

DOES MATERNAL EMPLOYMENT BENEFIT CHILDREN'S EDUCATION?

A large rural workfare program in India raised women's employment that in turn benefited children's education



UN Women Asia and the Pacific

Overview

The National Rural Employment Guarantee Scheme (NREGS) is a 'right to work' program of the Indian government. It aims to provide greater livelihood security to rural households. It also creates greater opportunity for women to participate in the workforce. On the one hand, working and earning

income can have an empowering effect on women, and can also benefit their children. On the other hand, children may suffer if they have to engage in domestic duties while the mother is working away from home. In a recently published article, Afridi, Mukhopadhyay and Sahoo (2016) analyze the effect of maternal workforce participation on children's education in the context of NREGS in India.

Key Results

- Higher workforce participation by mothers leads to better educational outcomes of their children. This effect is over and above any income effect from the mother's contribution to household income.
- Maternal employment results in a higher share of household budget being allocated to children's educational expenditure in poorer households.
- Increased participation in the labor market leads to improvements in the mother's decision making abilities within household.

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The Growth to Empowerment (G2E) program within GrOW examines the impact of economic growth on women's economic empowerment.

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Background

The National Rural Employment Guarantee Act (NREGA) of India provides a legal guarantee of 100 days of minimum-wage employment each year to rural households who are willing to engage in manual unskilled public work projects. The scheme (NREGS) that operationalizes this Act was launched in 2006, and over the next two years it covered all districts of India. In terms of the number of beneficiaries, it has emerged as the world's largest workfare program.¹ From a gender perspective, there are two important features



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of NREGS. First, it aims for one-third of the participants to be women. Second, it provides men and women an equal wage rate which is predetermined depending on the nature of the work. Therefore, the program widens the opportunity to earn income for women in villages. Moreover, unlike a private labor market where women are often paid less than men for the same type of work, NREGA is without any gender-based wage discrimination.

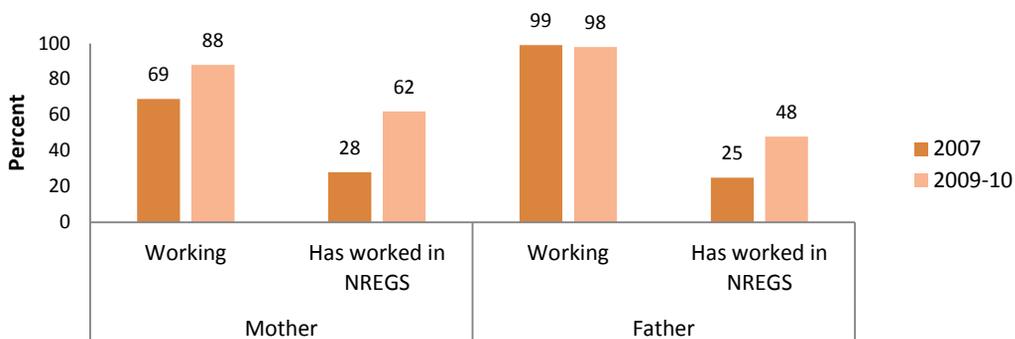
In a country where female labor force participation rates are low and stagnating, a program like NREGS has the potential to bring women into the workforce.² This is important because female employment can also affect the welfare of household members, especially children. There are three plausible channels through which the mother's employment has an impact on children's educational outcomes. First, the aggregate income of the household is likely to increase when the mother starts earning an income. This can lead to higher investments in children's human capital. Second, when the mother participates in outside work, children may have to take up household chores and other domestic duties, which may worsen their educational outcomes. Third, earning income may empower the mother to make decisions about resource allocation within the household. Existing literature shows that women prefer to invest more in children's welfare. Hence, this may have a positive effect on children's education. Conceptually, all three channels may be at play, making the direction of the resulting effect ambiguous. It is therefore important to empirically examine the net effect of mother's workforce participation on children's educational outcomes.

Methods and Data

The study uses individual-level panel data for two years: 2007 and 2009-10 from the state of Andhra Pradesh in India. The dataset is part of the Young Lives Survey (YLS).³ The analytical sample consists of 3,275 children who were in the school-going age group (5-14 years) in 2007. The same children are followed in 2009-10, along with information on their parents and other relevant factors. Education outcomes are measured in terms of the time spent in school in a typical day, enrollment rate, and the grade progression of each child. Furthermore, to test for any direct evidence of investment in children, household-level data measuring the budget share of education expenses is analyzed.

The study aims to evaluate the causal effect of the mother’s workforce participation on children’s education. The main challenge is to tackle the possibility that female labor supply and household income are determined simultaneously with the decision to invest in children. For instance, a negative income shock may force women to look for work, and at the same time, it can reduce expenditure on children’s education. In such cases, a naïve analysis between the mother’s labor supply and children’s education would show a negative relationship without considering causality. The study employs appropriate econometric techniques – instrumental variables and child fixed effects – to take these issues into account. In particular, the authors utilize the sub-district level intensity of NREGS implementation, along with variation in rainfall, to identify exogenous shifts in the mother’s employment status. Essentially, this approach exploits the fact that female workforce participation has increased between the two survey years, mostly as a result of NREGS (Figure 1). In addition, the analysis also estimates the effect of maternal workforce participation separately from the effect of a rise in household income. This helps to shed light on the causal chain, especially to test whether the effect on children’s education is due to greater bargaining power of working mothers in the household. For a sub-sample with additional information, the study also directly tests whether working mothers have greater say and control over a number of important decisions made within the household.

Figure 1. Changes in parental workforce participation rates



Main Results

- Higher workforce participation by mothers leads to better educational outcomes of their children.** There is a significant rise in children’s time spent in school, partly due to higher enrollment rates, when mother participates in the workforce. A positive effect is also found on children’s grade progression, indicating an overall improvement in educational outcomes. This effect is over and above any income effect from the mother’s contribution to household income. One might think that a working mother may be using schools as a day-care facility (lack of childcare facilities often constraints women from working outside the home in rural India). However, further analysis reveals that this is not the case. Rather, the observed effect is likely to be caused by the channels discussed below.

- **Maternal employment results in a higher share of household budget being allocated to children's educational expenditure in poorer households.** The proportion of household expenditure on school fees, uniform, and private tuition increases are a result of employment. This evidence indicates that the effects are due to real investments in children's human capital when the mother works.
- **Increased participation in the labor market leads to improvements in the mother's decision making abilities within household.** Working mothers are more likely to make key decisions about land, wage activities, business, and self-employment. Workforce participation also provides them with greater control over earnings from these activities. Therefore, to sum up all these findings, NREGS expands the opportunity to earn income for rural women in Andhra Pradesh. This improves their intra-household decision making power, they spend more on schooling expenses, leading to better education outcomes of children.

Policy Lessons

- **The study provides new evidence that employment not only empowers women, but also leads to higher investments on the human capital of the next generation.** Thus, policies that promote female employment in developing countries can have far reaching benefits.
- **The design of public policies can have effects beyond the primary objective of the program.** The basic objective of NREGS was to provide employment to households and alleviate poverty in rural areas. However, the design of the program incorporated certain features that encouraged women's workforce participation through which children benefited. Therefore, any cost-benefit analysis of such a program should take these effects into consideration.

Further Reading

Afridi, F., Mukhopadhyay, A., & Sahoo, S. (2016). Female labor force participation and child education in India: evidence from the National Rural Employment Guarantee Scheme. *IZA Journal of Labor & Development*, 5(1), 7.

<http://link.springer.com/article/10.1186/s40175-016-0053-y>

Endnotes

1. For an overview and synthesis of existing research on NREGS, see:
<http://www.ncaer.org/events/ipf-2016/IPF-2016-Paper-Sukhtankar.pdf>
2. This article summarizes the pressing issue of low female labor force participation in India:
<http://www.ideasforindia.in/article.aspx?article=What-explains-the-low-and-stagnating-female-labour-force-participation-in-India>
3. Young Lives is a multi-country project to track childhood poverty over time. Further details can be found here: <http://www.younglives.org.uk/>

Open Questions

The study analyzes data from Andhra Pradesh, a state where traditionally women's workforce participation has been higher. In terms of the implementation of NREGS, this state has been on the better side of the national average. Therefore, it remains an open question as to what extent the effects can be generalized for other states or in a nation-wide setting. Further research would be needed to address this issue.

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The **GrOW initiative** funds 14 research projects aimed to empower women to participate in economic activities, providing evidence that can inform social and economic policies to improve poor women's lives, while promoting economic growth.

Research Project – G2E (Growth to Empowerment) is a project of the GrOW initiative: Pathways for shared prosperity: Understanding the links between women's economic empowerment and growth.

Information

<https://www.uni-goettingen.de/grow>

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