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# COVID-19 and Employment Losses Among Workers with Disabilities: An Intersectional Approach

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# Introduction

- Social and economic losses due to Covid-19 around globe
  - Disproportionately borne by women, minorities, low-income groups
- Before pandemic: large disability employment gap
  - Earlier recessions: disabled individuals hit harder with job losses
  - Gap increased up through 2015, then started to close
- Pandemic appears to have erased this progress

# Introduction

- Objective: use CPS data to document employment trends for disabled and non-disabled individuals during pandemic compared to prior years
  - Conduct intersectional analysis of individuals with multiple identities, especially disability, race/ethnicity, and gender

- Also perform decomposition analysis to test how explained portion of disability employment gap has changed during pandemic

# Background

- People with disabilities less likely to be employed. Why?
  - Education and skill gaps
  - Employer attitudes and organizational culture
  - Disability income support from govt
- People with disabilities also face pay gap
- People with disabilities more likely to work part-time, in contingent work, in gig work with few benefits, and in service and blue-collar jobs
  - These types of jobs hard hit by pandemic business closures
- Experience of disability varies by gender and race

# Data and Methodology

- Study uses Current Population Survey (CPS), contains info on disability
  - six disability questions identify hearing, vision, cognitive, and mobility impairments, and difficulty with self-care or going outside alone
  - do our own seasonal adjustment and reweight the data accordingly
- First conduct descriptive analysis
  - Annual trends in employment rates and # jobs by disability status and intersection with race & gender
  - Monthly patterns during 2020, especially before and after April

# Data and Methodology

- Next: logit regressions to predict percent change in likelihood of employment by disability status, intersected w/ gender & race, for working-age people
- Next: employment gap decomposition
  - Follows precedent set by Fairlie (1999, 2003)
  - Similar to Oaxaca/Blinder wage gap decomposition
  - Use coefficients from pooled regressions to approximate returns to characteristics in absence of discrimination
  - Residual employment gap is difference btw actual employment rates and predicted employment rates
  - Controls: gender, race/ethnicity, educational attainment, marital status, age, occ/ind
  - CPS has data on occ/ind for people employed currently or in past year

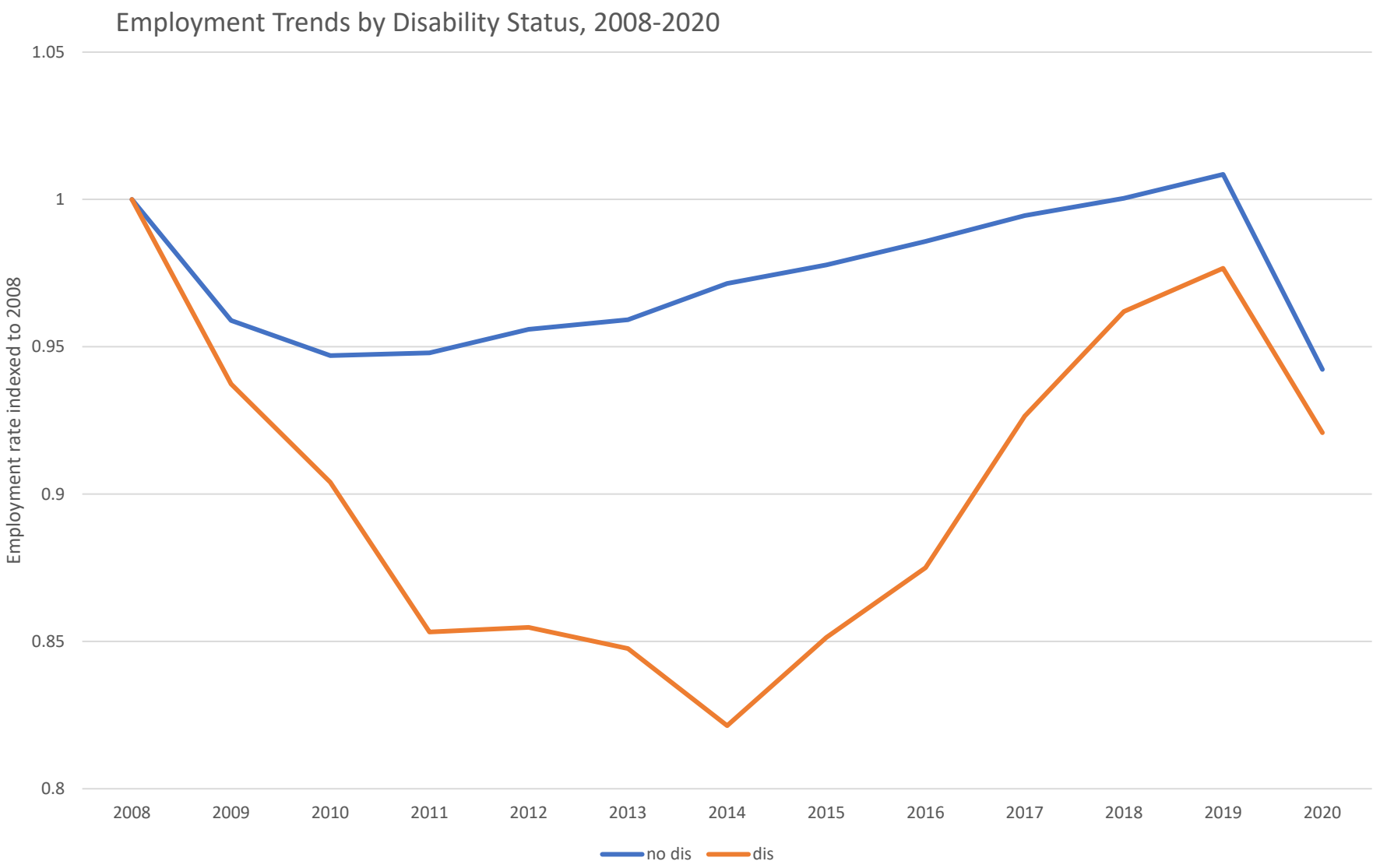
# Sample Means

- Means for non-disabled and disabled sub-samples are comparable except for employment status, age, education, and marital status.
  - Individuals with disabilities less likely to be employed or have a Bachelor's or graduate degree
  - People with disabilities are older, more likely to be separated/divorced or widowed.
- People with disabilities overrepresented in blue-collar and service occupations, and underrepresented in white-collar occupations
  - Biggest difference is managerial jobs, held by 12.0% of non-disabled workers and 8.8% of disabled workers.

| | Total | Non-disabled | Disabled |
|---|---|---|---|
| Employed | 0.689 | 0.720 | 0.295 |
| Disabled | 0.073 | 0.000 | 1.000 |
| Gender | | | |
| Male | 0.492 | 0.492 | 0.499 |
| Female | 0.508 | 0.508 | 0.501 |
| Race/ethnicity | | | |
| White non-Hispanic | 0.591 | 0.588 | 0.629 |
| Black non-Hispanic | 0.127 | 0.124 | 0.160 |
| Hispanic/Latino | 0.189 | 0.192 | 0.149 |
| Other race/ethnicity | 0.094 | 0.096 | 0.063 |
| Education | | | |
| No HS degree | 0.089 | 0.083 | 0.165 |
| HS degree | 0.274 | 0.266 | 0.375 |
| Some college/AA | 0.281 | 0.280 | 0.295 |
| Bachelor's degree | 0.232 | 0.242 | 0.115 |
| Graduate degree | 0.124 | 0.130 | 0.051 |
| Marital status | | | |
| Never married | 0.356 | 0.355 | 0.373 |
| Married | 0.515 | 0.527 | 0.367 |
| Separated/divorced | 0.112 | 0.104 | 0.213 |
| Widowed | 0.016 | 0.014 | 0.047 |
| Sample size | 549,141 | 505,920 | 43,221 |

# Employment Patterns

- Figure 1: Annual 2008-2020 employment rates by disability status
- Figure 2: Monthly 2020 number of jobs by disability status
- Figure 3: Stratification by disability, race, and gender
- Additional data reported in paper: Workers with disabilities are more prevalent in occupations and industries with larger employment declines


Employment Trends by Disability Status, 2008-2020
Employment rate indexed to 2008
1.05
1
0.95
0.9
0.85
0.8
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
no dis
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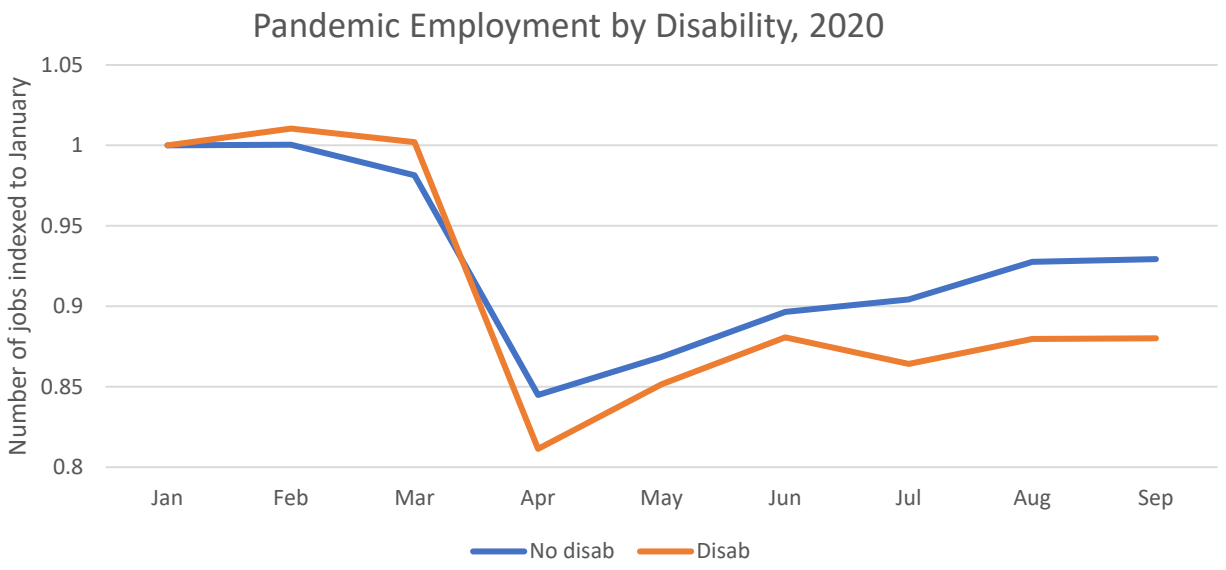
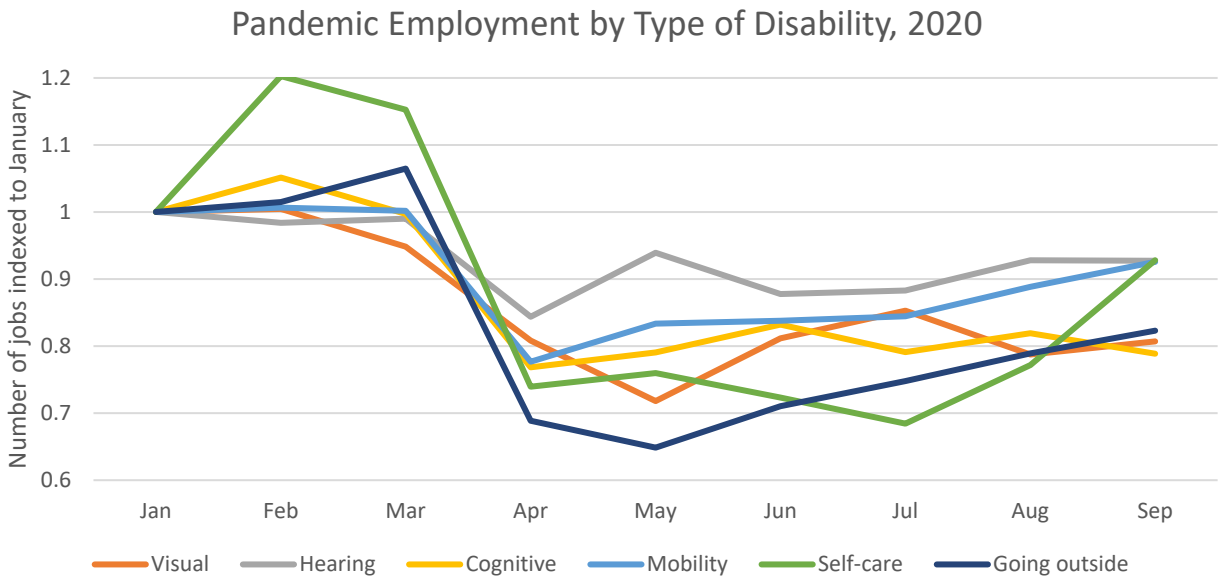
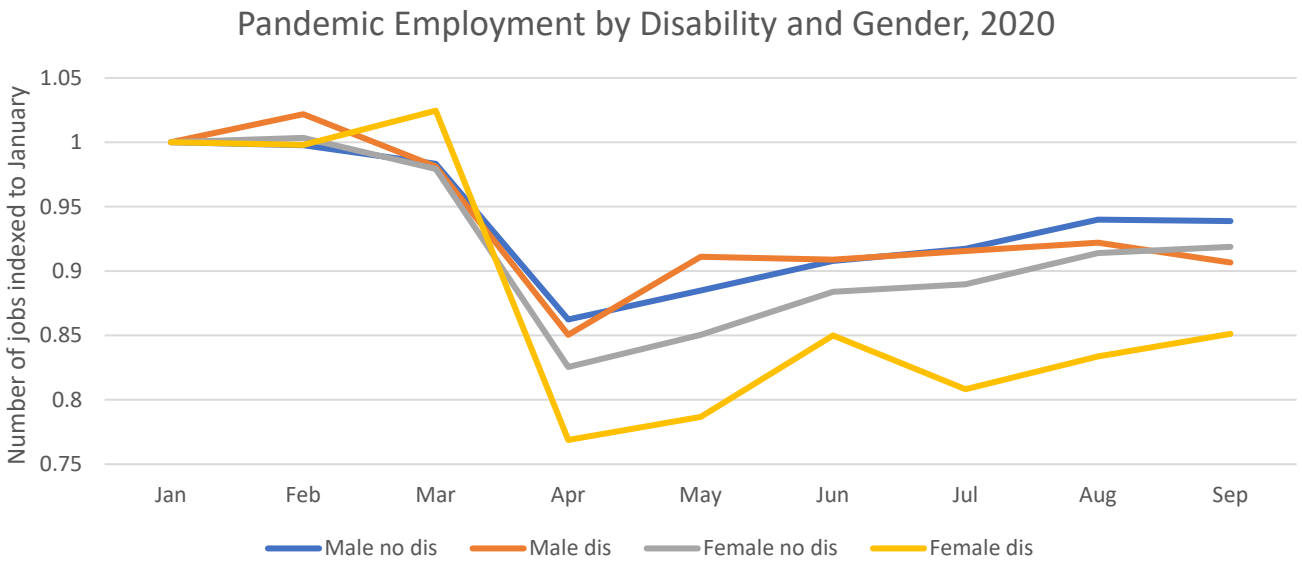
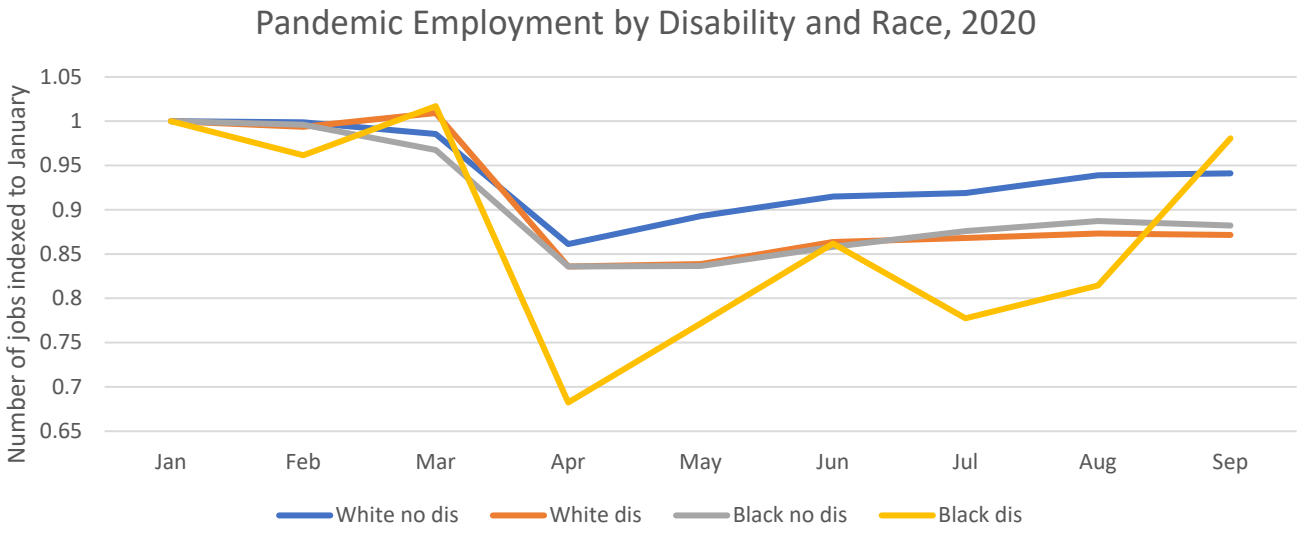

Pandemic Employment by Disability, 2020
Number of jobs indexed to January
1.05
1
0.95
0.9
0.85
0.8
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
No disab
Disab


Pandemic Employment by Type of Disability, 2020
Number of jobs indexed to January
1.2
1.1
1
0.9
0.8
0.7
0.6
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Visual
Hearing
Cognitive
Mobility
Self-care
Going outside


Pandemic Employment by Disability and Gender, 2020
Number of jobs indexed to January
1.05
1
0.95
0.9
0.85
0.8
0.75
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Male no dis
Male dis
Female no dis
Female dis


Pandemic Employment by Disability and Race, 2020
Number of jobs indexed to January
1.05
1
0.95
0.9
0.85
0.8
0.75
0.7
0.65
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
White no dis
White dis
Black no dis
Black dis

# Logit Results

- Disability gaps significantly different from zero in Jan-April 2020 and Jan-Sept 2020
- Employment drops significantly larger for women relative to men, and for Blacks and Hispanics/Latinos relative to White non-Hispanics
- Two-way interactions (disability & gender; disability & race) also show larger declines compared to people w/o disabilities
- Three-way interaction: White and Black women with disabilities bore a relatively heavy burden of employment losses during the pandemic

| | Sample with job currently or in past 12 mos.^ | | | |
|---|---|---|---|---|
| | January-April pct. change | | January-Sept. pct. change | |
| Model 3: Disability 3-way interactions | | | | |
| Predicted employment change for white men without disabilities (base group) | -7.2% | (0.003)** | -2.9% | (0.002)** |
| Additional gap for those: | | | | |
| With disability | | | | |
| Males | | | | |
| White non-Hispanic | -2.7% | (0.022) | -2.0% | (0.019) |
| Black non-Hispanic | -18.5% | (0.107) | 0.6% | (0.084) |
| Hispanic/Latino | -9.5% | (0.056) | -5.0% | (0.051) |
| Other race/ethnicity | 0.8% | (0.094) | -3.1% | (0.104) |
| Females | | | | |
| White non-Hispanic | -6.3% | (0.024)** | -6.5% | (0.021)** |
| Black non-Hispanic | -15.9% | (0.069)* | -7.7% | (0.060) |
| Hispanic/Latino | -7.1% | (0.071) | -10.2% | (0.065) |
| Other race/ethnicity | -10.8% | (0.071) | -5.5% | (0.057) |
| Demographic controls | Yes | | Yes | |
| Occupation controls | Yes | | Yes | |
| Sample size | 418,997 | | 418,997 | |

# Decomposition Results

- Within both Jan-April and April-Sept very little of the cross-sectional disability employment gap is explained by occupation, industry, education, and demographic variables
  - 8.3% in Jan-March and 17.7% in April-Sept
- About half the increase in disability employment gap moving from 1st period to 2nd period is explained by these factors, especially occ distribution
- Similar substantive conclusion for decomposition for March-Apr 2020 compared to pooled 2014-2019 sample

| | | Jan-March, 2020 | | April-Sept., 2020 | | Change | |
|---|---|---|---|---|---|---|---|
| | | (1) | | (2) | | (3) | |
| Employment levels | | | | | | | |
| | No disability | 0.9602 | (0.0007) ** | 0.8856 | (0.0011) ** | -0.0746 | (0.0013) ** |
| | Disability | 0.9015 | (0.0054) ** | 0.8093 | (0.0064) ** | -0.0922 | (0.0083) ** |
| | Difference | 0.0587 | (0.0054) ** | 0.0764 | (0.0065) ** | 0.0176 | (0.0084) * |
| Explained | | | | | | | |
| | Total | 0.0049 | (0.0008) ** | 0.0135 | (0.0017) ** | 0.0086 | (0.0019) ** |
| | Occupation | 0.0013 | (0.0003) ** | 0.0057 | (0.0008) ** | 0.0043 | (0.0009) ** |
| | Industry | 0.0003 | (0.0002) ** | 0.0013 | (0.0007) ** | 0.0010 | (0.0007) |
| | Education | 0.0018 | (0.0003) ** | 0.0044 | (0.0005) ** | 0.0026 | (0.0006) ** |
| | Other demographics | 0.0014 | (0.0004) | 0.0021 | (0.0007) | 0.0007 | (0.0008) |
| Unexplained | | 0.0538 | (0.0054) ** | 0.0638 | (0.0049) ** | 0.0099 | (0.0073) |
| Percent of difference explained | | 8.3% | | 17.7% | | 48.8% | |

# Policy implications

- Pay particular attention to the intersection of disability with gender and race in designing proactive employment policies
- Need more employer policies to provide telecommuting accommodations rather than pigeonholing individuals with disabilities into a traditional workspace
- Ensure that pay levels and raises of people with disabilities are determined more by actual job performance and qualifications, rather than stereotypes and workplace cultural dynamics

# Conclusion

- White and Black women with disabilities experienced relatively greater employment losses during the pandemic compared to White men without disabilities.
- Decomposition results:
  - there remains a substantial disability gap in employment after controlling for demographic, occupation, and industry factors
  - disability gaps appeared to increase during the pandemic
  - large portion of increased disability gap accounted for by how pandemic differentially affected occupations and industries
  - was still an increase in the unexplained component of the disability employment gap in the pandemic.