Nelson, Todd D. 2005. "Ageism: Prejudice against our feared future self." *Journal of Social Issues* 61: 207–21.

Neumark, David, and Wendy A. Stock. 1999. "Age Discrimination Laws and Labor Market Efficiency." *Journal of Political Economy* 107:1081–125.

North, Michael S., and Susan T. Fiske. 2015. "Intergenerational Resource Tensions in the Workplace and beyond: Individual, Interpersonal, Institutional, International." *Research in Organizational Behavior* 35:159–79.

Pager, Devah. 2007. *Marked: Race, Crime, and Finding Work in an Era of Mass Incarceration*. Chicago, IL: University of Chicago Press.

Pager, Devah, and Lincoln Quillian. 2005. "Walking the Talk: What Employers Say Versus What They Do." *American Sociological Review* 70:355–80.

Palmore, Erdman B., Laurence Branch, and Diana K. Harris. 2005. *Encyclopedia of Ageism*. New York: Haworth Pastoral Press.

Pearlin, Leonard I. 1999. "Stress and Mental Health: A Conceptual Overview." Pp.161–75. *A Handbook for the Study of Mental Health: Social Context, Theories, and Systems*. Allan V Horwitz and Teresa L. Scheid, editors. Cambridge University Press.

Pearlin, Leonard I. 2010. "The Life Course and the Stress Process: Some Conceptual Comparisons."

Journals of Gerontology-Series B Psychological Sciences and Social Sciences 65 B(2):207–15.

Pfeffer, Jeffrey. 2018. *Dying for a Paycheck*. New York: HarperBusiness.

Phillipson, Chris. 2019. "'Fuller' or 'Extended' Working Lives? Critical Perspectives on Changing Transitions from Work to Retirement." *Ageing & Society* 39: 629–50.

Prentice, Deborah A., and Dale T. Miller. 2006. "Essentializing Differences between Women and Men." *Psychological Science* 17:129–35.

Quadlin, Natasha. 2018. "The Mark of a Woman's Record: Gender and Academic Performance in Hiring." *American Sociological Review* 83:331–60.

Redman, Tom, and Ed Snape. 2006. "The consequences of perceived age discrimination amongst older police officers: Is social support a buffer?" *British Journal of Management* 17:167–75.

Roscigno, Vincent J. 2019. "Discrimination, Sexual Harassment, and the Impact of Workplace Power." *Socius: Sociological Research for a Dynamic World*. Published electronically June. https://doi.org/10.1177/2378023119853894.

Roscigno, Vincent J., Carsten Sauer, and Peter Valet. 2018. "Rules, Relations and Work." *American Journal of Sociology* 123:1784–825.

Roscigno, Vincent J., Sherry Mong, Reginald Byron, and Griff Tester. 2007. "Age Discrimination, Social Closure and Employment." *Social Forces* 86:313–34.

Rosen, Benson, and Thomas H. Jerdee. 1976. "The Influence of Age Stereotypes on Managerial Decisions." *Journal of Applied Psychology* 61:428–32.

Rothenberg, Jessica, and Daniel S. Gardner. 2011. "Protecting Older Workers: The Failure of the Age Discrimination in Employment Act of 1967." *Journal of Sociology & Social Welfare* 38:9–30.

Rubin, Beth A., and Charles J. Brody. 2011. "Operationalizing Management Citizenship Behavior and Testing Its Impact on Employee Commitment, Satisfaction, and Mental Health." *Work and Occupations* 38:465–99.

Rubin, Donald B. 1987. *Multiple Imputation for Nonresponse in Surveys*. New York: John Wiley.

Schieman, Scott, and Paul Glavin. 2015. "The Pressure-status Nexus and Blurred Work-family Boundaries." *Work and Occupations* 43:3–37.

Schieman, Scott, Melissa Milkie, and Paul Glavin. 2009. "When Work Interferes with Life: The Social Distribution of Work-nonwork Interference and the Influence of Work-related Demands and Resources." *American Sociological Review* 74:966–87.

Schneider, Daniel, and Kristen Harknett. 2019. "Consequences of Routine Work-schedule Instability for Worker Health and Well-being." *American Sociological Review* 84:82–114.

Shah, Pinal, and Brian Kleiner. 2005. "New Developments Concerning Age Discrimination in the Workplace." *Equal Opportunities International* 24:15–23.

Shippee, Tetyana P., Lindsay R. Wilkinson, Markus H. Schafer, and Nathan D. Shippee. 2019. "Long-Term Effects of Age Discrimination on Mental Health: The Role of Perceived Financial Strain." *Journals of Gerontology-Series B Psychological Sciences and Social Sciences* 74:664–74.

Smith-Lovin, Linda, John V. Skvoretz, and Charlotte G. Hudson. 1986. "Status and Participation in Six-person Groups: A Test of Skvoretz's Comparative Status Model." *Social Forces* 64:992–1005.

Stainback, Kevin, and Donald Tomaskovic-Devey. 2012. *Documenting Desegregation: Racial and Gender Segregation in Private-sector Employment since the Civil Rights Act*. New York: Russell Sage Foundation.

Standing, Guy. 2012. "The Precariat: From Denizens to Citizens?" *Polity* 44:588–608.

Stevenson, William B. 1986. "Change in the Structure of a Bureaucracy: A Longitudinal Analysis." *Sociological Perspectives* 29:307–36.

Tausig, Mark. 1999. "Work and Mental Health." Pp. 255–74 in *Handbook of the Sociology of Mental Health*, edited by Carol S. Aneshensel and Jo C. Phelan. Boston, MA: Springer.

Tomaskovic-Devey, Donald, and Dustin Avent-Holt. 2019. *Relational Inequalities: An Organizational Approach*. Oxford, England: Oxford University Press.

Turner. R. Jay, and Franco Marino. 1994. "Social Support and Social Structure: A Descriptive Epidemiology." *Journal of Health and Social Behavior* 35: 193–212.

U.S. Equal Employment Opportunity Commission. 2018. *The State of Age Discrimination and Older Workers in the U.S. 50 Years after the Age Discrimination in Employment Act (ADEA)*. Retrieved December 1, 2019 (https://www.eeoc.gov/reports/state-age-discrimination-and-older-workers-us-50-years-after-age-discrimination-employment).

U.S. Equal Employment Opportunity Commission. 2021. "EEOC Releases Fiscal Year 2020 Enforcement and Litigation Data." Retrieved May 17, 2022 (https://www.eeoc.gov/newsroom/eeoc-releases-fiscal-year-2020-enforcement-and-litigation-data).

Vallas, Steven P. 2006. "Empowerment Redux: Structure, Agency, and the Re-making of Managerial Authority." *American Journal of Sociology* 111: 1677–717.

Vogt Yuan, Anastasia S. 2007. "Perceived Age Discrimination and Mental Health." *Social Forces* 86: 291–311.

Vosko, Leah F. 2006. *Precarious Employment: Understanding Labour Market Insecurity*. Montreal, QC: McGill-Queen's University Press.

Webster, Murray, Jr., and James E. Driskell, Jr. 1978. "Status Generalization: A Review and Some New Data." *American Sociological Review* 43:220–36.

Williams, David R., Harold W Neighbors, and James Jackson. 2003. "Racial/ethnic discrimination and

health: Findings from community studies." *American Journal of Public Health* 93:200–08.

Williams, David R., Jourdyn Lawrence, Brigette A. Davis, and Cecilia Vu. 2019. "Understanding How Discrimination Can Affect Health." *Health Services Research* 54:1374–88.

Williams, David R., Yan Yu, James S. Jackson, and Norman B. Anderson. 1997. "Racial Differences in Physical and Mental Health: Socio-economic Status, Stress and Discrimination." *Journal of Health Psychology* 2:335–51.

Wilson, George, Vincent J. Roscigno, and Matt L. Huffman. 2013. "Public Sector Transformation, Racial Inequality and Downward Occupational Mobility." *Social Forces* 91:975–1006.

Yavorsky, Jill E. 2019. "Uneven Patterns of Inequality: An Audit Analysis of Hiring-related Practices by Gendered and Classed Contexts." *Social Forces* 98: 461–92.

Zwerling, Craig, and Hillary Silver. 1992. "Race and Job Dismissals in a Federal Bureaucracy." *American Sociological Review* 57(5):651–60.