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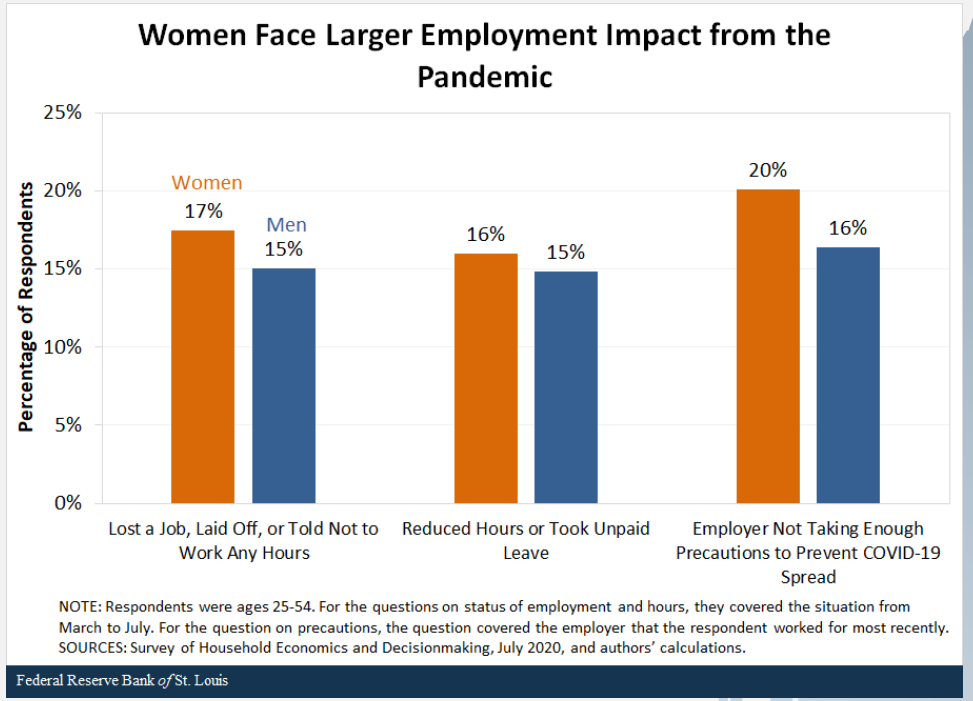
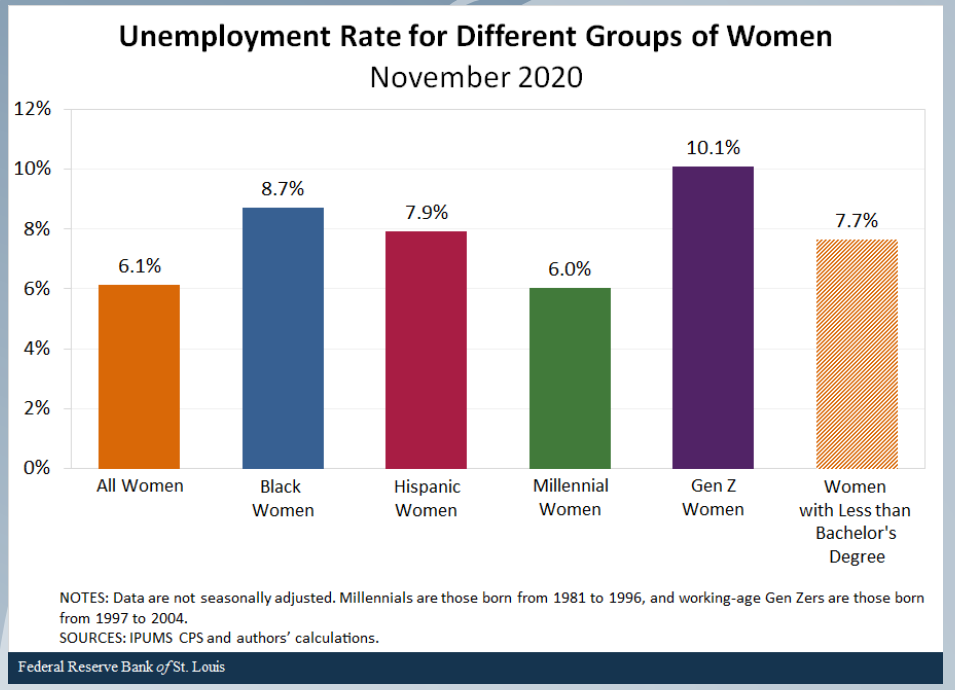
THE GENDERED EFFECTS OF COVID-19 ON FACULTY RESEARCH

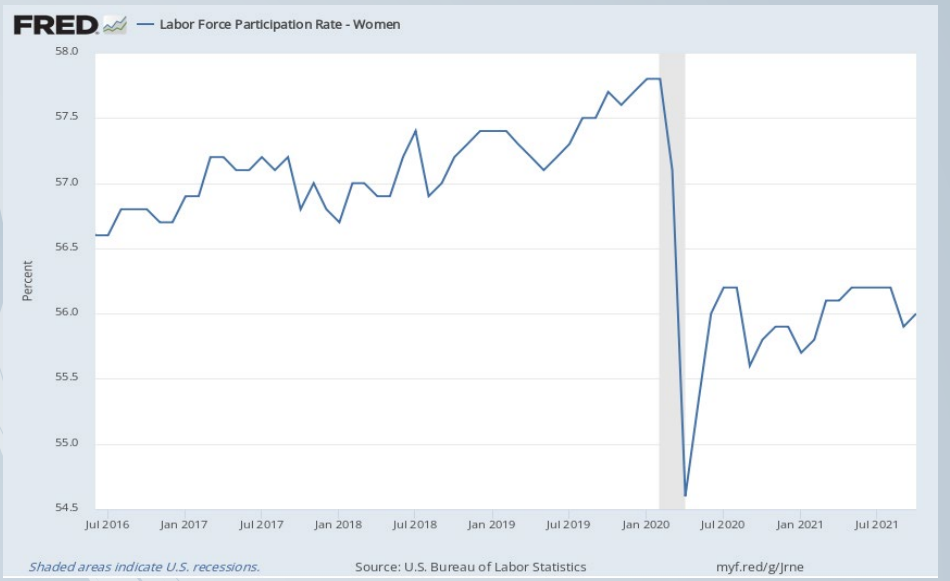
EVIDENCE AND POLICY RECOMMENDATIONS

EFFECT OF COVID-19 ON WOMEN

The COVID-19 "She-cession"







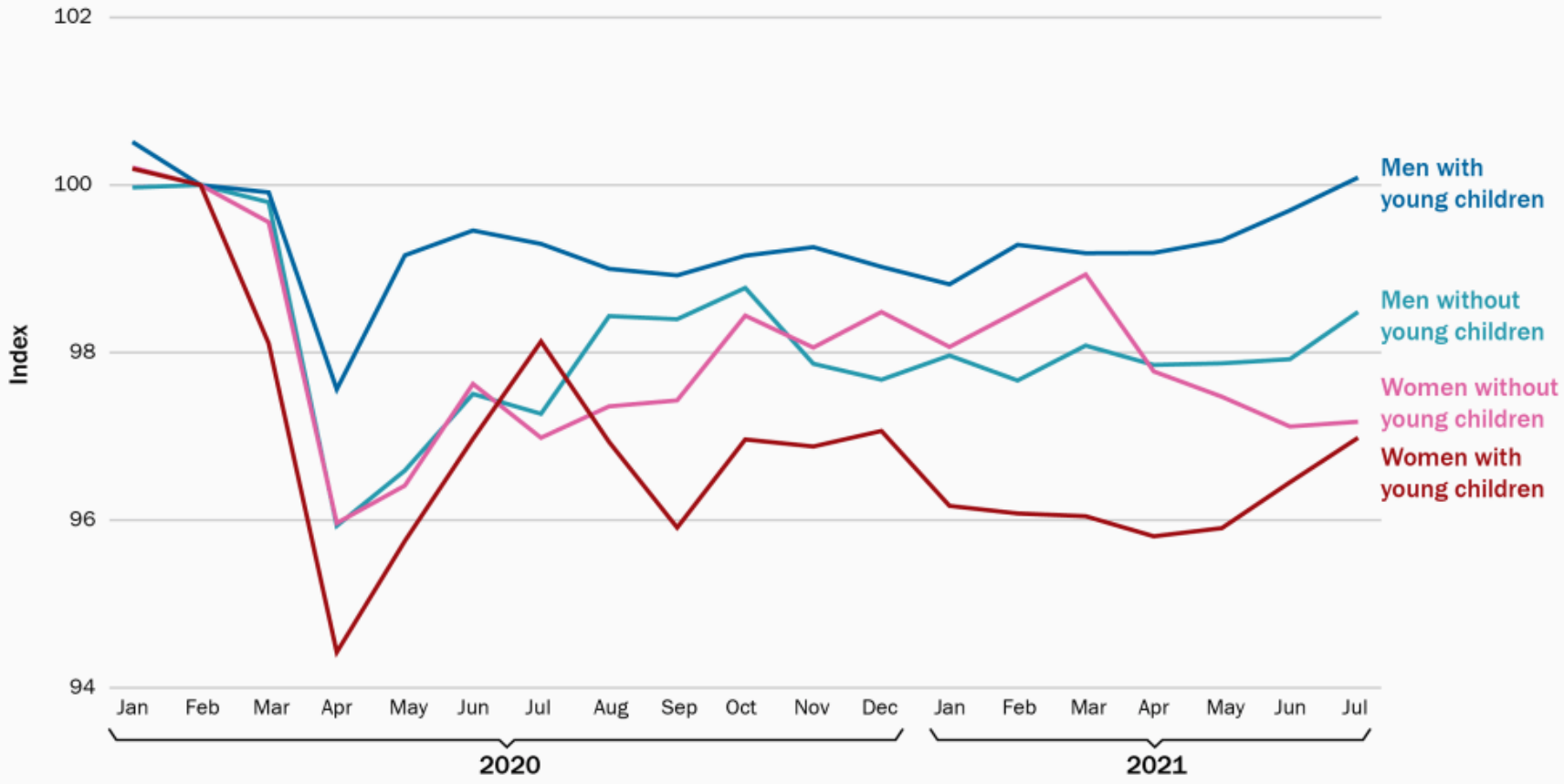
Nearly 2 million fewer women in the U.S. labor force in October 2021 than in February 2020. (BLS Oct 2021)

Only about 56% of women are now in the workforce today, which is about the same as in May of 1988…

Why women are dropping out of the labor force due to the pandemic

A different kind of downturn….

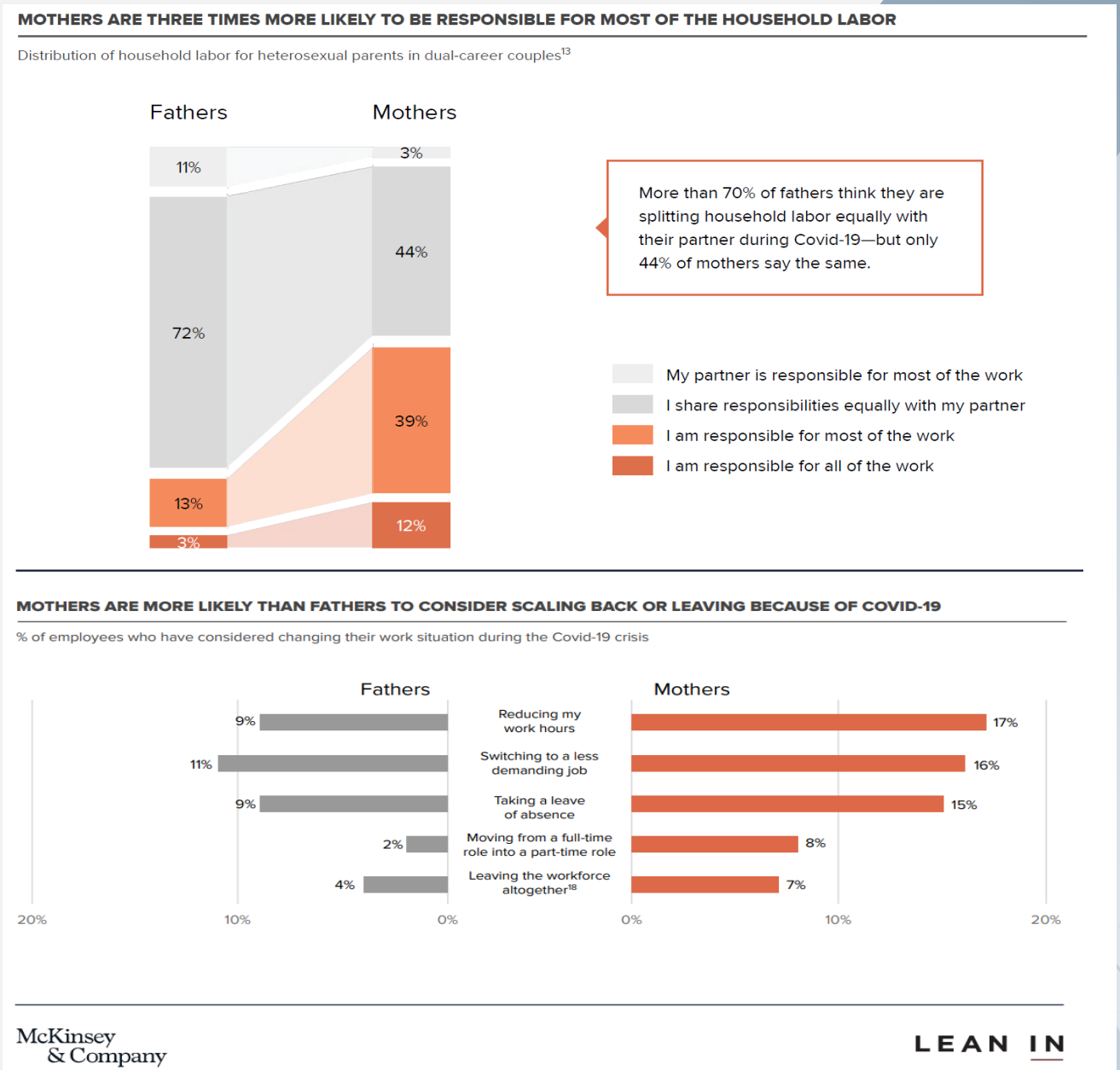
"COVID-19 is hard on women because the U.S. economy is hard on women, and this virus excels at taking existing tensions and ratcheting them up." (*Brookings* 2020)



Source: CPS.
Note: Prime-age, LFPR is not seasonally-adjusted. Values indexed to Feb. 2020. We define young children as those less than 13 years of age.

B | Economic Studies at BROOKINGS

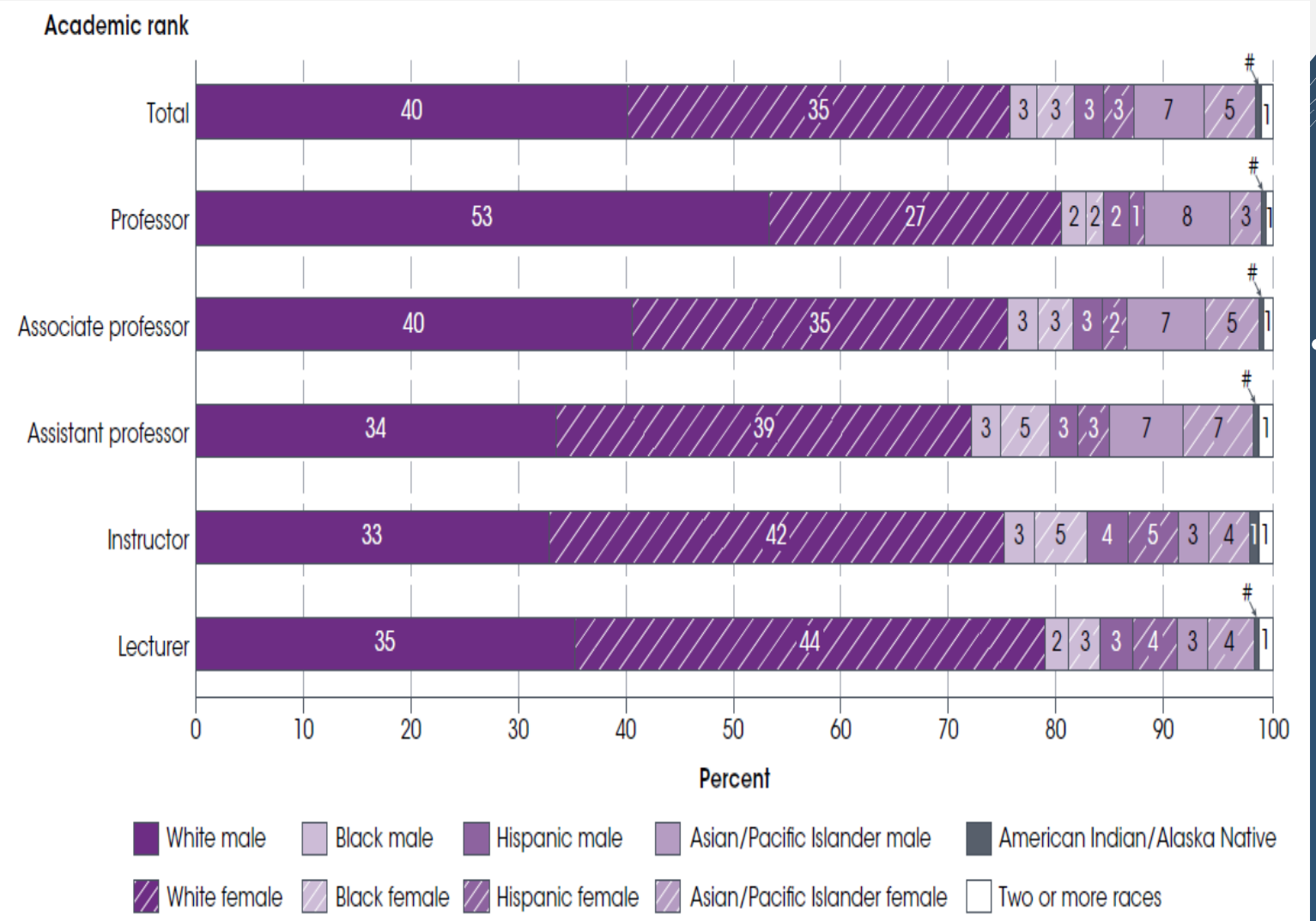
A closer look (*Women in the Workplace*, 2020)



- Mothers are more than twice as likely as fathers to feel judged for caregiving during the pandemic
- Latina and Black mothers are shouldering heavier burdens than white mothers.
- As a result: 1 in 4 women are contemplating downshifting their careers or leaving the workforce
- What about women who are still working? Look at academics

THE GENDER GAP IN ACADEMIA & IMPACT OF COVID-19

DERYUGINA, SHURCHKOV, AND STEARNS, *AEA PAPERS & PROCEEDINGS* 2021



Rounds to zero.
NOTE: Sex breakouts excluded for faculty who were American Indian/Alaska Native and of Two or more races because the percentages were 1 percent or less. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Race categories exclude persons of Hispanic ethnicity. Percentages are based on full-time faculty whose race/ethnicity was known. Detail may not sum to 100 percent due to rounding. Although rounded numbers are displayed, the figures are based on unrounded data.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), IPEDS Spring 2019, Human Resources component. See *Digest of Education Statistics 2019*, table 315.20.

Pre-COVID Facts

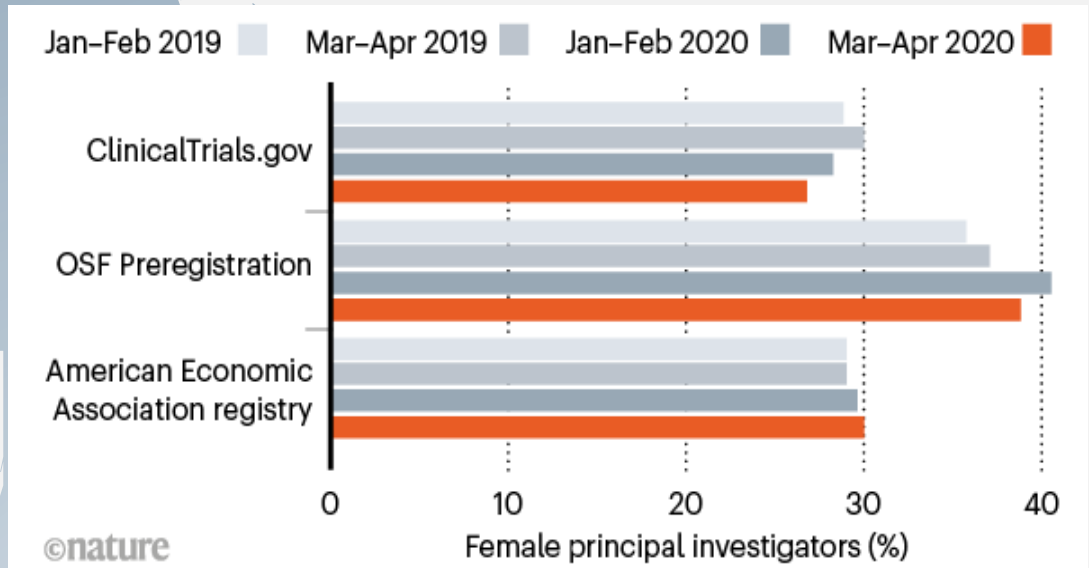
- Women earn more degrees (57% Bachelors; 59% Masters; 53% Doctorate)
- Overall, women represent about 50% of all faculty

BUT :

- Only 1/3 of all full professors are female (The Condition of Education 2020 Report)
- Women represented 30% of grantees (Holman et al. 2018)
- Published about 30% fewer articles (Hechtman et al. 2018)
- Received 30% fewer citations than men (Huang et al. 2020)
- Women fair worse in STEM fields

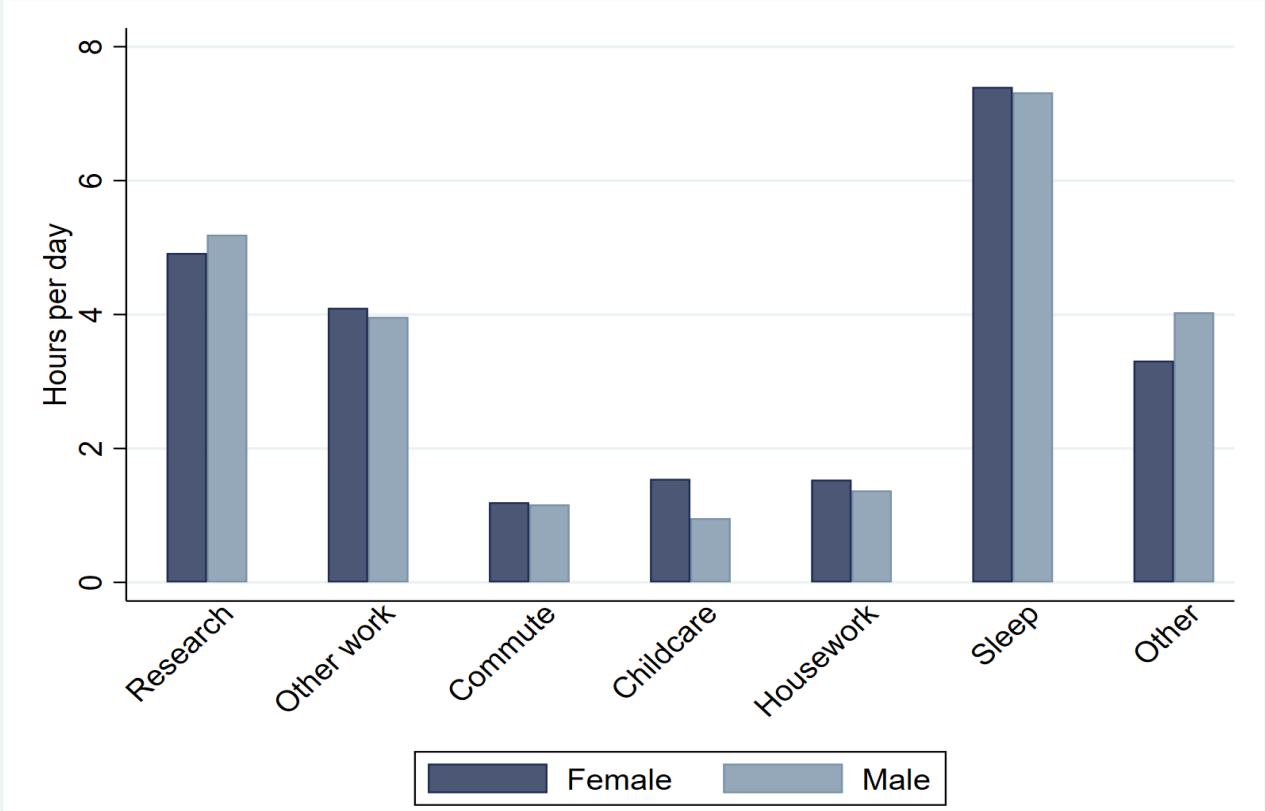
"The New Normal" ? How Female Academics Are Being Affected by COVID-19

- Submissions to economics journals and pre-print series by female authors fell by at least 12% in March 2020 and by over 20% in April 2020, relative to the mean (Shurchkov 2020).
- Early- and mid-career female economists disproportionately affected (Amano-Patiño et al. 2020; Vincent-Lamarre et al. 2020)



Fewer new projects by female PIs since COVID-19 (Source: Vincent-Lamarre, Sugimoto, and Larivière 2020)

Gender Gaps Prior to the Pandemic



Source: Deryugina, Shurchkov, and Stearns (2021). N=19,905. All differences significant at 1%.

Less time spent on research; more on childcare/housework

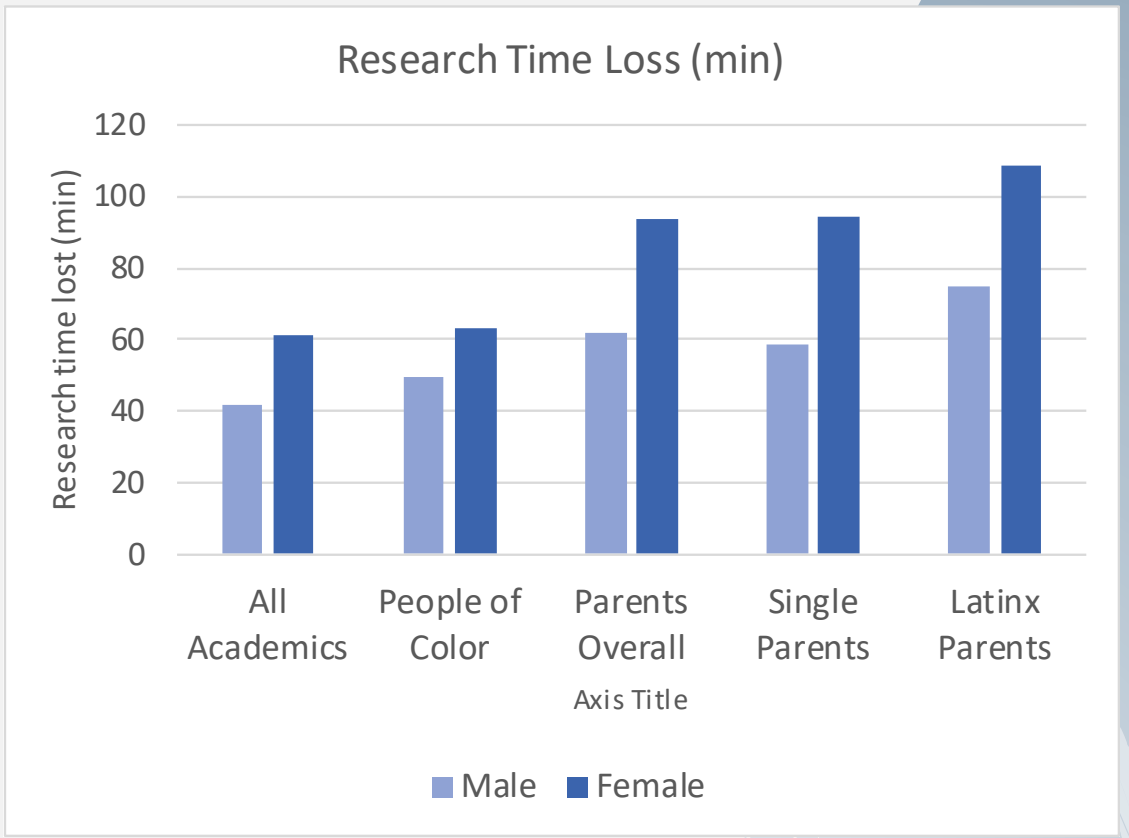
Global survey of academics

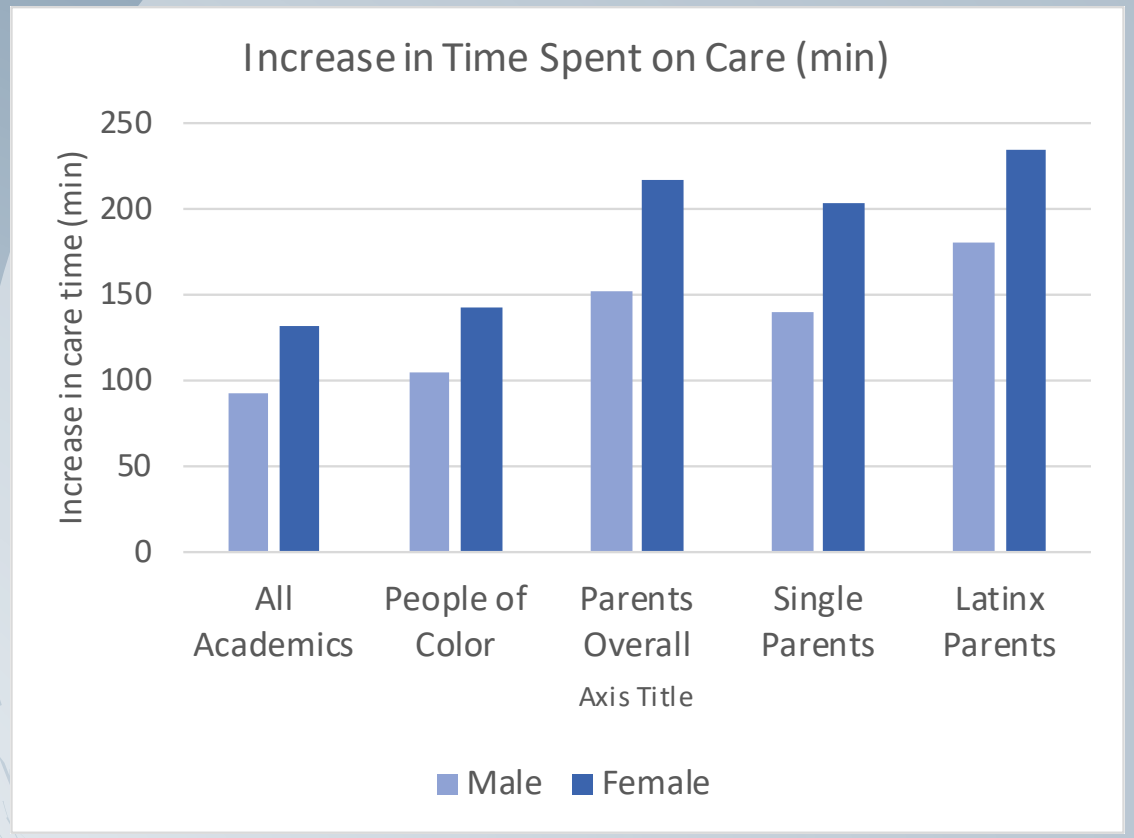
Key questions:

- Professional circumstances (field of research; rank)
- Family circumstances (living arrangements; number and ages of children)
- Pre- and post-COVID estimates of time spent on research and other job; commute; childcare/schooling; household; sleep; other
- Post-COVID changes to funding and institutional policies

The Effect of Covid-19 on Time Use

Total work time decreased by 50 min relative to the pre-COVID 9-hour average.

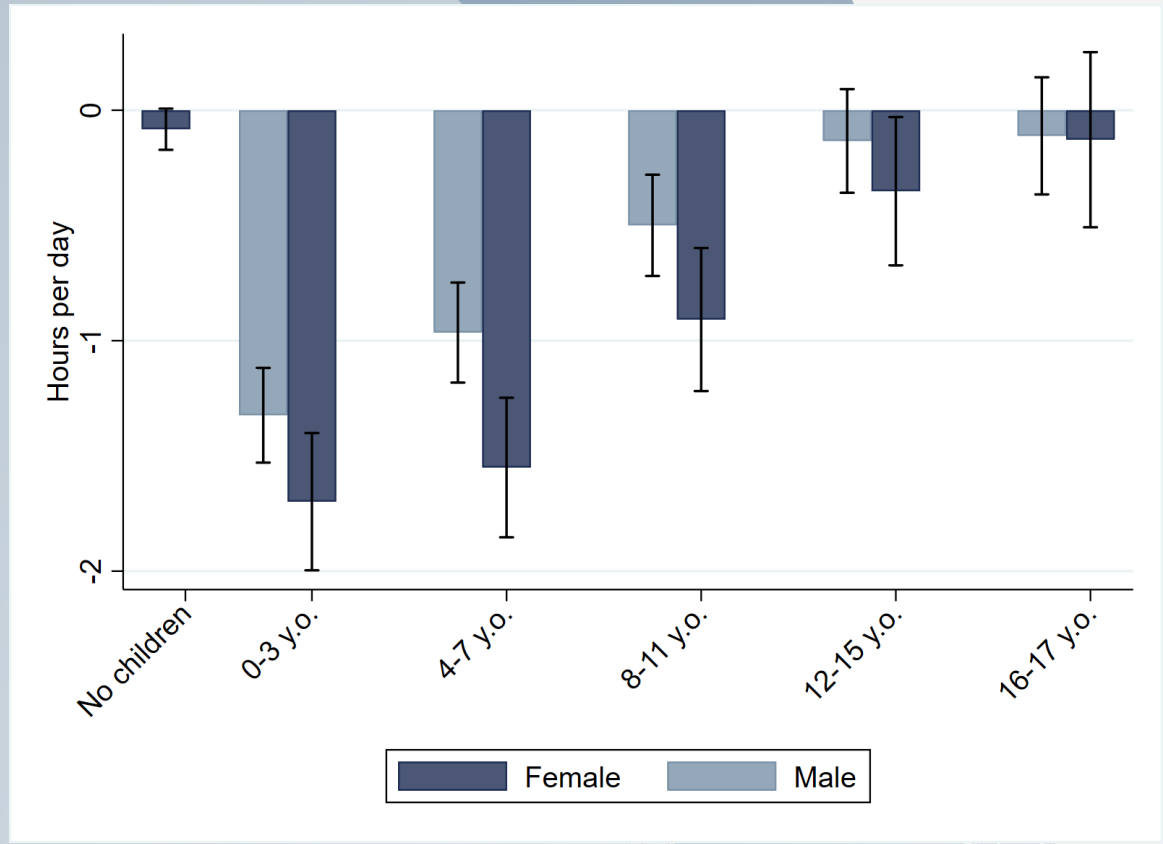




Note: All gender differences significant at 95% level

Latina women with at least one child lost 108 min of research (the most of all groups) and it's mostly due to increased housework, childcare, and because they are not reducing other job-related responsibilities

Parents, particularly mothers of young children, lost the most research time



Developmental age bins

Source: Deryugina, Shurchkov, and Stearns (2021). N=19,905. Estimates are relative to male with no children. Controls include PhD year FE, date of survey completion FE, and number of children indicators and their interactions with gender. Bars represent 95% confidence intervals using robust standard errors.

Overview of the findings

- In countries where schools were open a larger share of the days, mothers of young children reported having more time to spend on research, while men did not substantially benefit from greater school openness.
- Having a partner at home did not lead to a significant improvement in terms of lower childcare burden or greater research time for women with young children relative to men with young children.

Source: Deryugina, Shurchkov, and Stearns (2022, forthcoming).

Childcare as a mitigating factors

Investigate the effects of:

- Stay at home partner

31 percent of men and 14 percent of women have a stay-at-home partner

- Primary schools staying open in the pandemic (Unesco data)

Great variation in school openness

SUMMARY & POLICY RECOMMENDATIONS

Caveats and Implications

- Results likely underestimate lost research time
- A decrease in research time does not automatically translate into a proportionate decline in productivity
  - Find that our female respondents with young children have not fallen behind in terms of publications (yet?)
  - Increase in efficiency (at what cost?)
  - Next steps
- Neither time use nor productivity impacts allow us to evaluate the full detrimental effects of the pandemic on overall welfare

Summary of Findings

- Mean lost research time due to COVID-19 is about 50 min per day
- Mothers lost twice as much research time per day than fathers did (over 1 hour v. 30 min)
- Women with young children (under 7 years old) lost over 90 min of research time per day
- Having a stay-at-home partner does not fully offset the disruptions the way access to public schooling seems to

Taking action

- Childcare is hard to observe and is rarely considered in institutional research policies (outside of parental leave) – important to address access
- Tenure clock extension policies: Most are universal – may exacerbate pre-existing inequalities
- In the longer term?
  - Being left-off "hot" projects (on the effects of COVID-19) produces additional gaps in long-term research pipelines
  - Reopening differences across institutions and within fields (e.g., lab v. non-lab) will lead to further disparities
  - Moving to virtual conferences and workshops impacts access to mentoring and opportunities for advancement
  - In the broader labor market, moving to remote work can help women, but in academia, the added flexibility is less important

Perception of job "Flexibility" + Gender Stereotypes =

Long-term worsening of the gender gap in research and status of women in academia

Solution

Access + change stereotypes about: what researchers do and the default caregiver gender

THANK YOU!

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