

## Research

# The role of Self-Help Groups in strengthening resilience amidst the COVID-19 pandemic: Insights from India

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## Abstract

Self-Help Groups (SHGs), the credit based voluntary groups in India are widely known for their potential to alleviate poverty and empower women. This research article explores a lesser-known theme. It tries to analyze the possibility of utilizing the current SHG model of the Indian Government to build and strengthen resilience of the SHG members in case of an external shock like financial stress, food insecurity, dispute in home for joining SHG, and difficulty to repay loan amidst lockdown due to the COVID-19 pandemic. This article also focuses on their coping mechanisms and attitude towards these crises. By utilizing primary data collected from 320 SHG members in one of the aspirational districts in West Bengal, India, the present paper tries to fulfill its objective. It provides a comprehensive understanding of the problems faced by the SHG members by combining both quantitative and qualitative techniques. The findings reveal that from organizing vocational trainings to relaxing loan repayment, SHGs and its women members overcame various adversities with tenacity, especially during the COVID-19 pandemic. Based on the study findings, it is reasonable to conclude that the current SHG model in India presents a promising avenue for enhancing the resilience of its members in the face of external shocks.

## Article Highlights

- Idiosyncratic stress like financial stress and systemic stress like the COVID-19 pandemic were ranked the top two crises faced by the SHG members. Recognizing financial stress and stress due to the COVID-19 pandemic as the top challenges faced by SHG members implies the need for immediate support (that includes access to financial resources, and assistance in adapting livelihood strategies to withstand external shocks), resilience-building efforts (by providing members with skills to diversify their income sources, creating emergency funds, and fostering community solidarity to collectively address crises), and policy attention (implementing policies that provide targeted assistance, such as social safety nets, healthcare access, and economic stimulus).
- The SHG members mostly had an active attitude towards the crises faced demonstrating their remarkable resilience and adaptive capacity. This highlights the most dominant role of SHGs in their ability to foster a sense of solidarity and collective problem-solving. Members often share experiences, skills, and resources, which can be invaluable during times of crisis. Additionally, the group dynamic encourages mutual support and encourages members to take proactive steps to address challenges rather than feeling overwhelmed by them. Moreover, participating in SHGs often

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empowers individuals to develop skills, build confidence, and access resources that enable them to better cope with crises. Thus, it implies the importance of community-based approaches like the SHGs to resilience-building.

- The primary role of SHGs in strengthening resilience among its members, particularly during challenging times like the COVID-19 pandemic was preventive measures (organizing COVID awareness programs), followed by promotional measures (organizing vocational trainings) and protective measures (distribution of food grains). By engaging in these preventive, promotional, and protective measures, SHGs bolstered the resilience of their members by equipping them with knowledge, skills, and resources to navigate challenges effectively. Overall, the implication is that SHGs have played a multifaceted role in supporting their members through the COVID-19 crisis, by focusing on prevention, promotion, and protection measures to enhance their resilience and mitigate the adverse effects of the pandemic on their well-being.

**Keywords** COVID-19 pandemic · Lockdown · Adversities · Resilience · Self-Help Groups · India

## 1 Introduction

In recent years, to empower women economically, socially, and financially several livelihood-microfinance programs have been launched [1, 2]. Based on the strong tenets of Developmental Idealism [3], microfinance provides collateral-free credit to rural women to alleviate financial distress [4] and promote their social and economic well-being [5, 6]. In India, apart from the provision of credit, microfinance encourages the attitude of perceiving microfinance business as a long-term growth potential. It also helps in the capacity building of clients to create a new market for growth of financial services with improved productivity [7]. Moreover, in India the microfinance sector is dominated by two models i.e., NABARD's SHG-Bank Linkage Programme and Microfinance Institutes (MFIs)-Bank Linkage model [8]. The SHG-Bank Linkage Program was launched in 1990 and initiated by National Bank for Agriculture and Rural Development (NABARD) in 1992 to link the unbanked and the weaker section of the country's population with formal banking system. As on 31 March 2022, India had approximately 119 lakh SHGs covering 14 crore families. During 2021–22, a state-wise compilation of SHGs' savings linked with banks showed that the Southern region registered the highest share (36%) followed by the Eastern region (27.4%) and Western region (11.4%) [9].

SHGs are credit-based groups that provide collateral free loans to disadvantaged and vulnerable sections of the population. SHG members, mostly poor women are a group of 10–20 women from the same socio-economic background. They mutually agree to contribute to a common fund by regularly saving small amounts of money to meet their emergency needs on mutual help basis. The group members rotate these small pooled savings among themselves as loans within the group [10–14]. SHGs are built on strong social networks among members, fostering trust and reciprocity. Therefore, integrating SHGs with theoretical frameworks enhance the understanding of their functioning, impact, and potential improvements. For instance, several theories have been proposed to understand the concept of social capital which refers to the networks of relationships among people and the resources embedded within those networks. For instance, in Nan Lin's Theory of Social Capital, the social capital emerges from the structure of social relationships, such as network density, centrality, and diversity. He argued that individuals with diverse and extensive social networks have greater access to resources and support [15]. Again, in Coleman's Theory of Social Capital, he argued that social capital arises from the norms, trust, and networks within a community, facilitating cooperation and collective action. The author emphasized the importance of social ties in achieving shared goals and solving collective problems [16]. Moreover, Granovetter's Theory of Weak Ties proposes that weak ties, or connections between acquaintances rather than close friends, are particularly valuable for accessing new information and opportunities. He argued that weak ties bridge different social circles, facilitating the flow of information and resources [17].

Like the theories on social capital, theories on collective efficacy refers to the belief shared by members of a community or group so that they can work together effectively to achieve common goals. For instance, in Social Capital Theory by Putman [18], he refers to the resources (such as trust, reciprocity, and social networks) that individuals and communities can access through their social relationships. Moreover, collective efficacy is seen as a form of social capital that enables communities to mobilize resources, solve problems, and achieve common goals. Collective efficacy is also viewed as a form of empowerment, which involves individuals and communities gaining the knowledge, skills, and resources needed to exert control over their lives and environments. Empowerment theory emphasizes the importance of participatory decision-making and collective action in fostering collective efficacy [19, 20]. Collective efficacy can also be understood

in terms of social identity theory, which posits that individuals derive their sense of self-worth and identity from their membership in social groups. When individuals identify strongly with a group and believe in its collective efficacy, they are more likely to engage in cooperative behaviors and work towards common goals [21]. Additionally, Social Learning Theory proposed by Albert Bandura provides a valuable insight into how individuals within these groups learn, interact, and grow by learning through observing others' behaviors, attitudes, and outcomes of those behaviors [22].

### 1.1 Self-Help Groups in West Bengal, India

The significant impact of microfinance and SHGs in West Bengal, are highlighted in the report by NABARD and various studies. The state has a robust network of SHGs, particularly benefiting women, and the results are promising in terms of economic empowerment and social development [9, 23]. The findings suggest that SHGs in West Bengal have been successful in not only providing access to credit but also in fostering autonomy among their members. By reducing reliance on local money-lenders and enabling participation in economic activities like crop and livestock farming, SHGs are contributing to poverty reduction and improving household incomes. Additionally, the involvement of SHG members in decision-making processes at both family and community levels reflects a positive shift towards women's empowerment [23–28]. The studies also shed light on the specific economic activities undertaken by SHG members, such as crop cultivation, livestock farming, and various entrepreneurial ventures like poultry farming and rice businesses. These activities not only generate income but also enhance skills and knowledge among the participants. Overall, the success of microfinance and SHGs in West Bengal underscores the importance of such initiatives in promoting inclusive growth and empowering marginalized communities, particularly women, in both rural and peri-urban areas [29–31].

### 1.2 Self-Help Groups as promoters of resilience

SHGs have the ability as a means of promoting and building resilience among its members: One, access to affordable credit through SHGs helps the poor to build their asset base and therefore cushion themselves from any external shocks and use the saving as a form of insurance against contingencies [32, 33]. Two, SHGs have a social fund which provides members with a basic form of insurance and serves as a community safety net on which members can draw in times of crisis [34]. Third, it also enables poor people to be in a better condition to deal with shocks [35]. For example, microcredit improved the coping mechanisms of the poor in Bangladesh during the floods in 1998 [36]. However, few resilience-based interventions have been implemented in low- or middle-income settings and even fewer among women SHGs [37–41]. Only two studies in the Indian state of Bihar developed and tested a resilience-based curriculum for girls (Girls First) studying in government schools [42, 43] and, on women SHGs [44]. Given this background, discussing social protection theories in relation to how SHGs foster resilience among their members is crucial for understanding the mechanisms through which these groups operate. Rooted in the field of disaster management and development studies, various theories emphasize strengthening social protection systems to enable people to cope, adapt, and bounce back from adversity more effectively. While resilience is defined as the adaptive capacity of people and communities to recover, bounce back, and thrive in the face of adversity [45–47], social resilience is also closely linked to social protection, as it involves strengthening social networks, community cohesion, and support systems to help people withstand and recover from shocks and stresses. Moreover, the ILO framework of social protection differentiates between three types of measures: 1. protective measures—which have the specific objective of guaranteeing relief from deprivation; 2. preventive measures—which directly seek to avert deprivation in various ways; and 3. promotional measures—which aim to enhance real incomes and capabilities [48].

Relying on various theories on resilience, SHGs have also shown remarkable contribution in building the capacity of individuals and communities to cope with, adapt to, and recover from adversities. For example, the socio-ecological model of resilience is a widely studied concept in various fields, including psychology, sociology, public health, environmental science, and community development. It is a framework used to understand how individuals and communities adapt and thrive in the face of adversity and stressors. At its core, the socio-ecological model of resilience emphasizes the interconnectedness of various levels of systems, from the individual to the community to the larger societal and environmental contexts. At the individual level it involves personal characteristics, coping strategies, skills, and resources that contribute to an individual's resilience. It considers factors such as cognitive abilities, emotional regulation, and adaptive behaviors. At the interpersonal level, it focuses on relationships and social support networks within families, peer groups, and communities. Strong social connections, trust, and communication play vital roles in promoting resilience among individuals. At the same time communities provide essential resources, services, and infrastructure that support

resilience. Factors such as community cohesion, leadership, access to healthcare, education, and economic opportunities contribute to community resilience. Moreover, institutions, including government agencies, non-governmental organizations, and businesses, influence resilience through policies, programs, and services. Effective governance, responsive institutions, and equitable access to resources are critical for building resilience at this level. Finally, at the environment level, it considers the natural and built environment in which individuals and communities reside. Environmental factors, such as access to clean water, green spaces, and protection from natural disasters, significantly impact resilience [48–53].

### 1.3 Self-Help Groups and the COVID-19 pandemic

The national lockdown due to COVID-19 in India from 22 March to 31 May 2020, caused unprecedented challenges for those working in the informal economy. Thus, SHG members who were mostly self-employed in small businesses like selling of eggs and dairy products, incense sticks, handmade embroidery were significantly impacted. Full or partial lockdown imposed by the government hindered them to step out and sell their products in the market which eventually led to a decline in the small amount of income that they used to get. In addition to it, majority of husbands of the SHG members were either daily wage earners or migrant laborer in the neighboring district who suffered the worst during the pandemic due to loss of job. For a considerable number of SHG members, the loss of employment represented an equivalent deprivation of their means of sustenance. Moreover, most of them had taken loans from their respective SHGs, necessitating regular repayment. Consequently, the prospect of unemployment and income diminution was non-negotiable.

## 2 The context of the study

Considering these circumstances and the effect of restricted movement, we had the opportunity to document how the SHGs build resilience among its members during the COVID-19 outbreak in two rural blocks of West Bengal, India through our field visit during December 2020 and May 2021. Following the definition of resilience as the ability to bounce back and thrive in the face of adversity [45–47] we examine the role of SHGs to strengthen the SHG members asset base and capacities, on which they may draw in times of crisis. Moreover, three years into the COVID-19 pandemic, literature shows how it disproportionately affected women: one, women lost more jobs compared to men; two, there was an increase in childcare and other responsibilities; three, since women dominated grass root health services, they were more exposed to the infection and, four home confinement increased their chances of domestic violence [55, 56]. Albeit all adversities, women, a vulnerable subpopulation [57] contributed the most during the pandemic—especially women SHG members who played a significant role in combatting the COVID-19 pandemic in India. SHGs in India has won numerous accolades for its competency in alleviating poverty and empowering women. However, the lesser-known facts are about its potential to build resilience among its members, mostly women. Therefore, we try to explore the potential of the credit based voluntary groups in India, known as the SHGs in building resilience among its members when they face adverse situations with special emphasis during the COVID-19 crisis.

## 3 Methodology

The study followed a mixed methodology approach by combining elements of both quantitative and qualitative approaches and tried to provide a comprehensive understanding of the research objective.

### 3.1 Sample size

SHGs are an integral part of various poverty alleviation and rural development programs in India, including the National Rural Livelihood Mission (NRLM). In India, West Bengal has the second highest number of SHGs covered under NRLM [9]. Moreover, in West Bengal, Birbhum is one of the five aspirational districts that has the highest percentage (87.5%) of rural households [58–60]. By considering the proportion of female SHG members in West Bengal in the age group 18–59 years as the prevalence for the present study and by using the formula developed by Lwanga & Lemeshaw, 1991 [61] for sample size estimation, we obtained the desired sample size of 160 respondents.

Our initial interactions with SHG members revealed that the dynamics within the SHGs varied within a relatively small geographic area. Differences in perceptions, expectations, and experiences motivated us to study them. Since understanding these variations is crucial for tailoring support and interventions effectively, we considered the location of the respondents as an indicator to study their exposure to program benefits and surveyed additional 160 respondents from a different block away from the district headquarters. We chose two blocks out of the total 19 blocks of the Birbhum district based on the highest (Khoyrasole-100%) and lowest (Suri 1-86%) percentage of rural households [62]. Thereafter, we selected 160 SHG members from the district head quarter located in Suri I, and 160 SHG members from Khoyrasole which is located about 50 kms away from Suri I. In discussion with officials at the office of district SHG & Self Employment section Suri I, Birbhum, we selected 40 members from each village randomly. This helped to ensure a representative sample, which provided valuable insights into the needs, challenges, and successes of SHG members in those areas. The inclusion criteria of the respondents were women in the age group 18–59 years and those who were SHG members for at least three years at the time of survey. Exclusion criteria of respondents were proxy members of SHG and households with multiple SHG members.

Information on food security, dispute in home for joining SHG, disputes among SHG members, difficulty to repay loan amidst lockdown due to COVID-19 was collected using a structured questionnaire. We adopted the questions on food security from Wave 1 of the Longitudinal Ageing Survey of India questionnaire [63].

### 3.2 Variable description

The present study employs a mixed methodology and therefore, the process of deciding variables had essence of both quantitative and qualitative methodology. For instance, variables like age, education and other socio-demographic variables were selected based on existing literature. On the other hand, variables related to SHG membership like duration of the membership, age at joining the SHG were selected from the data collected to meaningfully support the analysis. Therefore, the present study has both deductive (already existing in literature) and inductive (themes that emerged from the data) approaches to variable selection.

The following table summarises the outcome and explanatory variables used in the study (Table 1).

Caste in India is a deeply entrenched social hierarchy that has profoundly shaped the country's social, economic, and political landscape. Historically and traditionally, the caste system in India is linked to Hinduism. During British colonial rule, the caste system was further solidified through administrative and social reforms. The British codified caste distinctions in the census and used it as a tool for governance. After India gained independence in 1947, the Indian Constitution, abolished "untouchability" and aimed to eliminate caste discrimination. The Constitution also introduced measures such as reservations in education, employment, and politics for Scheduled Castes (SCs), Scheduled Tribes (STs), and Other Backward Classes (OBCs) to address historical injustices [65–68].

### 3.3 Quantitative analytical methods

Bivariate analysis was done to investigate the association of the SHG members' resilience with selected socio-demographic and household characteristics. In this paper, we used chi-square test as a bivariate technique to determine whether there was any significant association between the two variables. We also assessed the following assumptions before conducting the chi-square test. The assumptions were independence of observations, random sampling, adequate sample size, and mutually exclusive categories. The present data set and the contingency table adhered to all the above-mentioned assumptions.

Additionally, studies that try to identify the most dominant factor influencing a problem, have used Henry Garret's ranking technique [69–71]. Garrett's ranking technique provides the change of orders of constraints and advantages into numerical scores. The advantage of this technique over simple frequency distribution is that the constraints are arranged based on their severity from the point of view of respondents [72]. Hence, in the present paper, we use Garrett's ranking technique to find the most important crises faced by the respondents. It is calculated as percentage score and the scale value is obtained by employing Scale Conversion Table given by Henry Garrett [73]. The percentage score is calculated as under the following formula:

**Table 1** Description of the variables used in the study

Sl. No	Variable	Description
<i>Outcome variable</i>		
1	Resilience	Following Smith et al. 2008 [64], we adopted the Brief Resilience Scale for each of the five crises and generated the Brief Resilience Score with principal component analysis and divided into three parts (collapsed, recovering, and bounced back) with the xtile command in Stata 15
<i>Explanatory variables</i>		
2	Age (in years)	Less than 30, 30–39, 40–49, 50–59
3	Education	No education, Primary Education, Secondary Education, above secondary education
4	Marital status	Currently married and otherwise that included never married, separated, or widowed
5	Husband's education	No education, Primary Education, Secondary Education and above
6	Place of residence	Villages near district headquarters and villages away from district headquarters
7	Asset index	Low, medium, and high
8	Religion	Hindu and Muslim
9	Caste	Scheduled Caste, Scheduled Tribe/Other Backward Class, and none
10	Age at joining SHG (in years)	19–29, 30–39, 40 and above
11	Duration of SHG membership (in years)	Less than 5 years, more than 5 years
12	Type of activity—Respondent	Unemployed, undertook self-employed activities with SHG loan, employed in job received from SHG
13	Type of activity—Husband	Unemployed, Self-employed, Others
14	Joint income	Less than Rs. 15,000, More than Rs. 15,000



$$\text{Percentage Score} = \frac{100(R_{ij} - 0.5)}{N_j}$$

where,  $R_{ij}$  = Rank given for  $i^{\text{th}}$  item  $j^{\text{th}}$  individual and  $N_j$  = Number of items ranked by  $j^{\text{th}}$  individual.

The present data set also fulfils the assumptions underlying Garrett's ranking technique which are independence of judgments, equal intervals between ranks, comparable meaning of ranks across participants, stable preferences, limited number of items to be ranked, participants' ability to discriminate between items.

### 3.4 Qualitative analytical methods

An open ended, semi-structured format of the questionnaire was followed to gather information on the personal experiences faced by the SHG members on disputes in home due to SHG membership, stress, and coping mechanisms. Few examples of open-ended questions that were asked to the respondents to illicit information of stress and resilience are as follows:

1. What comes to your mind when you hear the words stress and resilience?
2. What mechanisms did you apply to pull yourself out of various crises?
3. Do you want to share any personal experience?

Questions were asked in Bengali and each of the individual interview was then translated from Bengali to English. The broad themes extracted from the analysis were presented in the form of a narration by supporting quotes of the SHG members. Proper checklist and guidelines were prepared for it.

### 3.5 Development of the questionnaire and its validation

For the present study, we employed a mixed-methods approach, utilizing both quantitative and qualitative tools to gather primary data. Quantitative data was collected through structured interviews using a pre-designed and pre-tested questionnaire. This questionnaire covered a range of topics related to the study's objectives, including household characteristics (such as household members, asset index, and fuel used for cooking), individual characteristics (like age, education, occupation, and marital status), resilience, and coping mechanisms. Detailed information was also collected on the organizational and financial structure of the SHGs. In addition to the quantitative data, we also gathered qualitative information. We developed semi-structured interview guidelines in English which was then translated into and implemented in native language, Bengali. The questionnaire was validated by undertaking pilot testing of the questionnaire and the final administered questionnaire was administered only to 320 SHG members.

Standardisation of interviews was maintained to ensure consistency and reliability of data collection across all participants. It involved establishing a structured questionnaire, prompts, and procedures that were consistent for all interviewees. This ensured that each participant received the same treatment and was asked the same questions in the same way, reducing variability in responses, and making comparisons between participants more valid. Since, we developed a structured interview schedule with predetermined questions, it helped that all participants were asked about the same topics in the same manner. Hence, by standardizing interviews, we minimized bias, increased reliability, and enhanced the validity of the study findings.

### 3.6 Challenges of data collection amidst COVID-19 pandemic

Data collection during the COVID-19 pandemic was a challenging endeavour. We had to adapt to the evolving circumstances despite the numerous obstacles. The pandemic forced everyone to rethink their research approaches, and we were not exception to it. We incorporated the necessary modifications, such as revised consent forms and adherence to COVID-19 protocols, to ensure the safety and well-being of both respondents and researcher. Despite the difficulties, there were individuals willing to assist us in our research efforts. The support we received from various individuals, whether senior SHG leaders, local doctors, or administrative heads, highlights the importance of community and collaboration, especially during the pandemic.

## 4 Results

In this study, we delve into the dynamics of SHG membership, drawing insights from a dataset encompassing 320 SHG members. Employing a mixed methods approach, we navigate through both quantitative and qualitative facets to elucidate a nuanced understanding of SHG engagement and its role in building resilience among the members. In the following section, we discuss the results of the study.

### 4.1 Types of adversities faced by SHG members

Table 2 presents different types adversities faced by the SHG members in rural Birbhum, West Bengal, India. To study whether place of residence and SHG association had any role to play in it, we bifurcated the abovementioned crises—both idiosyncratic (individual) and systemic shocks (affected all or most other households in the community) by it. We classified idiosyncratic shocks as financial stress, food insecurity, and dispute at home and systemic shocks as disputes among SHG members and difficulty to repay loan amidst lockdown due to the COVID-19 pandemic. SHG members who lived in VADHQ experienced more financial stress (57.5%), food insecurity (85.6%) and had difficulty to repay loan during the lockdown period due to COVID-19 (94.4%) compared to the ones who lived in VNDHQ. Again, 77.5% of SHG members in VNDHQ said that they have disputes in their own SHG. Results on association with duration of SHG membership showed that the members with less than 5 years of SHG membership were more financially stressed (44.0%), suffered from food insecurity (72.0%), and had difficulty to repay back the SHG loan during lockdown due to COVID-19 (86.0%). As reported by existing SHG members in VNDHQ, although 71.9% of them never faced any dispute at home by joining SHG, 12.5% of them said that they were currently facing trouble at home because of SHG membership.

### 4.2 Types of crises: Garrett ranking

We further asked respondents to rank the crises in descending order (Fig. 1). Among the idiosyncratic stress, financial stress received the score of 68 making it the most cited crisis by the SHG members, followed by food insecurity, and dispute at home. Systemic shocks such as stress due to the COVID-19 pandemic and dispute in own group were also reported.

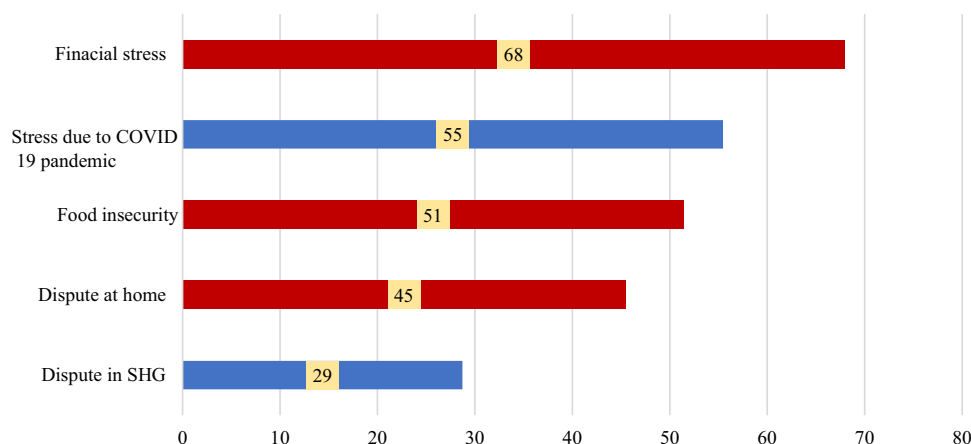
**Table 2** Types of crises faced by SHG members by their place of residence and duration of SHG membership (%), Birbhum, WB, India

		VNDHQ	VADHQ	Less than 5 years membership	More than 5 years membership	Total
<i>Idiosyncratic shocks</i>						
Financial stress		p < 0.001		p < 0.05		
Yes		20.6	57.5	44.0	31.5	39.1
Food insecurity		p < 0.001		p < 0.01		
Yes		46.3	85.6	72.0	56.7	65.9
Dispute in home for joining SHG		p < 0.05		p < 0.001		
Never		71.9	68.8	66.8	75.6	70.3
Yes, currently		12.5	6.3	5.7	15.0	9.4
Initial days		15.6	25	27.5	9.45	20.3
<i>Systemic shocks</i>						
Disputes among SHG members	p = 0.127			p < 0.05		
Yes		77.5	70.0	69.4	80.3	80.3
Difficulty to repay loan amidst lockdown due to COVID 19	p < 0.001			p < 0.05		
Yes		68.8	94.4	86.0	74.8	81.6

VNDHQ Villages near district head quarter; VADHQ Villages away from district headquarter



**Fig. 1** Ranks assigned by SHG members for various crises faced by them (Mean score), Birbhum, WB, India. Idiosyncratic and systemic stress highlighted in red and blue bars respectively



### 4.3 Coping mechanisms by the self-help group members

Figure 2 shows the various coping mechanisms adopted by the SHG members for difficulty to repay loan during the COVID-19 lockdown. Out of the 261 (81.6%) respondents who faced problem of repaying the loan amount due to the COVID-19 lockdown, reported that eventually they took help from husband and family to repay back the loan (14.4%), delayed payment of instalments (42.5%) and around 24.7% of the respondents utilised COVID special government schemes like *Jaago* money. R3 (Age 45 years; Religion Muslim) speaks about how she got support from her own group. She says, "I did not have money to repay back the loan at that time. So, the didis in the group told me to give it later. It was a huge relief."

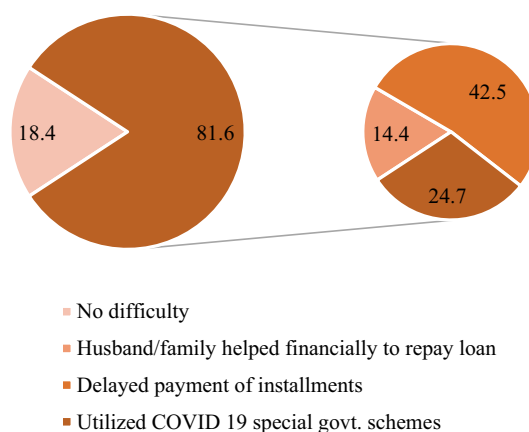
### 4.4 Attitude to various crises by the SHG members

Figure 3 describes SHG members' attitude to various crises. Majority of the SHG respondents (45.9%) reported that they were active (sought help from neighbor/relatives/group members; Shared woes with friends & family members; Communicated with the concerned individual/ SHG member; explored opportunities for raising household income). However, 23.4% of the respondents mourned and cried for the misfortune they were facing (i.e., resignation). Few SHG members (18.1%) felt depressed—they skipped meals, shunned household responsibilities, became listless, lost initiative, and adopted indifferent attitude towards life. Finally, 12.5% of the women felt fatalistic—sought help from God and prayed.

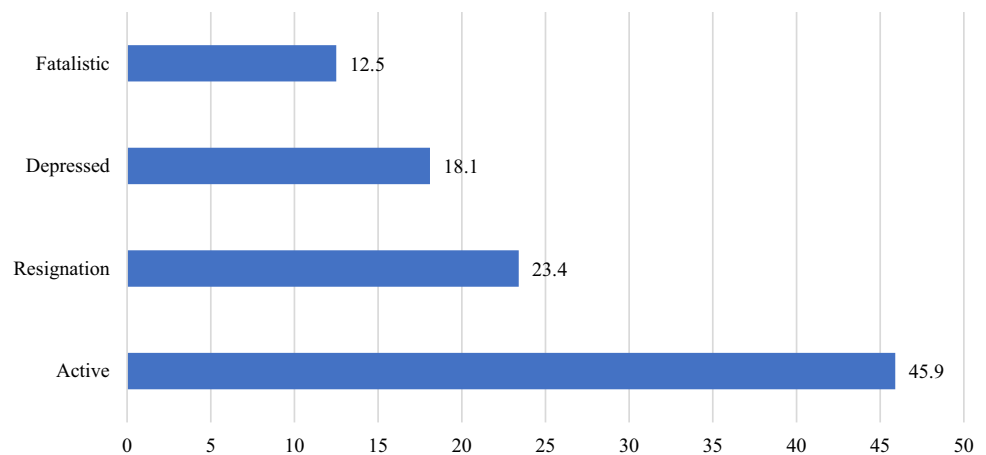
### 4.5 Role of SHG's strengthening resilience among its member

As described in Table 3, majority of the respondents (48.4%) reported that the SHGs took protective measures like providing of *Jaago* money (24.6%) (A monetary assistance provided by the Government of West Bengal to SHGs in the state), followed by relaxing of loan repayment (12.5%) and distribution of foodgrains (11.3%). A 46-year-old SHG member with

**Fig. 2** Coping up mechanisms adopted by SHG members for difficulty to repay loan due to the COVID-19 pandemic (%), Birbhum, WB, India.



**Fig. 3** SHG members' attitude to various crises (%), Birbhum, WB, India



**Table 3** Role of SHG's in strengthening resilience among its members (%), Birbhum, WB, India

Protective measures	Percent
Provide <i>Jaago</i> money	24.6
Relaxation in loan repayment	12.5
Distribution of foodgrains	11.3
Preventive measures	
Organise COVID-19 awareness program	26.6
Promotional measures	
Organise vocational training	25.0

no education tears up while giving details of her situation during the pandemic. She recalls, *"We had a big loan to repay apart from the loan that I took from my group. With the help from group in the form of Jaago money I could gradually return the other loan."* Similarly, a 34-year-old SHG member recalls the panic that was created due to the COVID-19 pandemic. She says, *"With no income, we had bare minimum to eat. If it was not for the SHGs, my family would have been destroyed. My group supported me and many others by distributing food grains. It was because of their effort we were able to have two meals in a day."*

While 26.6% of the SHG members reported that the SHGs they were a part of had organized COVID-19 awareness programs in which they were oriented on the benefits of social distancing, use of masks, combating misinformation and quarantine if infected (i.e., preventive measure), one in four respondents (25%) said that SHGs organized vocational trainings like mask stitching (i.e., promotional measures) to build resilience among them. A 53-year-old SHG member remembers and applauds her group's initiative to include her in one of the vocational trainings. She says, *"I am a widow and I don't want to be a burden on anybody be it my son or not. So, I have always looked for opportunities to earn income. But the pandemic was something new that no one was prepared for."*

#### 4.6 Resilience of the SHG members

Table 4 presents the chi-square association between resilience and selected socio-demographic and economic characteristics. Overall, 48.1% of the respondents bounced back, 41.9% reported to be recovering and 10% of the SHG members collapsed under the crises. The study found out that majority of the respondents (52.3%) who belonged to the age group of less than 30 years bounced back, 53.1% in the age group 40–49 years were recovering and 27.3% of the respondents who collapsed belonged to the age group of 50–59 years. Both the respondent and her husband's education were found to be significantly associated with resilience. While majority of the respondents with no education (SHG member—57.1% and respondent's husband—73.7%) were found to be recovering, those with secondary and above education had already bounced back (SHG member—84.9% and respondent's husband—53.6%). Although marital status of the respondent was not significantly associated with resilience, findings show that currently married respondents were resilient compared to their non-married counterpart. Among caste, respondents who belonged to the OBC caste bounced back (56.3%).

**Table 4** Percentage of SHG members by resilience (%), Birbhum, WB, India

	Bounced back	Recovering	Collapsed	Total (N)
Respondent's Age (in years)**				
Less than 30	52.3	36.1	11.6	86
30–39	49.2	40.8	10.0	120
40–49	45.7	53.1	1.2	81
50–59	39.4	33.3	27.3	33
Respondent's education***				
No education	31.4	57.1	11.4	35
Primary education	25.9	57.4	16.7	108
Secondary education	56.5	37.9	5.7	124
Above secondary education	84.9	9.4	5.7	53
Marital status				
Currently married	45.7	44.0	10.3	282
Otherwise	65.8	26.3	7.9	38
Husband's education**				
No education	10.5	73.7	15.8	19
Primary	39.0	47.6	13.4	82
Secondary and above	53.6	38.8	7.7	196
Religion				
Hindu	45.5	45.1	9.4	244
Muslim	56.6	31.6	11.8	76
Caste*				
SC/ST	40.2	51.3	8.6	117
OBC	56.3	31.1	12.6	103
None of these	49.0	42.0	9.0	100
Asset index***				
Low	29.9	55.1	15.0	107
Medium	40.4	52.3	7.3	109
High	75.0	17.3	7.7	104
Place of residence***				
VNDHQ	64.4	29.4	6.3	160
VADHQ	31.9	54.4	13.8	160
Age at joining SHG (in years)***				
19–29	58.6	33.1	8.3	169
30–39	44.8	46.9	8.3	96
40 and above	21.8	60.0	18.2	55
Duration of SHG membership***				
Less than 5 years	33.2	52.3	14.5	193
More than 5 years	70.9	26.0	3.2	127
Type of work—Respondent***				
Unemployed	31.0	49.6	19.4	104
Undertook self-employed activities with SHG loan	57.1	39.9	3.0	163
Employed in job received from SHG	78.3	13.0	8.7	21
Type of work—Husband***				
Unemployed				
Self-employed	55.9	32.4	11.8	90
Others	40.2	51.6	8.2	169
Joint income (in Rs)***				
Less than Rs. 15,000	34.8	52.5	12.7	213
More than Rs. 15,000	90.8	7.9	1.3	75
Total	48.1	41.9	10.0	320

VNDHQ Villages near district head quarter; VADHQ Villages away from district headquarter

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

While 75% of the SHG members who belonged to the high category of the asset index bounced back, 15% of the low asset index collapsed. Similarly, while 64.4% of the SHG respondents who lived in the VNDHQ bounced back, 13.8% of those who lived in the VADHQ collapsed. SHG related factors such as age at joining SHG and duration of SHG membership were found to be significantly associated with being resilient. Respondents who were unemployed were found to be either recovering (49.6%) or had collapsed (19.4%). In case of respondent's husbands' occupation, among those who were self-employed significantly bounced back (55.9%). Respondent's whose family income was more than Rs. 15000, were found to be resilient.

#### 4.7 Thematic analysis on resilience among SHG members

We asked the SHG members, "What comes to their mind when they hear the words like stress and resilience? And how do they cope up with such stress like COVID -19? Each of the research question was translated into the following broad themes that are discussed below.

- Stress

They all understood the word "tension" and could relate to having experienced it, though the word "stress" was less well-known. R6 (Age 53 years; Religion Hindu) says, *"Tension is there. It is always there."* There were instances when SHG members told their fears of not being able to repay back the loan, especially during the lockdown period due to the COVID-19 pandemic. R2 (Age 36 years; Religion Hindu) talks about the time when she used to be frightened to attend meetings. She says, *"I was so afraid of being kicked out of the group because I was delaying the loan repayment. I had no source of income during the pandemic. Somehow, I managed with my husband's help."* Furthermore, women who had less than five years of SHG membership seemed to be more anxious in terms of loan repayment during the COVID-19 pandemic. For example, SHG member like R7 (Age 25 years; Religion Hindu) expressed her stress and helplessness like *"I just did not know what to do. I had to repay a huge amount of loan. My husband lost his job as a watchman. We had no money."* R8 (Age 34 years; Religion Muslim) shares a similar experience during the COVID-19 pandemic. She says *"It was so uncertain. Nobody knew anything. I had lost all hope."*

- Coping mechanisms

When they were asked about how they coped up with tension/stress, they spoke of several ways, including praying, sharing their woes with other family members, crying, and especially if it was a conflict, moving away from the situation and distracting themselves. R1 (Age 30 years; Religion Muslim) thinks her friends in the group are the biggest supporters. She says, *"I opened to my friends. They also face similar problems. We talk and try to find out a solution."* When women were prompted to speak about their strengths, they reported self-confidence and religious faith. R6 (Age 53 years; Religion Hindu) adds, *"Praying helps me a lot. I have a firm believe in God. He removes all obstacles."* Several women also recognised the role of SHGs. R5 (Age 46 years; Religion Muslim) tells us how regular meetings in the group served as a platform to meet with group members who are now her friends and with whom she can discuss any issue. She says, *"I look forward for group meetings. Apart from the regular thing we also discuss personal problems and find solutions."* Finally, SHG members like R7 and R8 who had earlier shared their stress about difficulty to repay loan due to the COVID -19 pandemic said that financial help from close relatives served as a blessing during tough times.

- Resilience

We asked the SHG members what according to them is their biggest strength? Few SHG members could easily articulate that their biggest strength was support from family. R4 (Age 37 years; Religion Hindu) says, *"I became SHG member because of my husband. He got all the information from panchayat office."* She adds that without her husband's help she could not have repaid back the loan. Others praised the strength of the group. R6 (Age 53 years; Religion Hindu) says, *"If you are alone nobody will care. But when you become a member, 10 people will know you. They will come and stand by you in your problems."*

## 5 Discussion

SHGs have become a cornerstone of microfinance initiatives in India, providing financial assistance and empowerment to millions of households across the country. With more than 14.2 crore households through more than 119 lakh SHGs, the SHG program in India is the world's largest microfinance program [9]. The present study explored the potential of the SHGs in building resilience among its members with special emphasis on the COVID-19 pandemic. The study findings align with existing theories on resilience, social capital, social efficacy, and social protection. The novelty of the present work is that it presents a comprehensive picture of empirical evidence along with established theoretical frameworks that strengthened the validity and comprehensibility of our work.

Various kinds of idiosyncratic and systemic shocks were reported by the SHG members. Support from family, community, active and positive attitude were found to be important aid to recovery after adversities. The findings align with the socio-ecological model of resilience which demonstrates the unique intersectionality of various levels of the system. For instance, husband and family members of the respondent at the individual level, platforms like SHGs at the community level and the involvement of the government by providing financial relief such as *Jaago* money at the institution level [48–53]. It also emphasized that strong social networks and supportive relationships play a crucial role in building resilience. These connections provide individuals with emotional support, practical assistance, and access to resources during difficult times [15, 16]. Field narratives from thematic analyses emphasized the essence of Social Learning theory where SHG members learnt through observing others' behaviours, attitudes, and outcomes of those behaviours [22].

We would like to highlight that nearly four in five SHG members had difficulty to repay back the SHG loan they took during the COVID-19 pandemic. Field narratives and analysis suggested that it was mainly due to loss of job vis-à-vis income of either the husband or both. Our results indicate that SHG members who lived in VADHQ faced more adversities like financial stress, and food insecurity. Generally, it is observed that government administration becomes weaker with geographic isolation. Therefore, SHG members from VADHQ were more vulnerable to adversities. Again, those with less than 5 years of SHG membership also faced more difficulties. This suggest that being a SHG member might be a necessary condition but not a sufficient one to cope with stress and the adversities. Moreover, with shorter duration of SHG association, members may not yet have derived their sense of self-worth and identity from their membership in SHGs. Hence, they may not share the common belief in its ability to successfully execute tasks and achieve goals [21]. Additionally, with less than 5 years of SHG membership, collective-efficacy in terms of social capital, empowerment, and social identity is limited. Hence, it lacks the adequate resources that might enable the SHG member to bounce back from the adversities [18–21]. On the contrary, if a woman is associated with the SHG for more than 5 years, she may rebound from the challenges. This is because with longer duration, SHG members develop that mental fortitude that allows her to bounce back. The other possible reason could be because of the resources (such as trust, reciprocity, and social networks) that she has built over the years with her group members as suggested by the Putnam's Social Capital Theory [18].

The findings from our primary survey revealed the number of ways through which an SHG can build resilience among its members in case of an external shock. For instance, through skill building like knowing how to stitch face masks and selling them, SHG members could earn an income, when there were instances of sudden out-of-work situations. The SHGs also played an important role in dissemination of COVID related knowledge and fighting misinformation in villages through their wide- and far-reaching networks. Supplying of essential foodgrains was another critical role played by the SHGs. Few of the SHG members applauded the solidarity shown by the group members when they were unable to repay back the loan. Others revealed, the remarkable role played by their group leaders in raising awareness and creating opportunities amidst partial lockdown phase. The study findings therefore hint towards the feasibility of adopting the SHGs as a resilient model along with its current role of eradicating poverty and empowering women. This is due to the critical role played by the SHGs at the community as well as the institution level. For instance, the SHGs in partnership with the Government provided protective, preventive, and promotional measures to the SHG members. Thereby making them resilient and enabling them to address various challenges [48–54]. Our study also explored the emotional stakes of the SHG members when they were the hardest hit. Eloquent conversations with SHG members highlight their resilience, grit, and commitment to go forward and rebuild their lives in a circumstance when their individual and household condition indicated a state of perpetual poverty. Majority of them depended on non-farm activities which was not an economically viable option for a steady source of income, were Below Poverty Line card holders (a government-issued document in India for individuals and households eligible for government aid and support) and had no to marginal land holdings. Yet, these individual traits became insignificant when these women formed into groups. The finding acknowledges the importance of individual agency and empowerment within the context of group dynamics [18, 19, 49–54].

## 6 Limitations

The present study is not without limitations. It aimed to delve into the qualitative aspects of how SHG membership enhances members' resilience, rather than focusing solely on quantifiable progress. First, chi-square tests only determine whether there is an association between variables but do not indicate the direction or strength of the association. In addition, it only identifies associations, not causation. Even if there is a significant association, it does not imply causality between the variables. Second, the findings may not be generalizable due to the context-specific nature of the present research. Third, we highlight the lack of baseline comparisons that underscores the need for future research to provide more comprehensive insights into the dynamics of SHG membership.

## 7 Conclusion

SHGs can support members in the wake of unexpected shocks. It is feasible to have an SHG program that can strengthen the resilience of its members. Investing in SHGs not only strengthens financial inclusion and empowerment but also creates a robust network of support and solidarity. The study findings highlight the potential for leveraging the existing infrastructure of SHGs to enhance the resilience of their members in the face of external shocks. By further empowering SHGs with resources, training, and support, they can serve as crucial channels for building community resilience and preparedness. Special attention should be given to those who collapsed in an adverse situation like the COVID-19 pandemic. SHG members belonging to the age group 50–59 years, with primary education, poor wealth status, residing in VADHQ, less than 5 years of SHG membership and unemployed can be given special attention at the time of emergencies. Group discussions and orientation on empathy, caring, communication, capacity building, help seeking avenues may enable the SHG members adapt and withstand adverse situations. Hence, the COVID-19 pandemic is not merely a backdrop. It's a testament to the effectiveness of grassroots initiatives in addressing complex socio-economic challenges and promoting sustainable development. A few recommendations can be made to further enhance the effectiveness and impact of SHGs in India. One is to ensure the ongoing support and capacity building initiatives for SHG members, including training in financial management, entrepreneurship, and leadership skills. This will empower them to navigate challenges effectively and maximize the benefits of SHG membership. Two is to strengthen collaboration between SHGs and government programs at various levels to leverage resources and maximize impact. This includes integrating SHGs into existing social welfare schemes (like *Jaago money*) and providing targeted support during crises like the COVID-19 pandemic. Third, longitudinal studies could be suggested to track the long-term impact of SHG participation on resilience and socioeconomic status of the members.

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**Data availability** The data that support the results and analysis in this article is available with the corresponding author.

## Declarations

**Ethics approval and consent to participate** Our study is based on primary data with no identifiable information of the survey participants. To maintain research ethics, permission and consent at different levels were obtained before proceeding with the fieldwork. All the necessary ethical approval on the research topic, methods and the survey instruments were taken from the Students Research Ethics Committee (SREC) of the institute, International Institute for Population Sciences (IIPS), Mumbai, India. Prior to individual respondent interview, purpose of the ongoing survey, procedures of interview, associated risks (if any) were explained to each of the them. Anonymity and confidentiality were ensured to them.

**Competing interests** The authors declare no competing interests.

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