Physical disabilities are increasing among working-age Americans. Disability and employment are related, but no research has examined whether changing labor force opportunities related to deindustrialization are driving increases in disability. I will use national demographic and longitudinal datasets to examine the relationship between labor force conditions and rising disability rates. In an era of unstable employment and declines of certain industries, are changes in work driving changes in disability? Rising disability among the working-age may have broad societal implications including rising unemployment and healthcare costs, and rising economic insecurity through job loss or unemployment may produce lower quality of life and wellbeing. This dissertation will address whether changes in work drive changes in disability, and considers the social policy implications and interventions of this work.
Trends in Disability among Working-Age Americans: The Role of Labor Force Status

Project's nature and importance

Physical disabilities—defined here as difficulty doing routine household and personal care tasks such as bathing, housework and preparing meals—increased significantly from 133 per 10,000 people in the late 1990s to 176 per 10,000 people during the middle 2000s. Research that aims to explain the increase in disability often focuses on proximate risk factors—such as obesity and chronic conditions—but less research aims to understand the broader social structural factors that have led to the rise in disability rates. Altering structural factors can reduce numerous proximate risk factors by reducing inequality in access to resources.

One largely unexamined structural factor that may predict disability is labor force status, which has changed dramatically during the same time period that coincides with the rise in disability. In particular, jobs in manufacturing and production have declined over time. Research on work and disability often examines how disability affects employment, but little research has examined how employment affects disability and no research has examined whether changes in work are driving the increase in disability. In an era of unstable employment and declines of certain industries, are changes in work driving changes in disability? Rising disability among the working-age may have broad societal implications including rising unemployment and healthcare costs, and rising economic insecurity through job loss or unemployment may produce lower quality of life and wellbeing. This work will contribute to sociological literatures on inequality by deepening the understanding of how large-scale changes to work impact society.

Labor force status is a powerful measure of economic insecurity because unemployment is associated with lack of access to health-promoting resources, which in turn is associated with disability. People who are unemployed—defined by those looking for work and those who have dropped out of the labor force—are less likely to utilize necessary healthcare related to health conditions, and this can lead to disability. Job loss is also a major social stressor that can induce a physiological response—such as a higher stress hormone levels—that over time can negatively impact health and lead to disability. Social stressors like job loss can also lead to unhealthy coping behaviors—such as smoking—that can lead to disease and disability. Facing limited employment opportunities, individuals may also adopt a disability identity regardless of severity of a disability to obtain government disability benefits. No research has examined over time how unemployment predicts self-reported disability in the U.S. The first aim of my dissertation is to determine whether unemployment predicts work-limiting disability.

The second focus is to examine whether regional changes in occupational industries are associated with rising disability. For example, people with disabilities who are employed are more likely to work in dwindling industries—such as manufacturing and production—than people without disabilities. Manufacturing jobs have declined overall in the United States, but the decline is steeper in certain industries such as coal manufacturing—prevalent in Appalachia—where coal industry jobs related to Obama-era policy changes fell by 27% between 2005 and 2015. Rising disability may be concentrated in areas with diminishing employment opportunities. The second aim of my dissertation is to examine whether rising disability is concentrated in geographic regions with declining occupational and industry opportunities.

Innovative Contribution and Interdisciplinary Focus

This dissertation will bridge the sociological literatures on disability and economics literatures on the labor force. The project also aims to understand the geographic dispersion of disability in a changing labor force. This dissertation represents the first to understand how the changing labor force affects rates of disability among working-age Americans and will inform policy interventions aimed to reduce inequality and the societal impacts of disability.
Trends in disability among working-age Americans: The role of labor force status

Data

The National Longitudinal Survey of Youth 1979 (NLSY79) is a longitudinal dataset of American youth born between 1957 and 1964. The sample are ages 49 to 58 during the most recent survey in 2014. Questions regarding work-limiting disability and duration of the limitation were asked during each survey year starting in 1979, and detailed information about work histories of each respondent are included. Detailed work history will allow me to examine the temporal order of employment status and work-limiting disability to understand whether unemployment predicts self-reports of disability.

The Integrated Public Use Microdata series (IPUMS) National Health Interview Survey (NHIS) is a nationally representative survey of the non-institutionalized U.S. population. Annual data are available from 1986 through 2016. IPUMS-NHIS contains extensive information on physical disabilities, socioeconomic status, and demographic information—such as race, ethnicity, sex, and age. Restricted NHIS data include information on specific geographic regions such as state, county, and census tracts. These data will allow me to determine whether disability is concentrated in regions with shifting occupational and industry opportunities.

Conclusion

Disability and labor force status are intertwined, and yet no research has examined whether the changing labor force may be driving increasing disability rates. Rising disability among the working-age may negatively impact the U.S. economy due to rising unemployment and healthcare costs and may predict lower quality of life through stressful life experiences such as job loss. This dissertation will identify structural sources of disability and inform the development of interventions to reduce this problem.

Biography

Sarah Garcia is a PhD candidate in Sociology at the University of Minnesota and an alumni of the first cohort of graduate population trainees at the Minnesota Population Center. She is engaged in and committed to cross-disciplinary and population research with a focus on health and disability. Sarah studies the persistent relationship between education and health, and the relationship between inequality and disability.
### Project Title: Trends in Disability among Working-Age Americans: The Role of Labor Force Status

Provide justification along with costs. | Requested funding
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| **Category & instructions** | **Justification** | **Amount** |
| Your stipend | 200 hours at $22.89/hour (current graduate research assistant rate in Sociology):  
Data coding (100 hours)  
Writing (50 hours)  
Note: total amount exceeds allowable stipend  
The stipend will allow me to dedicate full-time effort to the dissertation project during the summer of 2019. Previous coursework and research experience in statistics, secondary data analysis, and advanced quantitative methods has sufficiently prepare me to successfully complete the project outlined in this | $3,418 |
| Supplies & Services | Cost to purchase the restricted NHIS data file required for the analysis. | $2,000 |
| Travel | Present findings at American Sociological Association 2020 annual conference in San Francisco. Networking and presenting my work at the conference is necessary because I plan to be on the job market in 2020. Dates of travel will be August 8-11th. Estimated airfare cost from Minneapolis to San Francisco is $337. Estimated housing costs at the Hilton San Francisco Union Square & Parc 55 hotel is $339 per night for a total of $1,017 for three nights. Allowable per diem in San Francisco during August is $76 per day or $38 on travel days. For a four days of travel the total allowable per diem is $228. | $1,582 |

**TOTAL BUDGET** | **$7,000** |

**Other funding: List other or matching funding you have requested for this project.**

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References