Gendered experiences of software engineers during the COVID-19 crisis

(1) Federal University of Pará, Brazil
(2) Getúlio Vargas Foundation, Brazil
COVID-19 has worsened gender inequality. These charts show what we can do about it

Gender, race and parenthood impact academic productivity during the COVID-19 pandemic: from survey to action (Parent in Science)

https://www.biorxiv.org/content/10.1101/2020.07.04.187583v1_full.pdf
Background & Method

Framework Distance Matters by Olson & Olson, 2000

- Common Ground
- Collaboration Readiness
- Coupling of work
- Collaboration Technology Readiness
- Organization Management

Survey study in Brazil, 366 valid responses

- Early in social isolation (median = 40 days)
  31 questions
- Technology roles (N= 233)
  - Men (149) - 64%
  - Women (86) - 36%
- Logistic regression, Chi-square and T-tests to compare groups with positive & negative wellbeing

How do known theoretical concepts impact the wellbeing of remote workers during COVID-19?

Survey: https://github.com/clarac/distancesurvey/wiki
1. Workers with positive wellbeing

- Received more incentives from the employer
  - Team engagement, virtual happy hour
- Experienced less challenges with technology
- Reported less interruptions
- Described co-workers as more collaborative
- Had less challenges with common ground
  - i.e., reaching a common understanding among co-workers
- No Difference in coupling of work
  - Tech workers
- Had no difference in remote work experience
  - Before pandemic: (years)
  - Social isolation: (days)

Remote workers’ wellbeing in the age of COVID-19

Clara Caldeira, Leticia S. Machado, Marcelo G. Perin, Cleidson R. B. de Souza
August 2020

ABSTRACT

Social isolation measures used worldwide to reduce the impacts of COVID-19 led many office workers to work remotely with little notice. While researchers have studied remote collaboration for more than two decades, the scale and context of remote work during a pandemic is unprecedented and has changed personal and work dynamics. In this paper, we discuss the results of a survey study investigating the impact of remote work during the COVID-19 pandemic in Brazil, informed by Olson & Olson’s framework for distributed collaboration. We report preliminary findings from this study, focusing specifically on workers’ wellbeing. Our results suggest that the main factors influencing workers’ well beings are Common Ground Challenges, Collaboration Readiness, Collaboration Technology Readiness, Organizational Management, and Interruptions.
2. Gender Wellbeing / Insights into 3 categories

Interruptions (at home and by co-workers)

**Negative for both**

**Female respondents:** “difficulty in managing various tasks (home, children, appointments) together with isolation and work from home.

“I work on the breaks that I take in the middle of the routine for taking care of the child and the house at the same time which makes me usually work after my kid sleeps, so as not to have interruptions and less stress.”

**Male respondents:** “I don’t have an isolated office in the house. [there is] a lot of noise.”

“it was necessary to reorganize my house so that there is a place for me to work.”

Working at home (e.g., private space, organizational incentives, and childcare responsibilities)

→ **Positive for Men:** organizational incentives

(-) Women: flexible working hours, additional day off during the week, and changes in scheduling meetings.

Distributed and remote collaboration (e.g., common ground, and coupling of work).

→ **Positive for Women:** collaboration readiness

(-) Men: lack of informal conversations, i.e., the need to schedule meetings to talk to their colleagues.
2. Gender Wellbeing

Opportunities to better support women software engineers in remote work

→ Organizational incentives that reduce the burden of domestic work, such as vouchers for meal delivery, cleaning services or tools (e.g., robotic vacuum cleaner), and childcare.

→ Flexibility to account for the demands of childcare and domestic work (e.g. scheduling that prioritizes parents)

→ Carefully account for special circumstances when evaluating work performance

→ Communication policies that allow co-workers to freely ask questions
Research insights

→ To receive people with different kind of experiences -- Diversity & Inclusivity

→ To recognize that there are differences -- Evidences

→ To think about policies and programs -- More flexible and empathetic workplace

Gender-Inclusive Software - “This is not a women problem is a software engineering problem” (Margaret Burnett/CibSe 2020)
Espaço Infantil em eventos da Sociedade Brasileira de Computação: uma necessidade ou não?

References

https://www.parentinscience.com/

