

# Improving Female Labor Force Participation through Flexible, Internet-mediated Gig Work in India

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**Sector(s):** Gender, Labor Markets**Fieldwork:** Calcutta Foundation, Microsoft Research Bangalore**Location:** Kolkata, West Bengal, India**Sample:** 1,500 households**Target group:** Women and girls**Outcome of interest:** Employment Gender attitudes and norms**Intervention type:** Alternative work arrangements Employment Technology**AEA RCT registration number:** AEARCTR-0009190

Low female labor force participation affects both overall economic development and gender equity. In India, researchers conducted a randomized evaluation to test the impact of a month-long, flexible, at-home, paid work opportunity on women's future uptake of work, well-being, and gender attitudes held by household members, including children.

## Policy issue

In 2017, women globally were 35 percent less likely than men to be employed or looking for work outside of the home.<sup>1</sup> The Covid-19 pandemic has further exacerbated this disparity. For example, recent surveys conducted across thirteen countries in Latin America found that women with paid employment were more likely to lose their jobs than men during the pandemic, and in India, women have been more likely to stay out of the labor force after losing their jobs.<sup>2, 3</sup> Low female labor force participation affects both overall economic development as well as gender equity. Female employment rates are closely linked to women's empowerment, health, education, and decision-making power.

One approach to increase women's labor force participation may be to leverage technology to promote accessible employment opportunities. As internet-based "gigs" proliferate in low- and middle-income countries, it is important to understand the role they can play as a gateway to the labor market more generally, and as an opportunity to build skills while balancing household responsibilities. Likewise, it is important to understand how flexible characteristics of internet-mediated work (such as the ability to work at home, choose one's hours, and multitask with childcare) can overcome some barriers to women's participation in the workforce. Can flexible work arrangements— such as gig work facilitated by platforms that assign online, discrete tasks that can be completed at home—erode barriers to working outside of the home and increase women's labor force participation?

## Context of the evaluation

In recent years, India has experienced stagnation in the growth of its workforce, with the women's labor force participation rate at 20.3 percent in 2020 compared to 76 percent for men. India's gig economy may represent an opportunity for women workers, as these more flexible jobs could reduce some of the barriers that women face to enter the labor market. However, despite growth in the gig economy over the past ten years, the women's labor force participation rate has seen little improvement, and most gig workers are young, urban men.<sup>4</sup>

This evaluation is targeted to low- to middle-income households in urban and peri-urban Kolkata, West Bengal. The female labor force participation rate in West Bengal was 25% in 2011–2012, below the average for states in India.<sup>5</sup> As part of the evaluation, a randomly selected subset of households receive offers of jobs on the Project Karya platform. Project Karya at Microsoft Research in India is a smartphone-based job task platform that assigns workers discrete tasks, such as completing and correctly labeling voice recordings, that they can complete at home from their smartphones.

## Details of the intervention

Researchers conducted a randomized evaluation to test the impacts of a flexible, part-time internet-mediated gig work opportunity on women's uptake of future training and employment opportunities, as well as on well-being and gender attitudes of women and children. In the evaluation, researchers will randomly assign households to either receive a job offer or to serve in the comparison group. Households in the job offer groups were randomly assigned to different work arrangements which vary in their ability to work from home, ability to choose one's hours, and ability to multitask with childcare.

The gig work included recording oneself speaking specific sentences in Bengali or Hindi, and verifying that the recordings were labelled correctly. Women were paid approximately INR 1 (US\$0.013 in 2021) per completed task. Women also received training on the job platform and performance feedback from the implementing team.

In order to measure the impacts of various flexible attributes of this work, the job offers randomly varied by location, flexibility of hours, and the ability to multitask on childcare. Approximately 1,125 women were randomly assigned to one of the following work arrangements while the other 375 women served as a comparison group and received no job offer:

1. *Flexible + childcare*: An internet-mediated gig job which could be done from home, at the hours the participant wished to do work, and multitasking with childcare.
2. *Flexible + no childcare*: An internet-mediated gig job which could be done from home, at the hours the participant wished to do work, but without multitasking with childcare.
3. *Fixed timeslot + childcare*: An internet-mediated gig job which could be done from home, while multitasking with childcare, but at a fixed timeslot each day.
4. *Fixed timeslot + no childcare*: An internet-mediated gig job which could be done from home, but at a fixed timeslot each day and no multitasking with childcare.
5. *On-site work*: An internet-mediated gig job which required participating women to leave home and go to a central location in the neighborhood to work.

Among the women that were assigned to work from home, half were offered the ability to multitask with childcare. Women who were allowed to multitask—working while caring for children in their household—could have some background noise in the recordings related to having children present. The women who were not offered the ability to multitask were informed that the recordings required complete silence and that it was recommended that children were not in the same room.

Before women actually began the work, researchers randomly offered half of the women in the less-flexible groups the possibility of switching to a more flexible arrangement. This allowed researchers to separate selection and treatment effects. That is, the surprise change in job offer allows the research team to understand what types of workers were excluded from the labor market

due to being offered inflexible jobs, and to study if the flexible work opportunities had different effects on women who otherwise may not have taken up the job opportunity.

After one month, all women in the study received information about and assistance with applying to nearby skills training and employment opportunities. Researchers also collected information on participants' interest in and take-up of the job offers, the women's participation and productivity under the various work arrangements, and participants' time use, spending, and well-being. They also surveyed the women and their children about gender norms related to women's work.

## Results and policy lessons

*Research ongoing; results forthcoming.*

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