



## Intersectional trends in employment quality in older adults in the United States

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### ABSTRACT

Americans' working lives have become more precarious over the past several decades. Worsening employment quality has been linked to poorer physical and mental health and may disproportionately impact marginalized working populations. We examined differences in the quality and character of worker-employer relationships among older workers in the United States (US) across intersecting gender-racial/ethnic-educational subgroups. Using longitudinal data on employment stability, material rewards, workers' rights, working-time arrangements, unionization, and interpersonal power relations from the Health and Retirement Study (1992–2016), we used principal components analysis to construct an employment quality (EQ) score. We estimated intersectional differences in EQ, overall and over time, using generalized estimating equations. Overall, EQ was greatest for white men with college degrees and poorest for Latinx women with < high school degrees. Over time, EQ tended to remain unchanged or slightly worsen across intersectional strata; the greatest EQ reduction was for Latinx women with college degrees, while the greatest improvement was for white women with high school degrees. There are enduring and growing inequities in EQ for older marginalized adults in the US, which may contribute to growing health inequities.

### 1. Introduction

Over the past several decades, labor-market changes have precipitated a weakening of working-class power and a widespread deterioration of employment quality (EQ). Long-term employment with a single employer has been increasingly replaced by shorter-term arrangements, less stability, stagnating wages, and worsening access to health insurance, paid leave, pensions, and other benefits (Benach et al., 2014). Further, employer-worker power dynamics have become more imbalanced for much of the workforce, including less collective bargaining and participation in workplace decision-making (Benach et al., 2014). These EQ features are increasingly recognized as social determinants of health; there is a consensus that multidimensional EQ indicators are needed (Vives et al., 2020). Poor EQ can harm health through material deprivation, exposure to adverse physical and psychosocial working

conditions, and loss of control over one's life (Benach et al., 2014). Moreover, the effects of adverse EQ can compound over time, compromising access to necessities and hindering long-term planning. Thus, older adults nearing retirement may be especially vulnerable to the adverse effects of worsening EQ (Visser et al., 2018). However, existing US studies have focused on early to mid-career workers (Eisenberg-Guyot et al., 2020; Oddo et al., 2020; Peckham et al., 2019). Additionally, while studies in the US and elsewhere have found the greatest burden of poor EQ among women, those from racialized groups, and those with lower education levels, the potential amplification of EQ inequities at the intersection of gender, race, and educational attainment has not been examined.

US labor-market changes occur within the milieu of racist, classist, sexist and ageist policies and norms that exacerbate inequities (Bailey et al., 2017). These systems of oppression not only constrain

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employment opportunities, but also contribute to growing inequities in resource accumulation across one’s working years, which may exacerbate health inequities in older age (Ahonen et al., 2018; van Dijk et al., 2020). Thus, we aimed to examine differences in multidimensional EQ across intersecting subgroups of older US workers both overall and over time.

2. Methods

We used data from the Health and Retirement Study (HRS), a nationally representative biennial panel survey of US adults ≥ 50 (1992–2016) (Juster & Suzman, 1995). Analyses were restricted to 19,654 white, Black, and/or Latinx participants employed during ≥1 wave (mean: 4 waves; range: 1–13 waves). All analyses were performed in Stata MP Version 16.1 (StataCorp, College Station, TX).

2.1. EQ score construction

We constructed an EQ score for all respondents who indicated they were currently working for pay and/or unemployed and looking for work in a given wave. As detailed elsewhere (Andrea et al., 2021), our score is based on the multidimensional construct of EQ as theorized by Van Aerden et al. (2014); in short, EQ is the culmination - and interacting nature of - employment stability (e.g., job tenure), material rewards (e.g., income), workers’ rights and social protections (e.g., paid overtime), working time arrangements (e.g., hours worked), collective organization (e.g., union coverage), and interpersonal power relations (e.g., decision-making authority) (Van Aerden et al., 2014). The HRS items used to construct our score are described in Appendix Table 1. These items are similar to those used in other studies in the US and EU across most EQ dimensions; however, the HRS items used to proxy interpersonal power relations are more specifically relevant to older workers compared to prior EQ research. Because precariously employed individuals become unemployed more often than more stably employed individuals and are compositionally similar to the unemployed (Benach & Muntaner, 2007), unemployed participants were assigned values corresponding to poor EQ. As a sensitivity analysis, we also present estimates from analyses restricted to only participants reporting current employment (Appendix Figure A1); we observe no appreciable differences from the estimates discussed below. All items were age-standardized and missing items were multiply imputed prior to score development. To obtain an index including all dimensions, with some items contributing more weight to the index than others

(depending on the percentage of the variance each item explained), an aggregate EQ index was created using a data-driven principal components analysis approach with lower scores reflecting worse EQ (see Appendix Table A1 footnotes).

2.2. Multivariable analyses

We used linear generalized estimating equation (GEE) models to examine heterogeneity in overall EQ and change in EQ over time by intersecting gender, race/ethnicity (white, Black and Latinx), and educational groups. We tested between-group differences in the overall score and change over time using interaction terms. We subsequently estimated the predicted average EQ values for each subgroup overall and the change in EQ for each subgroup from 1992 to 2016.

3. Results

3.1. Overall EQ

EQ scores ranged from -2.10 to 2.75 (mean: 0.04). Racialized women tended to have worse EQ than others, while white men tended to have better EQ (Fig. 1). Within racial-gender subgroups, the more-educated tended to have better EQ than the less-educated, although less-educated white men often had comparable EQ to more-educated racialized workers. Latinx women with < high school degree (<HS) - 37.7% of all Latinx women - had the worst average EQ (EQ: 0.42; 95% CI: 0.51,-0.32). Conversely, college-educated white men - 37.0% of all white men - had the best average EQ (EQ:0.22; 95% CI: 0.19,0.24).

3.2. Cohort-level change in EQ over time

For most intersectional groups, EQ in 2016 was similar or worse compared to 1992. The greatest reductions in EQ were observed among racialized women, especially Latinx women with <HS (EQ: 0.41; 95% CI: 0.75,-0.08), GEDs (EQ: 0.70; 95% CI: 1.20,-0.21), and college degrees (EQ: 0.27; 95% CI: 0.46,-0.08) and Black women with <HS (EQ: 0.18; 95% CI: 0.35,-0.01) and college degrees (EQ: 0.12; 95% CI: 0.37,-0.00). Black men with <HS (EQ: 0.16; 95% CI: 0.30,-0.02) and white men with college degrees (EQ: 0.06; 95% CI: 0.13,-0.00) also experienced significant reductions in EQ. Alternatively, the only group to experience a significant increase in EQ over this period were white women with HS degrees (EQ:0.07; 95% CI: 0.00,0.14).

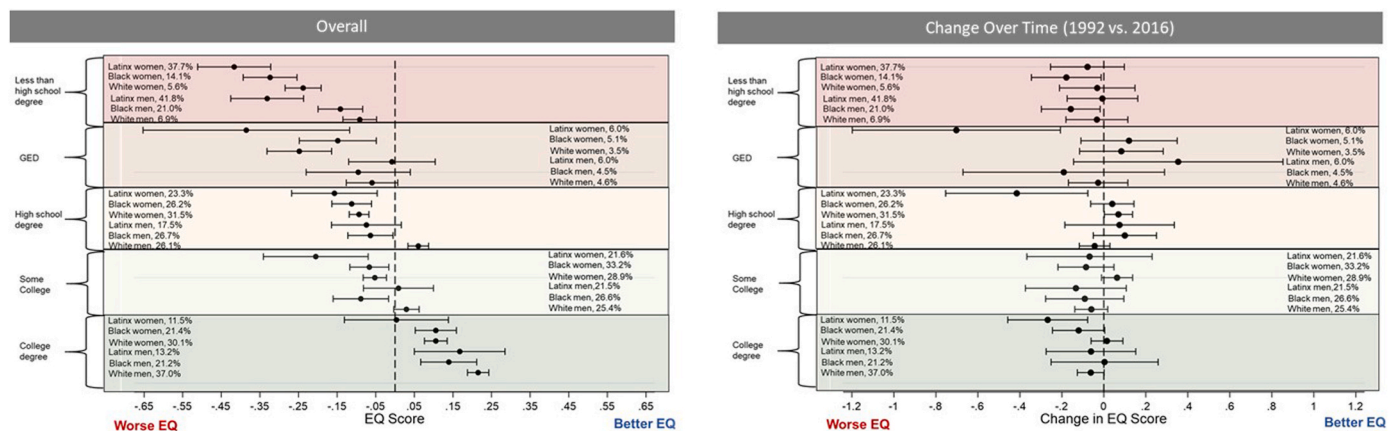


Fig. 1. Employment quality by educational attainment, race/ethnicity, and gender in adults aged 50 and older participating in the labor force, Health and Retirement Study 1992–2016. Displayed are subgroup-specific estimates and 95% confidence intervals derived using linear generalized estimating equations. All models included an exchangeable correlation structure, categorical indicators of survey year, robust standard errors clustered at the respondent-level, and respondent-level sampling weights. Reported percentages are within strata of race and gender (e.g., 37.7% of Latinx women had < high school degree). Abbreviations: EQ, Employment Quality; GED, General Equivalency Diploma.

#### 4. Discussion

Our findings underscore the inequitable effects of labor market changes on EQ for older US adults. They further highlight both enduring and growing inequities, and the importance of integrating an intersectional approach to studying EQ.

Our findings complement those observed in previous US-based evaluations of trends in multidimensional EQ (Eisenberg-Guyot et al., 2020; Oddo et al., 2020). However, our work extends this research by applying an intersectional framework to analyzing EQ trends among older adults. We observed inequities in EQ for those holding multiple marginalized identities, namely Black and Latinx women with low educational attainment. These inequities are products of centuries of racist and sexist policies that have shaped inequitable distributions of wealth, power, and opportunity (Bailey et al., 2017; Siqueira et al., 2014). While EQ has worsened or stagnated over time for Black and Latinx women irrespective of educational attainment, white women with HS degrees experienced gains in EQ. Lastly, while the most privileged group - white men with college degrees - had the greatest EQ overall, they too have experienced declining EQ. This may be due to declining union membership across race-gender groups and the decreasing value of a college degree for conferring bargaining power.

Our study had some limitations. First, the observed trends may be most generalizable to those born from 1931 to 1946. These workers were already mid-to late-career in the 1990s when substantial labor market changes were already underway. We may not observe the breadth of changes to EQ among younger workers for decades. Second, we were unable to include the self-employed; thus, results are not generalizable to these workers. Finally, although our multidimensional indicator has many strengths, it may mask domain-specific heterogeneity.

#### 5. Conclusion

Enduring and widening inequities in EQ may contribute to growing health inequities. Policies that protect workers' working conditions may be essential for reducing such inequities.

#### Credit author statement

SBA acquired the data, conducted the analyses, interpreted the results, and drafted the initial version of the manuscript. All authors advised SBA on study conceptualization, design, and results interpretation, and provided feedback on subsequent drafts of the manuscript. All authors approved the final version of the manuscript and agree to be accountable for all aspects of the work.

#### Financial disclosures

None.

#### Ethical statement

This research used publicly available, deidentified data. Thus, it was exempt from IRB review. However, the research falls under a broader research project approved by the University of Washington Institutional Review Board (study ID 5330).

#### Declaration of competing interest

None.

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#### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ssmph.2021.100868>.

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