Unveiling the Drivers of Financial Inclusion Among Self-Help Group Members: An Empirical Analysis

Motivation

India is the world's most populous democracy with dirigiste characteristics. Over the years various policies and programs of the Government of India have played a key role in deliberate reduction of poverty from 25% in 2015-16 to 15% in 2019-21. Lately financial inclusion is being widely recognised as an important tool of poverty eradication and inequality (Polloni-Silva et al. 2021). Furthermore, the effectiveness of financial inclusion is influenced by how equally the disadvantaged groups, particularly women, can access and utilize financial services (Saha & Qin, 2023). While India has made substantial progress in reducing poverty, 11.7% of adults in the country do not have a bank account and those with a bank account have a gender gap of 6% (Demirguc-Kunt et al. 2018). Acknowledging the importance of financial inclusion, the Self-Help Group Bank Linkage Program was launched in 1992 to make banking services available to the vulnerable and unbanked section of the society with its innovative approach to financial literacy, group collateral approach and purpose neutrality of loans (NABARD, 2022). This forms the foundation for this chapter.

Research questions

We try to address the following research question:

1. Whether the financial inclusion (JAM index) depend on the SHG member's duration of membership & place of residence?

Data base & sample

Primary data

The answers to the research questions are based on the data collected through primary survey. We have used structured interview schedules to obtain relevant information on components of financial inclusion of 320 SHG members.

Methods

Variable description

- *Outcome variables*
- *Financial inclusion index:* We computed the JAM index by using the O-Ring Theory formulated by Michael Kremer (Kremer,1993). Mathematically, it is written in the following form:

$$E(y) = k^{\alpha} \left(\prod_{i=1}^{n} q_i \right) Nb$$

Where E(y) is the expected production function, k is units of capital, α is the elasticity of capital substitution, qi represents the quality or expected percentage of maximum value the product retains, n is the number of tasks and B represents the output per worker. We utilized the information on respondents who had mobile phones, *Jan Dhan Yojana* bank accounts, and *Aadhaar* cards (Ravi, 2018).

- *Explanatory variables*

Apart from the various socio-demographic characteristics of the SHG member like age, education, religion, caste, asset index and place of residence, we asked question on bank account operation by self, ownership of mobile and uses of internet, awareness of *Jan Dhan Yojana* etc.

Quantitative analytical methods

Prevalence of financial inclusion was estimated using bivariate analysis. Path Analysis was carried out to show both the direct and indirect effects and the overall effect of the member's place of residence, duration of SHG membership and awareness in financial & digital literacy on the dependent variable, i.e., financial inclusion.

Findings

Financial inclusion among SHG members

Based on information gathered on various financial inclusion instruments, we attempt to explore whether the knowledge and awareness about financial inclusion among SHG members differed by their place of residence and duration of SHG membership. Table 1 discusses the results of chi-square association of selected financial inclusion components with place of residence and duration of SHG membership of the member. All the respondents irrespective of their place of residence and duration of SHG membership had ownership of bank account and had an *Aadhar* card. Three-fifths (55.0%) of the respondent residing in VNDHQ already had a bank account before joining SHG. However, 63.1% of the respondent residing in VADHQ had a bank account post SHG membership. Mild differences were noticed among SHG members of the two places of residence and duration when they were asked "Can you yourself operate your bank account?" Overall, eight in 10 SHG members had a mobile phone. A stark difference was observed in internet connectivity by place of residence of the SHG members. A little less than there-fourth (72.5%) and 65.0% of the respondents residing in VNDHQ were aware of the *Jan Dhan Yojana* Scheme and had an account respectively. Ownership of mobile phone was found to be more among residents in VNDHQ (93.13%).

Table 1: Prevalence of SHG members by features of financial inclusion by place of residence and duration of SHG membership (%), Birbhum, WB, India

	Place of residence		Duration of SHG membership		
	VNDHQ	VADHQ	Less than 5 years	More than 5 years	Total
When did you have your first bank account?	p<0.001		p<0.01		
After joining SHG	45.0	63.1	47.2	64.6	54.1
Before joining SHG	55.0	36.9	52.9	35.4	45.9
Can you yourself operate your bank account?	p<0.05		p=0.968		
No	7.5	14.4	10.9	11.0	10.9
Yes	92.5	85.6	89.1	88.9	89.1
Ownership of mobile phone	p<0.001		p=0.992		
No	6.9	26.3	16.6	16.5	16.6
Yes	93.1	73.8	83.4	83.5	83.4
Internet connection	p<0.001		p<0.05		
No	32.2	84.8	60.9	47.2	55.4
Yes	67.8	15.3	39.1	52.8	44.6
Usage of internet	p<0.001		p<0.001		
Entertainment (YouTube/Serial/Facebook)	18.1	8.5	7.5	23.6	13.9

Online class/ study	10.7	0.0	8.1	2.8	5.9
Job search	21.5	5.1	17.4	9.4	14.2
WhatsApp	49.6	86.4	67.1	64.2	65.9
Usage of mobile for banking purposes	p<0.001		p=0.244		
No	47.5	90.6	71.5	65.4	69.1
Yes	52.5	9.4	28.5	34.7	30.9
Awareness about Jan Dhan Yojana	p<0.001		p<0.05		
No	27.5	56.3	47.2	33.9	41.9
Yes	72.5	43.8	52.9	66.1	58.1
Ownership of Jan Dhan Yojana account	p<0.001		p<0.001		
No	35.0	90.0	70.5	50.4	62.5
Yes	65.0	10.0	29.5	49.6	37.5

*p<0.05, **p<0.01, *** p<0.001 based on chi-square test of significance*

Figure 1 describes the results obtained from path analysis. It shows that financial inclusion (JAM index) of an SHG member is either directly or indirectly affected by her place of residence and association with the SHG. While place of residence, negatively and significantly affects financial inclusion, having attended a financial & digital literacy camp directly improves financial inclusion. However, contrary to the obvious expectation, duration of SHG membership does not guarantee that.

Fig 1: Direct and indirect effect of SHG member's place of residence and duration of SHG membership on financial inclusion, Birbhum, WB, India
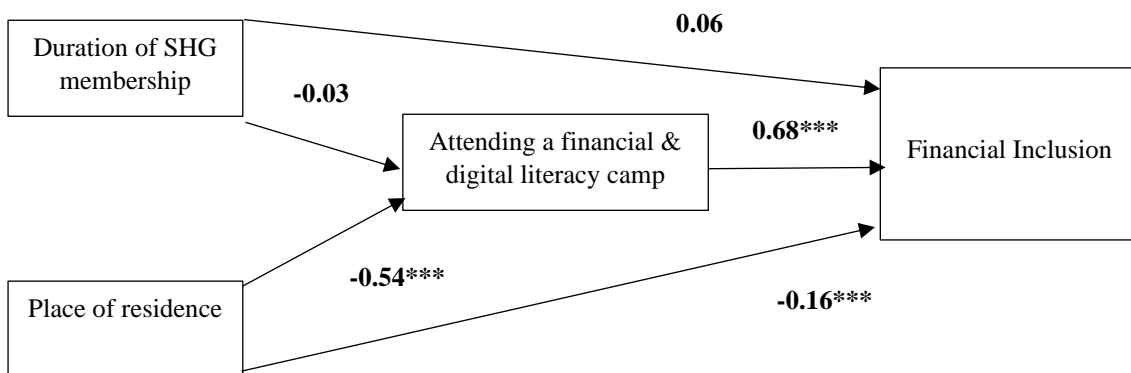
Discussion
One of the many initiatives of the Government of India to financially include the unbanked population was the introduction JAM trinity under which the Prime Minister's *Jan Dhan Yojana* is linked to the citizen's *Aadhaar* identity and mobile number to transfer subsidies and benefits and resulting into improvement in quality of life (Bakshi, 2015; Goel 2020). Therefore, the first step towards financial inclusion is having a bank account for which proper identification is required. Our study results indicate all the SHG members had an *Aadhar* card, thereby overcoming one of the most important supply side barriers of financial inclusion. Demirguc-Kunt et al. 2020 in their pioneering work on ways to financial include the unbanked claims that owning a simple mobile phone opens the possibilities for money accounts and other financial services; Having an internet connection further expedites the process. However, the

authors add that it must be tailored to the needs of disadvantaged proportion of the population like women, poor, first-time users of financial services and those with low financial literacy (Demirguc-Kunt et al. 2020). Our findings suggest that those with mobile phones were financially excluded. This might indicate the 'first-time users' rationale put forwarded by Demirguc-Kunt et al. 2020. However, having an internet connection and using it for banking purposes have significant association with being financially included.

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