

## **Doe's the microfinance operational achievements affect the household poverty status? Evidence from rural areas of Chittoor Dist., India**

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### **ABSTRACT**

The paper deals with the SHGRW adopting microfinance operational achievements (financial literacy, inclusion, decision-making, savings, repayment behaviour, and investment practices) that help to change household income. This empirical study explores the impact of microfinance operations on SHGRW household income. It is based on first-hand information from a survey of 300 SHGRW in certain panchayats from February to June 2023 and uses the probability sampling method. This primary data analyzed the 45 adopted microfinance practices to reduce them to 26 variables with six constructions using CFA. Finally, this study's regression analysis shows the positive influence of household income generation on the SHG women's adoption of financial operations. The woman's consistent saving habits, financial operations behavior, and decision-making allow her to spend and earn more money. This study's output says yes, microfinance operational factors are influenced by SHGs women's household income in India. This study needs to extend SHG women's financial practices beyond banking operations to improve their income level, and theory-based empirical analysis is more helpful to policymakers.

**Key Words:** Self-Help Group, Financial Literacy, Financial Inclusion, Financial Operation Behaviour, investment, Household income, women

### **Introduction**

In 1985, an international conference is held in Nairobi to discuss the status and precautions taken for the empowerment of women (Mokta, 2014). It is found that women face unequal poverty and cultural barriers (Khurshid, 2015). The microfinance model, which helps overcome the obstacles to women's empowerment, is developed by Muhammad Yunus (Sivachithappa, 2013; Moreno & Maria, 2010). In this model, women are advised by banks to become members of SHGs (Self-Help Groups) to utilize bank services, save money in a group account, access loans from banks, and practice loan repayment (Selvendran, 2018). Loans from banks are accessed by members at a nominal interest rate of 3%. The money supply is improved through SHG practices (Tursunkulovich, 2022; Tiwari & Arora, 2015) to achieve economic self-reliance via income generation (Shanthi & Murty, 2019; Shanmugapriya, 2016; Balaji, 2015). This is supported by the empowerment of financial literacy, inclusion, and financial skills, and the effective utilization of loans (Shetty, 2016; Uma & Rupa, 2013), decision-making, and investment. The outcomes of microfinance operations vary by SHG, with the economic development of self-reliance among SHG women negatively influencing financial operations behaviors (Karthigeyini & Thavaraj, 2017; Ramanujam & Arivazhagan, 2011). Psychological concerns are found to have no significant impact on income levels (Rao et al., 2018). This leads to the long-term loss of the microfinance motive of "women empowerment" (Shilpa et al., 2021). According to the summary of microfinance financial operations, some women's practices are failing, necessitating validation of the research questions (RQ) below among SHG members:

RQ-1: What are the women's microfinance operational factors with measuring variables?

RQ-2: Do microfinance operational factors influence women's household poverty?

The international conference in Nairobi in 1985 focuses on women's empowerment and identifies that women are hindered by unequal poverty and cultural barriers. The microfinance model, created by Muhammad Yunus, aims to help overcome these obstacles. Women are encouraged to join SHGs, where they save money collectively, access bank loans, and engage in loan repayment practices. These practices enable members to obtain loans at low-interest rates, improving their financial situation. By becoming economically self-reliant through income-generating activities, women are empowered with financial literacy and skills. Effective utilization of loans, decision-making, and investment are also promoted.

The impact of microfinance, however, varies among SHGs. Economic self-reliance among SHG women is found to negatively affect financial operations behaviors, while psychological concerns do not significantly impact income levels. This situation undermines the long-term goal of women's empowerment through microfinance. Therefore, the validation of the research questions concerning the operational factors of women's microfinance and their influence on household poverty among SHG members is essential.

In SHGs, practices related to microfinance are often influenced by various factors. Economic self-reliance among women sometimes leads to behaviors that negatively affect financial operations. Additionally, psychological concerns are observed not to have a significant impact on income levels. As a result, the overarching goal of women's empowerment through microfinance is sometimes compromised. Thus, addressing the research questions regarding the operational factors of women's microfinance and their influence on household poverty becomes critical.

The empowerment of women through microfinance, as initiated at the Nairobi conference and developed by Muhammad Yunus, is a multi-faceted process. Women are integrated into SHGs, where they collectively save money, access loans, and practice loan repayment, all aimed at economic self-reliance. However, the effectiveness of these practices varies, necessitating ongoing evaluation and validation to ensure that the ultimate goal of women's empowerment is achieved.

### **Review of Literature**

After becoming a member of an SHG, the study looks back at the previously published research literature on women's empowerment. This literature review covers the women's motives for joining and achievements regarding empowerment in financial literature, financial inclusion, financial decision-making, payment behaviour, and saving and investing practices. The women's economic empowerment through income level improvement improved after they joined SHGs.

According to Goepp (2013), empirical investigations have shown that women join SHGs because of variables that assist them in meeting their needs. It aids in repaying past debts, meeting household expenditures and financial circumstances, and becoming self-sufficient to ensure sustainable development. According to a similar empirical study (Ashalakshmi et al., 2017), women's empowerment is positively related to credit facility availability, income level improvement, and its impact on economic status improvement. These empowerments result in an improved standard of living in terms of consumption and increased survival expenditure related to family welfare activities in education and health precautions taken (nutrition, sanitation, drinking water), which leads to social empowerment after joining an SHG. Similarly, financial services became more accessible. According to a similar empirical study, women join self-help groups mainly to save money, get better access to bank credit, and make more money with the government's help. Women learn about politics, work for themselves to make money for their families, join the society, and manage their credit. (Ghosh & Surjapada, 2011). Some of the women's existing groups or forming new groups for savings, personal interest, starting their own business, improving social status, bank loan accessibility, government financial support, lower interest rates than commercial banks' regular lending rates and money lenders, preference for accessibility of government services, and compulsion from friends and family members are some of the reasons (Kumar et al., 2020; Singh & Padhi, 2017; Poonam & Shukla, 2013).

Karthigeyini & Thavaraj (2017); noted his conceptual study on rural financial status; the SHG membership influenced financial literacy on bank literacy, its linkage to bank accounts, Interest rates, bank loan process, and usage of Debit/ATM cards. Sound financial literacy improves the quality of financial practices, financial decisions, and skills to manage financial products and services, enabling them to control their current and future circumstances more than SHGs practices. Financial literacy is a significant concept of financial inclusion. Deprived SHGs women got financial knowledge, its impact on Bank Interest Rate calculation, EMI operations practices, Insurance awareness, bank Account information, bank loan generation and repayment, and debit card operation after joining SHGs. The SHGs women member have a bank account, accessing loans up to ₹ 2 50 000 for individual members and repaying the loan amount from their bank account; some of the SHGs members use a personal saving account and term deposits also (Ghosh & Surjapada, 2011). According to Shinde & Jadhav

(2021) research done on 1002 SHGs in Kolhapur, India, 49% of them have bank accounts with public sector banks, 65% of those who have debit cards are utilising them, and 86.6 per cent of those who have bank accounts consistently utilise them.

Ghosh and Surjapada, (2011). Empirical Investigation on loan repayment behaviour observed on 82 SHGs members; 54.33 per cent SHGs are repaid on time, 16.67 per cent are paid late (some time one day-week-month) on the corresponding date. Similar studies found that; Women's financial activities have risen regarding deposits and credit availments varying from three to sixty months after joining an SHG. Over 2,85,000 SHGs have used credit facilities from over 218 banking institutions or commercial bank branches, with a credit repayment rate of 95% with on-time repayment or without default (Verhelle & Berlage, 2003). SHG women taking the level of bank loan have a statistically negative significant impact on decision making (Yasmeen & Karim, 2014). Personalities have high financial knowledge, influencing good economic behaviour, and poor financial attitudes show less financial behaviour (Aggarwal et al., 2020). Rural SHG's member agriculture income source varies, and agriculture outcomes depend on the monsoon and season. It is also one of the reasons for delaying the monthly loan repayment.

SHG members' regular saving is expanding; it supports internal loans for revenue creation, post office savings, bank term deposits, or investments for financial development (Shilpa et al., 2021; Shetty, 2016; Uma & Rupa, 2013). Financially self-reliant individual SHGs women make their needful financial decision making (Karthigeyini & Thavaraj, 2017). After joining, 96.34 per cent of SHGs women took individual financial decisions related to loan amount usage in productive aspects, 42.68 per cent used bank loan amounts for starting a business, tailoring, animal husbandry and investment income generation activity (Ghosh & Surjapada, 2011) become a financially independent. Women could make financial decisions such as investments in recurring or function fixed deposits with banks and post offices, purchase of life insurance policies in the name of their children and themselves, and purchase of physical assets as a long-term investment due to an increase in financial literacy among SHGs. They improved their social status as individuals and as a group (Mandala & Desai, 2021; Kumar et al., 2021; Bhatia & Singh, 2019; Ashalakshmi et al., 2017).

Aggarwal et al. (2020) studied empirical analysis of SHG women's Empowerment in Uttara Pradesh. This study results show; 44.6 per cent of SHGs women member households have a monthly income level indicating economic status. Microfinance effectively supports women's sustainable empowerment and smooth financial operations by enhancing regular income and marital status is not influencing women's decision-making capacity after joining SHGs. Kumar et al. (2021); Noted on SHGs membership has a strong impact on decision-making, financial literacy inclusion, credit amount usage for income generations and financial attitude. These are all supporting women's income enhancement and becoming self-reliant.

After reading the literature, women achieved the poverty line after joining SHG. The microfinance operational support women to get financial literacy- inclusion- adoptions of operational behaviour on loan amount repayment and regular saving practices. However, these achievements differ from study to study (Chandel, 2015). This study measures the below objectives.

### **Objectives of the Study**

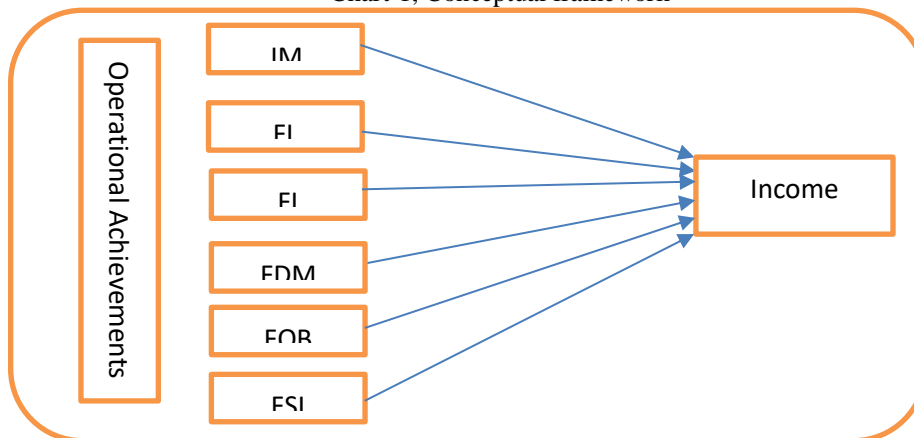
The SHGs women's financial achievement through microfinance operations achieved to explore the factors of microfinance practices by summarizing a large number of the component dataset to a minimum number of variables of factors using factor analysis before proceeding the further analysis (Kumari, 2020). Finally, the study output helps to know the impact of income level on SHGs women by microfinance operational factors achievements (Aggarwal et al., 2020).

- To know the SHGRW financial achievement through microfinance operations.
- To find the influence of achievement of microfinance operational factors on SHGRW household income.

### **Conceptual frame Work**

Based on the above objectives, this study measures the six items of SHGRW achievements in microfinance practices, which were divided into five different factors "joining motivation" (JM), "financial literacy" (FL), "financial inclusion" (FI), "financial decision making" (DM), "financial operations behaviors" (OB), and "financial saving and investment" (SI). These six factors influenced the income level of the SHGRW.

Chart-1, Conceptual framework



As chart-1 shows, in this study, the absolute microfinance operational practises achieved six different factors that influence income level, which helped to determine SHGRW income status.

### Hypothesis of the Study

It verifies the SHGRW income level improvement status as a result of operational successes in microfinance. by confirming the significance level below, which is based on the results of the investigation of chart-1, the hypothesis is formed.

$H_{01}$ : There is no significant influence of microfinance operational achievement factors on SHGRW Income level

## 2. Methodology

This empirical study is about the status of women's empowerment. It looks at their reasons for joining SHGs, how well they understand money, how they make decisions, how SHG women practise financial operations, and how much they save and invest. Previous studies found that women in rural SHGs have not been as successful in some places. It is helpful to individual households' women's financial wellness as well as the community and nation (Tripathi, 2016; Khurshid, 2015).

The current research adopted a representative probability sampling method; this method helps the findings' accuracy and may be more effective concerning the SHGs Rural women's (SHGRW) financial operations and empowerment. The structured questionnaire was divided into Five divisions of SHGRW achievements on microfinance practices. These are considered independent variables and Income considered as a dependent variable in this study. All factors measured in the quantitative data were collected through a self-administrated questionnaire using a five-point Likert scale (1-strongly disagree to 5-strongly agree) from the SHGRW achievements. Primary data was collected from SHGRW; using a structured schedule questionnaire in English and then translated into vernacular language, i.e., Telugu. While secondary data is collected from published research work from 2003 to 2022, A sample of 250 groups is drawn from the 1041 registered SHGs in the 25 Panchayaths, which are the local administrative bodies of five Mandals (Madanapalle, Nimanapalli, Punganur,

Somala, and Kalikiri) in Chittoor District, Andhra Pradesh, India. Equ.01 describes the sample selection technique used in the investigation.

**Equation–01: Sample Determination**

$$\begin{aligned}
 n &= [\bar{x} \pm Z^2(\sigma/\sqrt{p})] \\
 p &= N/1 + Ne^2 \\
 p &= 1041/[1 + 1041(0.0001)] \\
 p &= 942.85 \\
 \sqrt{p} &= 30.70 \\
 n &= [\bar{x} \pm Z^2(\sigma/\sqrt{n})] \\
 n &= 208.2 + [(2.57)^2 (90.24/30.71)] \\
 n &= 208.2 + (6.6049 \times 2.9394) \\
 n &= 208.2 + 19.41 \\
 n &= 227.61 \\
 n &= 228
 \end{aligned}$$

Were,

$n$  = Sample size  
 $\bar{x}$  = Mean of Population = 208.2  
 $\sigma$  = Standard Deviation = 90.24  
 $p$  = Percentage occurrence of state of condition = 99%  
 $N$  = Population = 1041  
 $e^2$  = percentage maximum error required = 0.0001  
 $Z$  = Value corresponding to level of confidence required at 99 per cent confidence level = 2.57

**Factor Analysis**

This analysis of primary data tested all of the independent variables using factor analysis. Variance analysis helped to understand the impact of the independent variables on the dependent variables, and these measurements helped predict the status of SHGRW's income level based on their achievements in microfinance practices. The primary data was used in the initial factor analysis. This analysis used Cronbach's alpha reliability test to assess the collected data for factor analysis. Table-1. If a factor has a value greater than 0.5, it is associated with a group of variables, so this study's results can be accepted for factor analysis.

Table-1: Results of Reliability Statistics for Factor Analysis

Cronbach's Alpha	N of Items
0.841	26

Source: Data compiled on SPSS Version 25

Table-2: Variables Consideration

Factor	No of Variables	Non-Supported Variable	Supported Variable
JM	14	10	4
FL	13	8	5
FI	14	10	4
FDM	9	5	4
FOB	8	3	5
SI	12	8	4

**Source:** Author Computation based on Table -12.

This study considers 26 variables that were evaluated as supported and 44 that were scored as unsupported. Table SHG for women's achievement of the joining motive and empowerment level verified the internal consistency and reliability of the scale using Cronbach's alpha statistics. The twenty-six measurement variables' reliability score is 0.841 (Table-2), which is greater than 0.7. The analysis does not support 44 variables out of 70. The women need to reveal some financial information because of their fear and lack of awareness about participating in research.

4 explains the outcome of the measurement variables using factors.

### Linear Regression analysis

The collected data were investigated using statistical techniques such as factor analysis and linear regression analysis using IBM-SPSS software, version 25. The main component matrix factor analysis is done to understand factors like JM, FL, FI, FDM, OB, and SI (Table-2). The study looked at the income level of the SHG women as a dependent variable for linear regression analysis; the following were independent variables: why women joined SHGs, financial literacy, financial inclusion, financial operations behaviour, financial decision-making, and financial saving and investment. It helps to figure out how different factors affect the income levels of SHG women.

$$Y = a + \beta_1 JM_1 + \beta_2 FL_2 + \beta_3 FI_3 + \beta_4 DM_4 + \beta_5 OB_5 + \beta_6 SI_6 + e$$

Y = Income level of the SHGs women

a = Integration

$\beta$  = Marginal Income

e = Error

## 3. Analysis and Results

This empirical analysis performed statistical analysis using first-hand information. The factor analysis assists in minimising the particular minimum variables. This analysis uses KMO and Bartlett's Test for sampling adequacy with satisfactory concern. The selected twenty-six variables' variance was measured through commonality analysis based on the extracted factors, a rotated component matrix, and a scree plot analysis to reduce the number of highly loaded variables. These variables were used in the linear regression analysis; they helped predict that their skills improved and helped determine their incomes changed slightly.

### 3.1 Factor Analysis

Table-3 results show the factors' variable variance in the association. The statistical calculation measure variance for the KMO (Kaiser-Meyer-Olkin) and Bartlett's Test is 0.755 (Aggarwal et al., 2020), and the corresponding P-value is 0.00.

**Table-3: KMO and Bartlett's Test Results**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.755
Bartlett's Test of Sphericity	Approx. Chi-Square	7150.489
	df	325
	Sig.	.000

**Source:** Data compiled on SPSS Version 25

All the factor tests have goodness-of-fit or positive significance. This study travelled a rotated component matrix by analysing six components and considering all items' suitability for the corresponding component's respective variables. Table- 4, the Rotated Component Matrix, shows the coefficients of individual variables' scores in six factors (Kumari, 2020). This study's measurement results show that the financial operations payment behaviour is the first component consisting of five variables, out of which four have more than 0.77, and the total payment amount is less than 0.55. Financial literacy has five variables with more than 0.5, while remaining decision-making, joining motive, saving and investment, and financial inclusion has four variables with more than 0.5. The first component is SHGs' women members' payment behaviour. After joining SHGs, women's financial literacy



improves, which points to the second component; SHG women make their own financial decisions about SHG operations and household-related matters, which points to the third component. The fourth component is about women's motivation to join SHGs, the fifth is about investments, and the sixth is about financial inclusion, which has four variables (Aggarwal et al., 2020).

**Table-4: Rotated Component Matrix**

Constructs	Component					
	FOB	FL	FDM	JM	SI	FI
Due date only	.855					
Loan Amount Only	.845					
Saving and Interest only	.814					
Bank Deposits	.779					
Total Amount only	.732					
EMI Operations		.973				
Bank Interest Rate		.965				
Insurance awareness		.951				
Accessing process of Bank Loan		.950				
Debit card Services awareness		.568				
Collogues			.791			
Own Experience			.775			
Children's			.715			
Spouse			.585			
Economic Development				.899		
Govt Benefits				.897		
Saving Money				.828		
Social Activity Participation				.788		
post office Deposits					.730	
Startup Business					.713	
Chits					.710	
Cow Purchases					.582	
Loan taken from Bank						.777
Bank Account Access						.751
Debit Card Services Usage						.671
Saving Bank Account having						.697
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 6 iterations.						

**Source:** Data compiled on SPSS Version 25

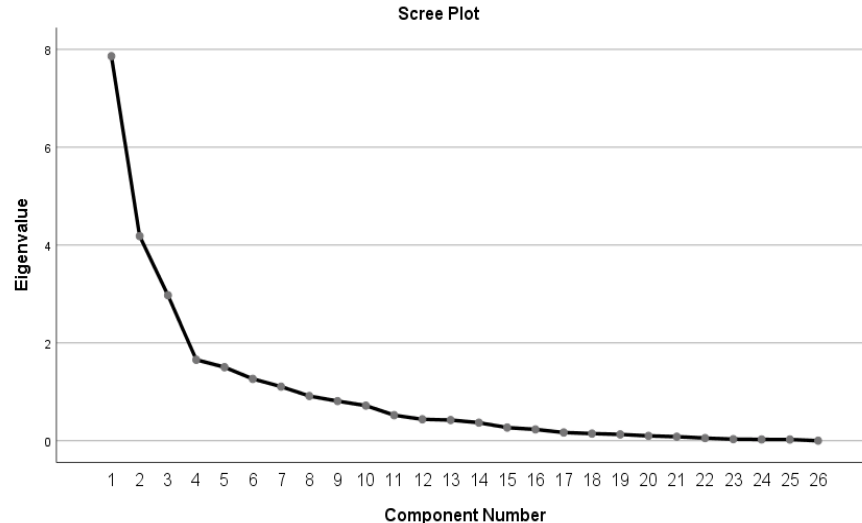
Table-5: Variance Analysis

Factors/ Name	Component	Rotation Sums of Squared Loadings		
		Total	Variance %	Cumulative %
1		5.716	21.985	21.985
2		3.980	15.307	37.292
3		3.494	13.439	50.731
4		2.992	11.508	62.239
5		1.766	6.794	69.033
6		1.492	5.739	74.771
Extraction Method: Principal Component Analysis.				

Source: Data compiled on SPSS Version 25 From the IBM-SPSS factor variance analysis

Table-5, the variance score shows the six components of SHG women's achievement and empowerment on financial operations factors. This variance score shows the total variance in per cent, and a cumulative per cent of variance can be given to all factors. The results explain that the initial cumulative variance per cent of the first variable is 21.985 per cent, and the six variables' 74.775.739 per cent is significantly considered for further studies out of twenty-six variables (Kumari, 2020; Thomas & Natarajan, 2018; Hair et al., 2009).

Chart-2, Scree plot



Source: Data compiled on SPSS Version 25

In most cases, the scree plot is used in the eigenvalues section of factor analysis to ascertain the bare minimum required number of variables that must be accepted and attained by SHG women. The women from the SHGs who got and fulfilled the goals are shown on the scree plot (Chart-2). Drawn on the X-axis are the twenty-six variables, and on the Y-axis are the Eigenvalues. The factors are minimized in decreasing order from left to right, with the bulk of the significant variables plotted on the extreme left side based on variance values (Thomas & Natarajan, 2018). The variances of all variables differ amongst the six groups, indicating that they do not relate to one another in the same manner.



### 3.2 Linear Regression Analysis

This empirical study used Linear regression analysis to determine how the rural SHGs member income level affects by the empowerment of microfinance operational determined factors (Financial Operations Behavior, Financial Literacy, Financial Decision Making, Joining Motive, Financial Saving and Investment, and Financial Inclusion).

**Table-6, Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.272	0.074	0.049	2.7037

Source: Data compiled on SPSS Version 25

Table-6, The regression model summary displays twenty-seven per cent of the "R-value" in this model, which indicates that the observed SHG women's income level and anticipated variables have a positive influence (Msomi & Nzama, 2022). The "R square" value of 7 per cent significantly positive effect on the income of the SHG women's households (Solomon & Sharma, 2021), which represents the variance (0.049) of the dependent and predicted variables, necessitating the use of an ANOVA (Table 7).

**Table-7, ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	128.738	6	21.456	2.935	.009
	Residual	1615.507	221	7.31		
	Total	1744.246	227			

Source: Data compiled on SPSS Version 25

The result of the ANOVA regression P value is 0.009, less than 0.05, indicating that the fit of the model in this study is good and sufficient to reach the level of significance. This regression model statistically significantly predicts the independent variables of SHG women's financial practises and achievements as a result of SHG women's income level (Solomon & Sharma, 2021). The study is monitoring the progress of independent parameter prediction in table-8.

**Table-8, Coefficients**

Model	$\beta$	t	Sig.
(Constant)	4.972	9.145	0.001
Financial Operations Behaviour	0.214	2.229	0.027
Financial Literacy	0.018	0.180	0.857
Financial Decision Making	0.304	2.379	0.018
Joining Motive	0.193	1.573	0.117
Financial Saving and Investment	0.631	3.003	0.003
Financial Inclusion	0.006	0.039	0.969

Source: Data compiled on SPSS Version 25

Table-8 predictors estimate output ("T" value, " $\beta$ " and "P" significance value.) indicate the relationship between the SHGRW income level and factor analysis. The model constant has a "t" value greater than 1.96 and a P-significant value less than 0.05. Similarly, the individual independent variables (financial operations behaviour, financial decision

making, and financial saving and investment behaviour) positively predict the SHG women's income level. The " $\beta$ " value has a 0.631 influence on the marginality with 0.05 per cent significance of SHG women's income level on saving and investment. It enables them to achieve long-term financial independence without falling into poverty. The  $H_{01}$  hypothesis is rejected by this study based on the results of the regression model, ANOVA analysis, and significant coefficient results.

#### **4. Discussion**

The Government of India's microfinance operations were implemented in 1992 with the support of NABARD as a Self-Help group for economically boosting below-party women. The women joined voluntarily and adopted microfinance operations (Selvaraj et al., 2016). Microfinance operations can help boost economic development (Sarkar, 2016; Lopamudra & Suresh, 2012). The SHG's income level is statistically positive, significantly influenced by microfinance operational (SHG joining motive, financial literacy, inclusion, decision-Inclusion-Decision making-operations behaviour, saving, and investment) factors (Solomon & Sharma, 2021).

The microfinance programme practises SHGRW financial literacy and assists women with regular savings in banks and accessing banking services. as well as financial operations participation, such as regular savings in banks, accessing bank loans, EMI payment preferences, awareness of bank interest rates on loans, risk predictions through insurance access, and awareness of ATM (Debit Card) services (Leoraklapper et al., 2015; Tiwari & Arora, 2015). This analysis's financial literacy results are insignificant, given the income level of SHGRW. Financial decisions help enhance the income level of individuals and households (Prajapati, 2022). These financial decisions are taken with support from colleagues, children, and spouses related to investment and household financial aspects (Aggarwal et al., 2020). The SHGRW takes some SHGs' financial decisions due to their experiences (Lokhande, 2015). Women are utilising government benefits, developing regular saving habits for convenience, increasing social activity participation after joining SHGs, and pursuing economic development. However, this achievement happened with the support of all group members, family members, and individual intentions. The SHGs' women had excess amounts saved in the post office; they participated in private chits for liquidity money requirements and had a saving mindset. Some SHG women started a business and purchased a cow for income enhancement and survival concerns using the bank loan amount (Lokhande, 2015). Microfinance activates participation, which is helpful to the effective usage of money for saving and investment; it supports income generation (Basargekar, 2009). The SHG women take loans from a bank with joint liability, participate in the SHG's group account, and access individual savings accounts through the bank. Women's use of debit card services also improved after becoming members of SHGs, but more than this loan amount is needed to earn money. These financial inclusion practices are only available to women in SHGs.

However, financial literacy and inclusion help women's investment choices through changes in their understanding of banking operations and creditworthiness, as well as their financial behaviour (Thyagarajan et al., 2021; Harika et al., 2020; Kumar et al., 2020; Kumar, 2017; Ashalakshmi et al., 2017; Sarkar, 2016; Poonam & Shukla, 2013). These financial practices support women's payment behaviour, supporting income level improvement. According to study findings, women's income levels increased by up to 27 per cent after participating in microfinance operations consistently. The degree to which SHGRW are economically empowered may be assessed by demographic indicators, behaviours related to microfinance, adoption rates, and accomplishments. Still, rural women's individual and family economic empowerment could have improved more due to a need for more skills in financial planning (Rajalakshmi & Arumugasamy, 2014).

#### **5. Conclusion and Implication**

This empirical study applies factor analysis to SHGRW's microfinance practices for development-related financial operations. Furthermore, this study aimed to investigate the assumed impact of financial services on income growth. The microfinance operations, given the financial literacy and inclusion operations, extend to the economic decision-making capabilities of individual members' enhanced skills. These financial skills are helpful for regular saving habits, bank loan access to cheap money, and decision-making skills on effective usage of funds. The SHGRW effectively performs financial operations for domestic functions and banking operations. It helps to become self-reliant through self-reliance. It supports the nation's economic development and women's empowerment. Moreover, the rural SHG's members' financial operations could be improved, which is the drawback of full-fledged financial literacy and

inclusion. There is a need for sufficient financial knowledge among the SHGRW. Through workshops and practical awareness, the government and microfinance management will take the necessary steps to enhance financial literacy, financial planning, and inclusion in micro aspects. Regular operational-based financial inclusion and literacy engagement are more helpful to rural women in income generation. This study's results help microfinance policymakers, women's development agencies, and rural development agencies concentrate on practice-based operations that have more significance for income generation. Individual SHG women focus on broader aspects of financial literacy and inclusion practices and the potential for economic development through income generation. Based on this study's results, further studies are required for rural women's financial literacy and inclusion extension opportunities to enhance women's income level and self-reliant status. Many studies on SHG women have helped academics understand the significance and value of microfinance, but more socioeconomic research is needed to determine this. An empirical study based on goal theory and application is useful for understanding how microfinance practices affect income generation at SHGRW.

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### Appendix

#### **Rural Women Achievements Elements Measures on Core Microfinance Practices**

Indicate your level of achievement promise with the following sentences from 1 (total disagreement) to 5 (total agreement).

<b>Personal achievement of Joining Motive in Microfinance</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
JM.1-	I am economically developed after join in SHG					
JM.2-	I have habit of regular money saving after became a SHG member					
JM.3-	Being a SHG member accessing Govt Benefits.					
JM.4-	I am participating social activity after join SHG					

<b>Personal achievement of Financial Literacy</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
FL.1-	I am aware of EMI operations					
FL.2-	I know Bank Interest Rates					
FL.3-	I am aware of Insurance					
FL.4-	I am aware of bank loan accessing process					
FL.5-	I know debit card usages					

<b>Personal achievement of Financial Inclusion</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
FI.1-	Being a SHG Member accessing bank account					
FI.2-	Being a SHG member joint liability loan taken from Bank					
FI.3-	I am using debit card after become a SHG member					
FI.4	I am participating saving bank account operations					



<b>Personal achievement of Financial Decision-Making Practices</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
FDM.1-	FDM.1: I am taken Some Financial Decision based on Owen experience on SHGs.					
FDM.2-	FDM.2: Some time my Children's helps in financial decision making.					
FDM.3-	FDM.3: I am taken help from spouse, when I am taken financial decision					
FDM.4-	FDM.4: My SHGs members helps to us in some financial decision-making activities.					

<b>Personal achievement of Financial Operation Behavior practices</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
FOB.1-	I am taken initiation to cash deposit in bank account out of group/ family members					
FOB.2-	I paid group liable amount due date only					
FOB.3-	I paid some time regular saving amount only.					
FOB.4-	I paid some time saving and loan interest only.					
FOB.5-	I paid on time all payments.					

<b>Personal achievement of Financial Saving and Investment practices</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
FSI.1-	FSI.1: I save money regularly in post office after become SHG member.					
FSI.2-	FSI.2: I am participating financial Chits after join SHG					
FSI.3-	FSI.3: I Bought Cow for Income generation after join SHG					
FSI.4-	FSI.4: being a SHG member, started business for income generation.					

<b>Personal achievement of Financial Saving and Investment practices</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
FRE.1	FR.1 Saving amount Increases after join SHG					
FRE.2	FRE.2: Fanatical asset increases after join SHG					
FRE.3	FR.3: Financial Access from bank increases after join SHG					
FRR.4	FSI.4: Liquid case Management increases after join SHG					