

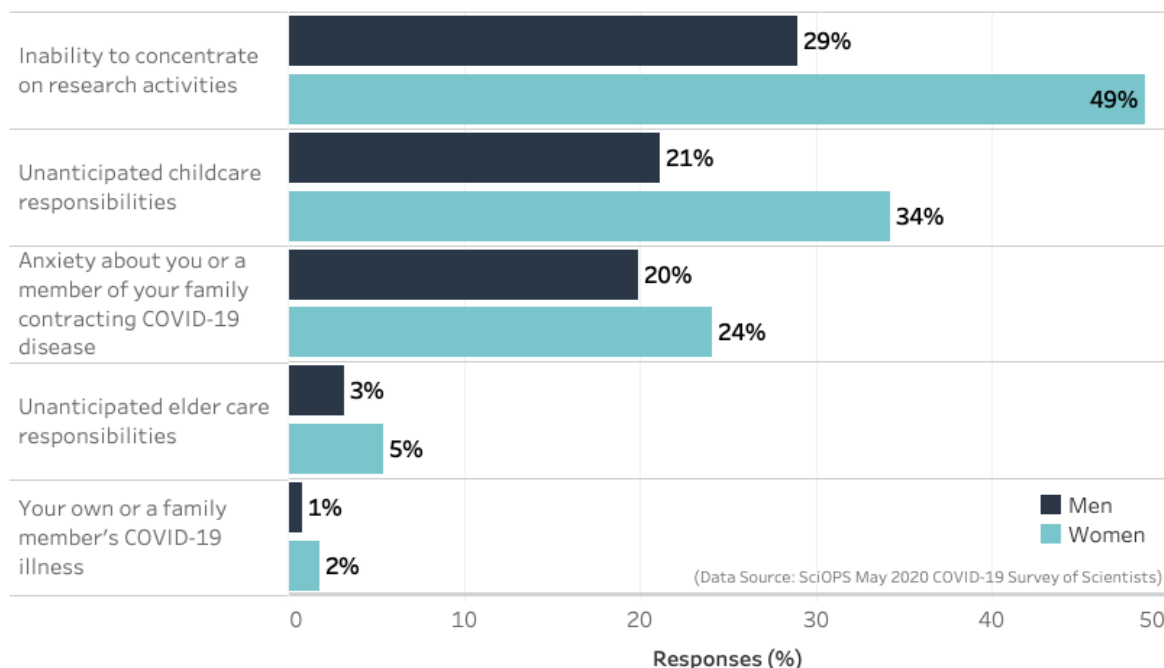
## COVID-19 stay-at-home orders worsen academic scientists' home-life: women experience more difficulties

Heyjie Jung

The COVID-19 crisis has blurred the boundary between work and home as many academic scientists struggle to manage their personal and professional lives. Working from home does not work well for families with children or elderly parents or those living in small spaces. With the closing of schools, health care facilities, and day cares, **some academics face increased family care responsibilities**.

SciOPS conducted the [COVID-19 survey](#) of academic scientists in May 2020 to look at how COVID-19 policies have influenced academic scientists' home-life. We asked if social distancing and COVID-19 related policies had negative impacts on their research activities.

**Figure 1. Major negative impacts of COVID-19 policies on scientists, by gender**



**Figure 1** shows the proportion of male and female respondents who reported major negative impacts from COVID-19 related policies. Although the rank order of negative outcomes is similar for men and women, **a higher proportion of women report difficulties** in concentrating on research and facing more burden from childcare and elder care responsibilities. Nearly **50% of women indicated that COVID-19 stay-at-home**

**orders extensively disturbed their research time**, while less than one-third of men reported the same. About one-third of **female scientists** responded that there were **major negative impacts on their research because of unexpected childcare responsibilities** due to COVID-19 related policies while about one-fifth of men experienced same level of impact.

In normal circumstances, female scientists face more family care responsibilities than

**COVID-19 policies harm women's research activities more than men's research activities.**

men. Women report doing more household chores than their male partners (O'Laughlin & Bischoff, 2005)<sup>1</sup> and working mothers report more childcare responsibilities (Fox, Fonseca,

& Bao, 2011)<sup>2</sup>. These differences in workload at home, inevitably shape outcomes at work. COVID-19 stay-at-home orders will inevitably affect gender inequity in the home and academic outcomes (e.g. teaching, research, publication, and grant getting). We find COVID-19 related policies such as stay-at-home orders result in negative impacts on research activities of scientists and disproportionately disadvantage female scientists.

Work-at-home policies create barriers to the successful conduct of scientific research by:

- Diverting attention from research
- Increasing family care responsibilities

**Female scientists report negative COVID-19 impacts at a higher rate** than male colleagues.

<https://www.sci-ops.org>

NOTES: Scientists were asked to select: "Minor negative impact", "Major negative impact", and "No negative impact".

## SciOPS

Data are from **SciOPS COVID-19 Survey of Scientists** conducted at the Center for Science, Technology and Environmental Policy Studies at ASU in **May 2020**.

**1,968** academic scientists in **20** research extensive universities

**3 fields of science:** Biology, Civil & Environmental Engineering, Biochemistry

**21%** response rate

Questions on COVID-19 impacts on scientific research, government preparedness, policies and personal health.

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<sup>1</sup> O'Laughlin, E. M., & Bischoff, L. G. (2005). Balancing parenthood and academia: Work/family stress as influenced by gender and tenure status. *Journal of family issues*, 26(1), 79-106.

<sup>2</sup> Fox, M. F., Fonseca, C., & Bao, J. (2011). Work and family conflict in academic science: Patterns and predictors among women and men in research universities. *Social studies of science*, 41(5), 715-735.