



Racial and Ethnic Differences in Lifetime Work Environment Exposures and Early Disability Retirement

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Work plays a large role in human health. Less is known, however, about the impact of work environments as a key factor shaping racial and ethnic health disparities. Work environments that are physically demanding, stressful, and hazardous are typically associated with earlier onset of physical health decline that may be associated with increased risk of early retirement due to disability. No research to date, however, has examined how different work environments may affect differences in early disability retirement among Black, Hispanic, and white individuals.

This is important because eliminating racial and ethnic disparities in disability may hinge in part on understanding the role of potentially

modifiable aspects of the work environment. Furthermore, those who leave the workforce because of disability often take either Social Security Disability Insurance (SSDI) if they qualify or Old-Age Survivors Disability Insurance (OASDI) benefits at age 62 (instead of full retirement benefits at ages 65 to 67), which are both associated with lower benefit levels. Given that non-Hispanic Black and Hispanic individuals rely more heavily on Social Security than non-Hispanic whites, understanding more about potentially modifiable aspects of work environments could be one path to reducing racial and ethnic wealth disparities related to Social Security benefits.

To date, research on the impact of work

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environments on later life health outcomes has been limited by incomplete information on occupational exposures over the life course. New data resources from the Health and Retirement (HRS) Life History Mail Survey (LHMS) provide a more complete accounting of lifetime occupational history than previously available. In conjunction with linkage to job characteristic information from the Occupation Information Network database (O*NET) and with rich information on later life health and work transitions in the HRS, we are now in a position to more fully characterize the health and labor force impacts of lifetime occupational exposures.

Our main hypothesis is that differential lifetime exposure to harmful work contexts can help explain racial and ethnic disparities in early disability retirement. To set the stage for understanding this set of connections, we first examine the potential association between lifetime exposure to a range of potentially harmful work contexts (“bad” jobs) and early disability retirement. We then examine racial and ethnic differences in lifetime work exposure, expecting that we will see higher levels of lifetime exposure to harmful work contexts among Black and Hispanic individuals relative to white individuals. Given well-documented racial and ethnic disparities in disability, we expect that Black and Hispanic workers will be more likely to retire early due to disability compared to non-Hispanic whites. In a final step, we look to see if exposure to potentially harmful jobs explains some of the association between race and ethnicity and early disability retirement.

We extend previous research by separately examining a wide range of measures that

represent potentially dangerous work conditions. For example, work context characterized by hazardous conditions or equipment, requiring safety equipment, and very hot or cold temperatures were associated with early disability retirement. We also evaluated several work contexts that we found were associated with lower likelihood of early disability retirement including, for example, work contexts that involve face-to-face discussion, freedom to make decisions and, interestingly, time spent sitting.

We also go beyond previous research by examining racial and ethnic differences. We found that Black workers had higher lifetime exposure to a range of the harmful work contexts we investigated and lower levels of exposure to work contexts associated with lower likelihood of early disability retirement. For a small number of potentially hazardous work contexts (e.g., radiation, high places), Black workers had lower lifetime exposure compared to white workers, possibly indicating barriers to entry, such as certifications, that make Black workers less likely to hold jobs where such exposures occur. Black individuals were also more likely to retire before or at age 62 across all four measures of disability. Taken together, these findings supported our expectations based on research literature demonstrating differential occupational sorting by race and well-documented racial disparities in health and functional status.

In contrast, we did not find statistically significant differences in exposure to harmful work contexts or early disability retirement between Hispanic and white workers. This might be explained by the well-known “Hispanic Paradox” — that Hispanics have lower

mortality than non-Hispanic whites despite lower socioeconomic status —not extending to disability. Indeed findings across a range of national data sets suggest that Hispanics' rates of disability are similar to non-Hispanic Blacks.

The primary focus of our study was to explore the role that exposure to potentially harmful jobs might play in early disability retirement disparities. We found, across a range of the harmful work contexts as well as the salutary work contexts we investigated, that lifetime work exposures matter. Specifically, after accounting for gender, education, and cohort, we found that lifetime occupational exposures account for (potentially mediate) some of the association between race and early disability retirement. To account for the fact that work contexts are not, in reality, experienced in isolation, we considered multiple, racially significant (where exposure levels varied by race) work context measures simultaneously. Not surprisingly, the degree of mediation was larger than when we considered each work context separately.

This is the first study to our knowledge that uses national panel data to shed light on racial disparities in early disability retirement by investigating the role of potentially harmful work contexts. While it is premature to propose remedial policy; it is nonetheless interesting to speculate on the possibilities. Many of the work contexts we explored represent potentially modifiable environments. Given the strong racial/ethnic sorting into occupation, these might help narrow disparities between racial/ethnic groups. Differential OASI calculations for specific job characteristics (or combinations of characteristics) might help offset the unsalutary effects of certain types of jobs. In sum, continued exploration in this area might eventually inform ways to modify work environments in ways that could improve the lives of workers in potentially harmful jobs while also reducing racial and ethnic disparities in financial well-being related to early disability retirement. ❖

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Sponsor information: The research reported herein was performed pursuant to grant RDR18000002 from the U.S. Social Security Administration (SSA) through the Michigan Retirement and Disability Research Center

(MRDRC). The findings and conclusions expressed are solely those of the author(s) and do not represent the views of SSA, any agency of the federal government, or the MRDRC.

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