Job Guarantee as Tool for Women’s Empowerment: Propensity Score Matching Analysis

Ashutosh Kumar¹ & Rahul Singh²

¹ Research Scholar in Executive Fellow Program in Management, Area of Research in Public Policy, The Centre for Research Studies, Birla Institute of Management Technology, Greater Noida, India
² Chairperson- PGPX Area Head- Strategy, Innovation, Entrepreneurship, Professor in Strategy and Globalization, Birla Institute of Management Technology, Greater Noida, India

Correspondence: Ashutosh Kumar, National Statistical Systems Training Academy, Plot Number 22, Knowledge Park-2, Greater Noida-201310, India. E-mail: ashutosh.kumar_july14@bimtech.ac.in

Received: May 14, 2022           Accepted: June 2, 2022               Online Published: June 6, 2022
doi:10.5539/ijbm.v17n7p7         URL: https://doi.org/10.5539/ijbm.v17n7p7

Abstract

Women’s empowerment relies on access to resources routed through micro-credit, cash transfers, self-employment, or wage-based employment. Educational qualifications such as formal education or vocational training provide the routes for employment. However, the Indian job guarantee program Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) ensures a minimum of 100 days of job guarantee to anyone willing to work without any eligibility criteria related to formal education. While gendered provisions in the program are intended to encourage women’s participation to make them self-reliant, the safety net features also protect their dignity. Therefore, aspects related to women's empowerment, such as their more significant say in household decision-making, may likely be impacted by the program. In addition, the program provides institutional support to women and access to resources through the wages earned. Analysis based on the robust propensity score matching analysis suggests that the women have been empowered from the point of view of household decision making. A similar analysis also holds for the women from the vulnerable sections of society. Hence, although intended for poverty alleviation, the programme acts as a tool for empowering rural women in India.

Keywords: decision making, women empowerment, MGNREGA, propensity score matching

1. Introduction

The goal to achieve gender equality and empowerment for all women and girls is stated in the Sustainable Development Goal number 5 (Sen, 2019). The notion of empowerment is associated with the process of acquiring the ability to make choices for those who have been denied such choices. In other words, the expansion of strategic and critical choices related to the basic survival of those who are not permitted to have choices is empowerment (Kabeer, 1999). Control of resources and the freedom to have choices to make decisions is translated as women’s empowerment (Keller & Mbewe, 1991). The core issue lies in the freedom to make choices, including household-level decision-making choices. As all the choices do not qualify to be equal in understanding the notion of power, there are two levels of choices. The first-order choice is related to the strategic life choices critical to survival, such as decisions related to livelihood or fertility. In contrast, second-order choices are relatively not critical for survival (Kabeer, 1999).

Participation in the household decision making has been frequently used as one of the most important indicators of women's empowerment (Kishor & Subaiya, 2008; Upadhyay et al., 2014; Varghese, 2011), including decisions related to the fertility of women (Upadhyay et al., 2014), health and wellbeing of women and children (Acharya et al., 2010) as well as other economic decisions related to purchasing of household goods. However, other indicators of women's empowerment, such as women's mobility, cannot be ignored. For example, women's say in the decision-making process related to the fertility preference in demand for fewer children shows that they are in greater control of their lives (Kishor & Subaiya, 2005). However, the association between preferences related to the number of children and variables related to empowerment are not consistent (Upadhyay et al., 2014).

Women’s work is mainly unrecognised, undervalued and unpaid despite all women working and sharing more outstanding household care and maintenance, including care for children (Mattos & Dasgupta, 2017). Moreover,
own domestic-related activities hurt the women’s participation in the decision-making process since unpaid work is more likely to be perceived as an insignificant contribution to the household (Hirway, 2018).

Although there is a complex relationship between paid work and empowerment, working women are more likely to be empowered than those not engaged in any economic activity (Sarkar, 2017; West, 2006). Employment makes women financially strong and independent, leading to their empowerment (Habib, Shafiq, Afshan and Qamar, 2019). Irrespective that women in certain occupations are more empowered than others (West, 2006), access to financial resources helps empower women (Bansal, 2010). However, for the poorer women likely to be engaged in informal labour activities or own-account work, it is not easy to improve their say in the household decision-making process due to their level of earnings (Kabeer, 1999).

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is implemented in the rural parts of India with a prime focus on the vulnerable sections of society, including women. Since gender-related inequalities intensify the effects of poverty (Kabeer, 1999) and rural women have less empowerment than their urban counterparts (Sarkar, 2017), the rural-based program focusing on the poor and the vulnerable can have a gendered impact.

2. Gendered Provisions of the Job Guarantee Program

As per the implementation guidelines for MGNREGA, one of the program's goals is to ensure the empowerment of socially disadvantaged segments of the society with an emphasis on women. Accordingly, the program is focused on the upliftment of vulnerable groups, including women in exceptional circumstances. Gendered provisions include identifying women in exceptional circumstances, work allocation to women participation, work allocation in particular categories of work, worksite facilities, supervision of work, participation in the payment process (table 1) and the program monitoring (table 3). In addition, specific other provisions ensure that the program acts as a safety net for the women, especially those belonging to the vulnerable groups (table 2).

Table 1. Gendered provisions for women’s participation in the program

| S.No. | Provisions in the guidelines |
|-------|-----------------------------|
| 1. Identification of women beneficiaries | |
| i. Door to door survey | The door to door survey identifies the disadvantaged groups, including destitute or widowed women. |
| ii. Survey team | The survey team includes women residents, leaders of Self-Help Groups (SHG), Anganwadi workers, and Accredited Social Health Activists (ASHAs). |
| 2. Work allocation for women participants | |
| i. Work allocation | Preference is given to women, including single women and older persons nearer to their residence. |
| ii. The quota of work allocation | At least one-third of participants are ensured to be women out of the total persons who have registered and requested to work. |
| 3. Worksite facilities for women participants | |
| i. Mother participants | If five or more children below the age of six years accompany their mothers to the work site, there is a provision for a creche there. |
| ii. Creche supervisor | One woman is identified for managing the creche, whose payment is at the level of prevailing wage rates for unskilled workers. |
| 4. Worksite supervision/management by women participants | |
| i. Appointment for mates or worksite supervisors | At least one mate or worksite supervisor is appointed for a group of fifty MGNREGA workers. Preference is given to women who have previously worked in MGNREGA. |
| ii. Provision of worksite supervision by women Self Help Groups (SHGs) | In some of the states in India, worksite supervision is assigned to women Self Help Groups (SHGs) which serves the dual purpose of the greater level of women's participation in the program and financial support to such groups. |
| 5. Participation in the payment process. | |
| i. Payments of the wages | Communication of the wage rates in the local language |
| ii. Payment agencies | Equal wage rates for men and women comply with the equal remuneration act 1976. |
| ii. Payment committee | Awareness of the banking system and the procedures for all the wage seekers, including women, especially in the areas of unfamiliarity. |

Source: Author’s compilation from MGNREGA guidelines, 2013.
Special efforts are taken to empower women through an adequate representation of women in the administrative staff of the program, sensitising them for participation in the program with the help of various modes of mass media, ensuring equal payment of wages in comparison to their men counterparts and educating them for the bank operations for greater control of financial resources (table 1) in their lives (MGNREGA operational guidelines, 2013).

Table 2. Gender aspects of safety net provisions in the program

| S.No. | Safety net provisions of the program |
|-------|-------------------------------------|
| 1.    | Livelihood security |
| i.    | Livelihood security for the vulnerable sections |
| ii.   | Extra help to vulnerable women |
| ii.   | Extra help for pregnant and lactating women |
| 2.    | Safeguarding women’s dignity |
| i.    | Inclusion of sanitation works |
| ii.   | Work allocation in Individual Household Latrines (IHHL) |

Table 2. Gender aspects of safety net provisions in the program

- Livelihood security for the vulnerable sections: It is recognised in the program guidelines that a particular focus is required for the livelihood security for some of the special categories of vulnerable groups, including women in particular circumstances. Therefore, extra efforts are needed to provide a safety net to such groups.
- Extra help to vulnerable women: Special efforts are required for vulnerable women such as widowed, destitute or deserted. Gram Panchayats (GP) require to identify such categories and ensure that a minimum of 100 days of work is provided.
- Extra help for pregnant and lactating women: Lactating and pregnant women (eight months before and ten months after childbirth) should also be treated as special categories so that works that require lesser physical effort. In addition, the works should be provided nearer to their residences.

Table 3. Gender aspects in the monitoring related to the program operations

| S.No. | Provisions | Features of the program implementation |
|-------|------------|----------------------------------------|
| 1.    | Vigilance and Monitoring Committee (VMC) | Vigilance and Monitoring Committee (VMC) consists of ten members, of which fifty per cent are women with appropriate representations to Scheduled Caste (SC) and Scheduled Tribes (ST) |
| 2.    | Representation in VMC | The members are identified from school teachers at the local level, members of Self-Help Groups (SHGs), Social Audit Volunteers, and others. |

3. Women’s Participation in the Job Guarantee Program

As per the 2011 figures from the census of India, women constitute less than half of the total population (Chandramouli & General, 2011). However, their participation in the program has been consistently more than their population's share (Table 4). In terms of absolute growth of women's participation in the program, the total number of person-days has a rising trend (Figure 2). While the program intends to ensure a minimum of 33 per cent participation of women, their participation rates continue to be higher. While the women's participation may be associated with their intent to overcome their deprivation, gendered provisions in the program guidelines may be an added advantage.
Table 4. Women’s participation in MGNREGA

| S.No. | Financial Year | Person-days worked by the women (in lakhs) | Women’s participation as the proportion of total person-days (in percentage) |
|-------|----------------|--------------------------------------------|--------------------------------------------------------------------------|
| 1.    | 2013-14        | 10959.38                                   | 52.44                                                                    |
| 2.    | 2014-15        | 8482.44                                    | 54.62                                                                    |
| 3.    | 2015-16        | 12136.11                                   | 54.98                                                                    |
| 4.    | 2016-17        | 12576.63                                   | 56.03                                                                    |
| 5.    | 2017-18        | 11805.09                                   | 53.12                                                                    |
| 6.    | 2018-19        | 13886.25                                   | 54.21                                                                    |
| 7.    | 2019-20        | 13864.30                                   | 54.49                                                                    |
| 8.    | 2020-21        | 19764.49                                   | 52.98                                                                    |
| 9.    | 2021-22        | 19031.56                                   | 54.57                                                                    |

Source: Author’s calculation from MGNREGA public data portal (https://nregarep2.nic.in/netnrega/dynamic2/dynamicreport_new4.aspx)

Figure 1. Women’s participation in terms of proportion of total participation
Source: Based on the data from MGNREGA public data portal

Figure 2. Total person days worked by women (in lakhs)
Source: Based on the data from MGNREGA public data portal
4. Literature Review

Women’s empowerment has both spatial and temporal elements with contextual positioning. Access and control of resources as assumptions for women empowerment (Kabeer, 1999) have been challenged by (Rocca et al., 2009), referring to the socio-cultural context of the societies where gender inequalities are deep-rooted. In such societies, increase in economic resources for women may be accompanied by adversities like domestic violence. However, such phenomena may be temporary and short-lived. In terms of temporal dimension, empowerment is dynamically related to different stages of life cycle of women. For example, it has been observed that older women (Bansal, 2010) or women having children have a better status than younger women or women without any children (Kishor & Subaiya, 2005). However, empowered women to reach out to other women to make them empowered (Habib, Shafiq, Afshan, & Qamar, 2019) irrespective of their age or maturity.

Pathways to empowerment are routed through access to financial resources such as credit and savings (Rodriguez, 2022), microfinance support (Al-Shami et al., 2018; Bansal, 2010; Kanungo, 2012), savings and investment (Maligalig et al., 2019), home-based self-employment (Khosravi et al., 2018) and non-farm-based employment (Maligalig, 2019).

Maligalig et al. (2019) have analysed women's intra-household decision-making power (WIDMP) based on their individual and joint portfolios to infer that women's decision-making has almost been equal to men's investment in rice breeding. Women employed in activities other than agriculture are likely to be slightly more empowered than others due to their better decision-making capabilities related to investments. From the point of view of access to financial resources through self-employment, immigrant women have been empowered through their home-based businesses (Khosravi et al., 2018). The optimal pathways to empowerment are routed through employment via education (Wilson et al., 2019), especially for the deprived and the marginalised sections of society.

Access to financial resources in terms of cash transfers may also have likely impact on the aspects related to women empowerment (Almas et al., 2018; Ambler & De Brauw, 2017; Adato & Roopnaraine, 2010; Ambler & De Brauw, 2017; Corboz, 2013; Litwin, Perova & Reynolds, 2019; Molyneux & Thomson, 2011; Sugiyama & Hunter, 2020; Tabbush, 2010; Waqas & Awan, 2019; Zaky, 2014). However, the area is mainly underexplored as very few studies evaluate the gendered impact of such programs (Corboz, 2013; Molyneux & Thomson, 2011).

Cash transfers have favourably impacted the gendered manner due to convenient access to resources for the women (Ambler & De Brauw, 2017; Litwin, Perova & Reynolds, 2019; Sugiyama & Hunter, 2020; Zaky, 2014). The women are likely to be empowered through the pathways connected to their psychological growth and decisions related to their child’s health (Leroy, Ruel and Verhofstadt, 2009) and education (Zaky, 2014).

Cash transfers may have a paradoxically limited impact on some of the detrimental aspects related to domestic violence (Litwin, Perova and Reynolds, 2019). However, there are pieces of evidence that suggest otherwise (Ambler & De Brauw, 2017; Zaky, 2014). Due to the greater dependence of women on their male partners, the programs may not impact as intended (Corboz, 2013).

Programs like Bolsa Familia from Brazil have favourably impacted three dimensions of women's empowerment related to their economic, health and psychological wellbeing (Sugiyama & Hunter, 2020). However, it may not be a universal phenomenon due to their context related to the institutional support system.

Contrary to the fact that women, on average, are found to be willing to sacrifice a proportion of household income to access financial resources and to have greater control over power, access to resources from the cash transfers has empowered women to reduce their willingness (Almas et al., 2018).

Women's economic and social empowerment has been associated with the income growth of women through employment provided by the job guarantee programs like MGNREGA from India (Rodriguez, 2022). In addition, the program has helped in the empowerment of rural women (Chopra, 2019; Pellissery & Jalan, 2011; Rajalakshmi & Selvam, 2017; Xavier & Mari, 2014) in terms of their more significant say in the decision-making process (Xavier & Mari, 2014), greater self-independence and self-esteem (Rajalakshmi & Selvam, 2017) and sense of collective strength (Pellissery & Jalan, 2011). However, as most of the studies are regional and limited to some of the dimensions of women empowerment, rigorous analysis is required to evaluate the program's gendered impact irrespective of the country's prevailing socio-cultural norms.

5. Problem Statement

Can MGNREGA wages acting as access to economic resources have a gendered impact on women's empowerment?
6. Data and Variables

Data has been taken from the nationally representative India Human Development Survey (IHDS-2012). IHDS-2012 datasets provide rich information at the individual and household levels. Datasets are suitable for the econometric evaluation of the program from the point of view of its gendered implications. There is a separate dataset for the eligible women and the information related to their participation in MGNREGA. The data set about the eligible women includes questions about the empowerment that has been derived from the women’s participation in the decisions that affect their daily lives. Some of the aspects related to the women's participation in the household decision making are included:

- Who has the most say in the decisions?
  1) What to cook daily?
  2) Whether to buy an expensive item such as a TV or Fridge?
  3) How many children do you have?
  4) What to do if you fall sick?
  5) Whether to buy land or property?
  6) How much money to spend on a social function such as marriage?

If the respondent has any children:
  a) What to do if the child falls sick?
  b) To whom your children should marry?

The possible answers are recorded for the women respondent as yes/no in terms of the binary outcome (1,0). Similar binary outcomes are coded for their husbands and senior male, senior female, or other household members. If there is more than one affirmative answer, the final answer is recorded for the person who has the most say in the decision-making process at the household level. Decisions regarding the purchase of capital goods such as TV or Fridge and assets such as land or property have been included to analyse empowerment related to women's economic decision-making at the household level. Women's decision-making regarding their fertility is proxied through the question related to the decision about the number of children they decide to have. Decision-making regarding women's health has been included, keeping in view the most fundamental decisions related to their wellbeing. If the women have children, questions assessing the women's decision-making for the health and the prospects related to the marriage of their children have also been included. All these aspects of women's decision-making are cross-culturally valid because of nationally representative data.

7. Methodology

Propensity score matching and nearest-neighbour matching methods have been applied for the analysis. A propensity score is a probability of treatment assignments conditional on the observed baseline covariates. Propensity score matching methods are used to compare the outcomes of the treated and untreated subjects based on their similar propensity scores. Whereas treated and untreated subjects are compared subject to their nearest proximity of propensity scores in the nearest neighbour methods (Rosenbaum & Rubin, 1983). Average Treatment Effect on the Treated (ATET) is the average difference in outcomes for treated and untreated subjects.

A sample size of approximately 11,000 eligible women has been taken to analyse the decision-making aspects of women (table 6). However, approximately 3000 women are taken from households below the poverty line (table 7). Approximately 1800 women are taken from the Scheduled Caste and Scheduled Tribe households (table 8) for analysis. Treatment and control groups are formed—the treatment group comprised participant women in the MGNREGA programme, whereas the control group comprised the non-participants. Matching the outcomes related to the decision-making factors is done for the individuals based on the proximity of their propensity scores. Finally, the average difference of the outcomes (Average Treatment Effect on the Treated) is taken to evaluate the programme's impact.

8. Results

It has been observed from the descriptive statistics that the proportions of women who participate in the program have a say in the household decision-making aspects is more significant in comparison to others. However, the result is not similar for the MGNREGA women for the decisions related to the number of children a woman can have (Table 5).

Average Treatment Effect on the Treated (ATET) has been evaluated using propensity score matching and the
nearest-neighbour matching approach to evaluate the program's impact on household decision-making. It is analysed that most of the coefficients are positive, with some of those statistically significant. While ATET coefficients for the decisions related to the fertility aspects of the women and their children’s health are negative, the results are not significant statistically (Table 5).

Table 5. The proportion of women who are decision-makers in their households

| S.No. | Household decision-making aspects                  | NON-MGNREGA women | MGNREGA women |
|-------|----------------------------------------------------|-------------------|---------------|
| 1.    | Decides what to cook daily                         | 93.97             | 95.62         |
| 2.    | Decides to purchase an expensive item              | 78.77             | 84.64         |
| 3.    | Decides the number of children you have            | 93.42             | 93.17         |
| 4.    | Decides what to do if you fall sick                | 86.49             | 88.56         |
| 5.    | Decides whether to buy land/property               | 76.25             | 83.93         |
| 6.    | Decides wedding expense                           | 81.95             | 87.51         |
| 7.    | Decides what to do if a child falls sick           | 92.17             | 92.23         |
| 8.    | Decides to whom your children should marry         | 89.57             | 91.33         |

Source: Author’s calculation from IHDS-2012 data.

The program positively impacts women's decision-making as most of the ATET coefficients are positive, including some statistically significant coefficients. Hence nearly all the aspects of women's decision-making are impacted favourably by the program (Table 6).

Analysis has been done for the poor women who belong to the households living below the poverty line and the poor women who belong to the Scheduled Caste (SC) and Scheduled Tribe (ST) households. It is analysed that all the ATET coefficients are positive for such women indicating that the program helps favourably the poor women who are MGNREGA participants compared to other poor women (Table 7). A similar analysis holds for the women who belong to the lowest strata of the society (Table 8).
Table 6. Impact of the program on the women’s decision making

| S. No. | Household decision-making aspects | ATET Coefficients (treatment vs control) |
|-------|----------------------------------|-----------------------------------------|
|       |                                  | Propensity Score Matching | Score | Nearest Neighbor Matching | Neighbor |
| 1.    | Decides what to cook daily       | 0.0117*                    | 0.0169**                               |
|       |                                  | (0.00565)                  | (0.00574)                               |
|       |                                  | 11971                      | 11971                                   |
| 2.    | Decides to purchase an expensive item | 0.0506***                  | 0.0577***                              |
|       |                                  | (0.00988)                  | (0.00990)                               |
|       |                                  | 11854                      | 11854                                   |
| 3.    | Decides the number of children you have | -0.00538                  | -0.00289                               |
|       |                                  | (0.00633)                  | (0.00659)                               |
|       |                                  | 11450                      | 11450                                   |
| 4.    | Decides what to do if you fall sick | 0.0281***                  | 0.0287***                              |
|       |                                  | (0.00848)                  | (0.00868)                               |
|       |                                  | 11964                      | 11964                                   |
| 5.    | Decides whether to buy land/property | 0.0637***                  | 0.0650***                              |
|       |                                  | (0.0101)                   | (0.0103)                                |
|       |                                  | 11747                      | 11747                                   |
| 6.    | Decides wedding expense          | 0.0503***                  | 0.0488***                              |
|       |                                  | (0.00920)                  | (0.00918)                               |
|       |                                  | 11925                      | 11925                                   |
| 7.    | Decides what to do if a child falls sick | -0.0000994                | -0.00199                               |
|       |                                  | (0.00730)                  | (0.00712)                               |
|       |                                  | 11456                      | 11456                                   |
| 8.    | Decides to whom your children should marry | 0.0230***                  | 0.0163*                                |
|       |                                  | (0.00788)                  | (0.00764)                               |
|       |                                  | 11426                      | 11426                                   |

Notes. 1. The questions are answered by respondent women; 2. Standard error in the parenthesis; 3. * p < 0.05, ** p < 0.01, *** p < 0.001; 4. Value of N (sample size) is mentioned in the third row of every response.

Table 7. Impact of the program on the poor women’s decision making

| S. No. | Household decision-making aspects | ATET Coefficients (treatment vs control) |
|-------|----------------------------------|-----------------------------------------|
|       |                                  | Propensity Score Matching | Score | Nearest Neighbor Matching | Neighbor |
| 1.    | Decides what to cook daily       | 0.0161                      | 0.0168                               |
|       |                                  | (0.0105)                   | (0.0124)                               |
|       |                                  | 3062                       | 3062                                   |
| 2.    | Decides to purchase an expensive item | 0.0202                    | 0.0418*                                |
|       |                                  | (0.0179)                   | (0.0198)                               |
|       |                                  | 3014                       | 3014                                   |
| 3.    | Decides the number of children you have | 0.00558                   | 0.00892                               |
|       |                                  | (0.0126)                   | (0.0128)                               |
|       |                                  | 2936                       | 2936                                   |
| 4.    | Decides what to do if you fall sick | 0.0347*                    | 0.0275                                |
|       |                                  | (0.0173)                   | (0.0172)                               |
|       |                                  | 3059                       | 3059                                   |
| 5.    | Decides whether to buy land/property | 0.0403*                    | 0.0570**                               |
|       |                                  | (0.0191)                   | (0.0207)                               |
|       |                                  | 2989                       | 2989                                   |
| 6.    | Decides wedding expense          | 0.0715***                  | 0.0508**                               |
|       |                                  | (0.0183)                   | (0.0185)                               |
|       |                                  | 3048                       | 3048                                   |
| 7.    | Decides what to do if a child falls sick | 0.0103                    | 0.00479                               |
|       |                                  | (0.0132)                   | (0.0138)                               |
|       |                                  | 2962                       | 2962                                   |
| 8.    | Decides to whom your children should marry | 0.00808                   | 0.0147                                |
|       |                                  | (0.0142)                   | (0.0146)                               |
|       |                                  | 2957                       | 2957                                   |

Notes. 1. The questions are answered by respondent women; 2. Standard error in the parenthesis; 3. * p < 0.05, ** p < 0.01, *** p < 0.001; 4. Value of N (sample size) is mentioned in the third row of every response.
Table 8. Impact of the program on the SC/ST poor women’s decision making

| S.No. | Household decision-making aspects | ATET Coefficients (treatment vs control) | Propensity Score Matching | Nearest Neighbor Matching |
|-------|----------------------------------|------------------------------------------|--------------------------|--------------------------|
| 1.    | Decides what to cook daily        | 0.0169 (0.0140)                           | 0.0192 (0.0148)          |                          |
|       |                                  | 1856                                      | 1856                     |                          |
| 2.    | Decides to purchase an expensive item | 0.0280 (0.0243)                           | 0.0354 (0.0258)          |                          |
|       |                                  | 1822                                      | 1822                     |                          |
| 3.    | Decides the number of children you have | 0.0284 (0.0152)                           | 0.0184 (0.0170)          |                          |
|       |                                  | 1761                                      | 1761                     |                          |
| 4.    | Decides what to do if you fall sick | 0.0429 (0.0231)                           | 0.0452 (0.0232)          |                          |
|       |                                  | 1853                                      | 1853                     |                          |
| 5.    | Decides whether to buy land/property | 0.0809"** (0.0253)                      | 0.0769"** (0.0274)      |                          |
|       |                                  | 1809                                      | 1809                     |                          |
| 6.    | Decides wedding expense          | 0.0576" (0.0236)                          | 0.0842"*** (0.0244)     |                          |
|       |                                  | 1846                                      | 1846                     |                          |
| 7.    | Decides what to do if a child falls sick | 0.0134 (0.0170)                          | 0.0123 (0.0182)         |                          |
|       |                                  | 1791                                      | 1791                     |                          |
| 8.    | Decides to whom your children should marry | 0.0128 (0.0180)                          | 0.0279 (0.0195)         |                          |
|       |                                  | 1791                                      | 1791                     |                          |

Notes. 1. The questions are answered by respondent women; 2. Standard error in the parenthesis; 3. " p < 0.05, ** p < 0.01, *** p < 0.001; 4. Value of N (sample size) is mentioned in the third row of every response.

9. Discussion

The program acts as the safety net (Table 2) with the help of gender-related provisions (Table 1) that help women's participation and the protection of their dignity. Evidence suggests that the pathways to employment are routed through education even for one of the most deprived segments of the society, like Australian aboriginals (Wilson et al., 2019). Contrary to this, the pathways may not be linked through education as MGNREGA participants do not require any educational qualifications yet have more likelihood of getting empowered related to the household decision-making process (Table 6). The analysis is further validated because the program participants belonging to the poor (Table 7) and the socially deprived (Table 8) households are more likely to be empowered than the other poor and socially deprived women. Since poor and socially deprived women are more likely to be less educated or illiterate, their empowerment is not routed through education if they are employed in the programs like MGNREGA.

Self-reliance and possibilities of new opportunities are also critical for women's empowerment (Kabeer, 2005) despite the pathways linked to women's employment (Wilson et al., 2019). Our analysis suggests that the MGNREGA women have a more significant say in the decision making as the employment provided by the program makes them financially self-reliant and opens up new opportunities. Hence MGNREGA women are empowered as we agree with Kishor and Subaiya (2005) that women’s more significant say in the household decision making is an indicator of their empowerment.

As the expansion of women's strategic and critical life choices is connected with empowerment (Kabeer, 1999), positive ATET coefficients for nearly all the indicators indicate that the program has favourably impacted women's empowerment. Although ATET coefficients are negative for some of the indicators related to the women's decisions about their fertility or their children's health, the results are not significant. Contrary to this, some critical and strategic life choices coefficients are statistically significant.

Women’s empowerment is not limited to the satisfaction of basic needs necessary for their or their family member’s survival (Kabeer, 2005), as there are second-order life choices also (Kabeer, 1999). Statistically significant ATET coefficients related to the women's household decision-making for the purchase of land or property indicate that the program also enables the expansion of second-order life choices for the MGNREGA women.
The program is successful in elevating the socio-economic status of women (Rodriguez, 2022), as our analysis shows that the MGNREGA women are more likely to get empowered through their more significant say in the household decision-making process. Hence the findings are consistent with Kar (2013), Mattos and Dasgupta (2017), and Pankaj and Tankha (2010) that the program helps in empowering women so that they may have greater control over their lives. Furthermore, since household decision-making as an indicator of empowerment is valid cross-culturally (Kishor & Subaiya, 2005), our analysis indicates that the program helps all women irrespective of their socio-economic status or cultural background.

10. Conclusion and Policy Suggestions

Policies related to access to resources can be successful if there is a genuine expansion of choices for the women (Kabeer, 2011). However, specific policies related to trade liberalisation and investment may weaken the link between employment and empowerment. Pathways to empowerment through wages are intricate in such a scenario due to the possibilities of greater bargaining power for the firms relative to the workers. Social protection is required at the institutional level to achieve balance (Braunstein, 2008). As the mandate of MGNREGA is to provide at least 100 days of employment in a financial year with a minimum of 33 per cent job allocation for women, the program acts as a safety net for the poor and the vulnerable, including women. The program wages are likely to be translated to women's empowerment due to the safety net features irrespective of the prevailing economic situations in the country.

Although cash transfer schemes like Brazil’s Bolsa Familia provide access to resources for women and helps them to get empowered, the institutional support system is also desirable for the universal success of such programs (Sugiyama & Hunter, 2020). MGNREGA, through the gendered provisions mentioned in the program guidelines, provides institutional support for the women ensuring their participation so that they may get access to the resources. However, the support system must be further strengthened in terms of more coordination with other stakeholders like the ministry of women and child development and the ministry of health. Furthermore, outcomes related to women's decision-making regarding their health and the wellbeing of their children are likely to be further improved with the help of a stringent support system.

Strategies related to education and employment are helpful for empowerment (Wilson et al., 2019), as pathways to empowerment are routed through employment via education. However, programs like MGNREGA are not restricted to following such pathways as employment is guaranteed to everyone who volunteers to work irrespective of their educational level. Therefore, our analysis suggests that the program is beneficial to expanding women's empowerment regardless of their educational level. Keeping in view that most of the jobs in the program are unskilled, women participants are less likely to be educated or highly educated. Therefore, unskilled jobs should be retained so that women who are not literate, less educated, or acquire the necessary skills are not left out of development and empowerment. However, it is also suggested that skill development be integrated into the program objectives so that women's empowerment may be routed through skill development.

For women, self-determination related to childbirth is linked to relatively stable employment with higher wages than employment in the informal sector (Kabeer, 1999). As outcomes related to childbirth are negatively impacted by MGNREGA, wage rates may further be enhanced for the women. Their employment may be guaranteed for the entire year so that employment stability with relatively high income may be ensured. Expansion of women's decision-making related to their fertility may have long-term consequences on the aspects related to population control.

Development is closely related to women's empowerment (Duflo, 2012). Therefore, strategies for inclusive development at the global level are not possible without the strategies that promote the aspects related to women's empowerment.

The data supporting this study's findings are available in [Inter-university Consortium for Political and Social Research] at https://doi.org/10.3886/ICPSR36151.v6

References

Acharya, D. R., Bell, J. S., Simkhada, P., Van Teijlingen, E. R., & Regmi, P. R. (2010). Women's autonomy in household decision-making: a demographic study in Nepal. Reproductive Health, 7(1), 1-12. https://doi.org/10.1186/1742-4755-7-15

Adato, M., & Roopnaraine, T. (2010). 12 Women's Status, Gender Relations, and Conditional Cash Transfers. Conditional cash transfers in Latin America, 284.

Almas, I., Armand, A., Attanasio, O., & Carneiro, P. (2018). Measuring and changing control: Women’s empowerment and targeted transfers. The Economic Journal, 128(612), F609-F639.
Al-Shami, S. S. A., Razali, R. M., & Rashid, N. (2017). The Effect of Microcredit on Women Empowerment in Welfare and Decisions Making in Malaysia. *Social Indicators Research, 137*(3), 1073-1090. https://doi.org/10.1007/s11205-017-1632-2

Ambler, K., & De Brauw, A. (2017). The Impacts of Cash Transfers on Women’s Empowerment. https://doi.org/10.1596/26272

Chandramouli, C., & General, R. (2011). *Census of India 2011. Provisional Population Totals* (pp. 409-413). New Delhi: Government of India.

Chopra, D. (2019). Taking care into account: Leveraging India's MGNREGA for women's empowerment. *Development and Change, 50*(6), 1687-1716. https://doi.org/10.1111/dech.12535

Corboz, J. (2013). Third-way neoliberalism and conditional cash transfers: The paradoxes of empowerment, participation and self-help among poor Uruguayan women. *The Australian Journal of Anthropology, 24*(1), 64-80. https://doi.org/10.1111/taja.12022

Duflo, E. (2012). Women empowerment and economic development. *Journal of Economic Literature, 50*(4), 1051-79. https://doi.org/10.1257/jel.50.4.1051

Hirway, I. (2018). Translating the SDG Commitments into Reality: Time Use Data for Gender Equality and Women’s Empowerment in the Global South. *Indian Journal of Human Development, 12*(1), 93-108. https://doi.org/10.1177/0973703018778128

Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change, 30*(3), 435-464. https://doi.org/10.1111/1467-7660.00125

Kabeer, N. (2005). Gender equality and women's empowerment: A critical analysis of the third millennium development goal 1. *Gender & Development, 13*(1), 13-24. https://doi.org/10.1080/13552070512331332273

Kabeer, N., Mahmud, S., & Tasneem, S. (2011). Does paid work provide a Pathway to Women's Empowerment? empirical findings from Bangladesh.

Kanungo, M. (2012). Rural development through microfinance, MGNREGA and women empowerment. *Odisha Review, 75-78.*

Kar, S. (2013). Empowerment of women through MGNREGS: issues and challenges. *Odisha Review, 69*(7-8), 76-80.

Keller, B., & Mbewe, D. C. (1991). Policy and planning for the empowerment of Zambia's women farmers. *Canadian Journal of Development Studies/Revue canadienne d'études du développement, 12*(1), 75-88. https://doi.org/10.1080/02255189.1991.9669421

Kishor, S., & Subaiya, L. (2005, July). Household decision making as empowerment: A methodological view. In *presentation at the 2005 Meeting of the International Union for the Scientific Study of Population (IUSSP), Tours, France.*

Leroy, J. L., Ruel, M., & Verhofstadt, E. (2009). The impact of conditional cash transfer programs on child nutrition: a review of evidence using a program theory framework. *Journal of development effectiveness, 1*(2), 103-129. https://doi.org/10.1080/19439340902924043

Litwin, A., Perova, E., & Reynolds, S. A. (2019). A conditional cash transfer and Women's empowerment: Does Bolsa Familia Influence intimate partner violence? *Social Science & Medicine, 238*, 112462. https://doi.org/10.1016/j.socscimed.2019.112462

Mattos, F. B. D., & Dasgupta, S. (2017). *MGNREGA, paid work and women's empowerment* (No. 994974190802676). International Labour Organization.

MGNREGA operational guidelines. (2013). Ministry of Rural Development, Government of India.

Molyneux, M., & Thomson, M. (2011). Cash transfers, gender equity and women's empowerment in Peru, Ecuador and Bolivia. *Gender & Development, 19*(2), 195-212. https://doi.org/10.1080/13552074.2011.592631

Pankaj, A., & Tankha, R. (2010). Empowerment effects of the NREGS on women workers: A study in four states. *Economic and Political Weekly, 45-55.*

Pellissery, S., & Jalan, S. K. (2011). Towards transformative social protection: A gendered analysis of the Employment Guarantee Act of India (MGNREGA). *Gender & Development, 19*(2), 283-294.
Rajalakshmi, V., & Selvam, V. (2017). Impact of MGNREGA on women empowerment and their issues and challenges: a review of literature from 2005 to 2015. The journal of internet banking and commerce, 1-13.

Rosenbaum, P. R., & Rubin, D. B. (1983). The central role of the propensity score in observational studies for causal effects. Biometrika, 70(1), 41-55. https://doi.org/10.1093/biomet/70.1.41

Sen, G. (2019). Gender Equality and Women's Empowerment: Feminist Mobilization for the SDGs. Global Policy, 10, 28-38. https://doi.org/10.1111/1758-5899.12593

Sugiyama, N. B., & Hunter, W. (2020). Do Conditional Cash Transfers Empower Women? Insights from Brazil’s Bolsa Familia. Latin American Politics and Society, 62(2), 53-74. https://doi.org/10.1017/lap.2019.60

Tabbush, C. (2010). Latin American women's protection after adjustment: a feminist critique of conditional cash transfers in Chile and Argentina. Oxford Development Studies, 38(4), 437-459. https://doi.org/10.1080/13600818.2010.525327

Upadhyay, U. D., Gipson, J. D., Withers, M., Lewis, S., Ciaraldi, E. J., Fraser, A., ... & Prata, N. (2014). Women's empowerment and fertility: a review of the literature. Social science & medicine, 115, 111-120. https://doi.org/10.1016/j.socscimed.2014.06.014

Varghese, T. (2011). Women empowerment in Oman: A study based on Women Empowerment Index. Far East Journal of Psychology and Business, 2(2), 37-53.

Waqas, M., & Awan, M. S. (2019). Do cash transfers effect women empowerment? Evidence from Benazir Income Support Program of Pakistan. Women's Studies, 48(7), 777-792. https://doi.org/10.1080/00497878.2019.1666007

West, B. S. (2006). Does Employment Empower Women? An Analysis of Employment and Women's Empowerment in India.

Xavier, G., & Mari, G. (2014). Impact of MGNREGA on women empowerment with special reference to Kalakkamnoi Panchayat in Sivangai district, Tamil Nadu. International Journal of Economics and Management Studies, 1(1).

Zaky, H. H. (2014). Does the conditional cash transfer program empower women? Evidence from Ain El-Sira, Egypt. Social Sciences, 3(4), 132. https://doi.org/10.11648/j.ss.20140304.14

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).