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Impact of before and after joining SHGs on Savings, Investments and Level of knowledge on Financial Literacy Antecedents - A study w.r.t. Bengaluru Urban District

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Abstract:

Purpose: The main intention of presented paper is to know how far the socio economic characteristics of respondents impact on the study. Further, the study is conducted to the mode of savings of respondents before and after joining SHGs. Also the study conducted to probe the type of investments taken by respondents of Bengaluru Urban district. Since financial literacy assumes critical at present, the study also made a pragmatic attempt to know the level of financial literacy antecedents before and after joining SHGs.

Methodology: A preplanned questionnaire was administered as schedule after considering the size of sample, incompleteness, delay and reject. Chi-square, Kendall's co-efficient of concordance, and contingency co-efficient techniques were performed to analyze and present the data. The participants of the study belongs to the Bangalore Urban district and these participants were interviewed and the concerned data was collected.

Findings : The study found that all the socio-economic characteristics supporting the study with significant variation in the data with high degree of relationship. The study reveals about the mode of savings by SHGs wherein the cash in hand is zero money that the respondents might have invested out of savings. Further, the study also found that the respondents, parking their savings in banks after joining SHGs. The best outcome is that respondents are not believing chit funds and improvement is found in case of post office. The study as far as investments are concerned the respondents preference on fixed deposits reduced from 20.83% to 5.00% followed by recurring deposits, post office savings, and jewelries. They show preference of investment towards Life Insurance policies, physical gold coin. Because of theft and fear, respondents preferred to invest on shares etc., and Public Provident Fund. The level of knowledge in financial literacy found more on antecedents of financial literacy after joining SHGs.

Keywords : Gold coin, Life Insurance policies, post office savings, jewelries, public provident fund, investment.

Introduction:

Financial inclusion in urban district of Bengaluru is essential in order to link the members to mainstream financial providers which helps the SHG members to access entire range of financial products from the mainstream financial institutions. Micro finance develops savings habits among the SHG members and it is a boon to poor women. The major intention of joining SHGs is not to avail loan but it is an empowerment process and savings mobilization (Rai, 2015). The SHG members start microfinance activities with group savings and equally sharing responsibility and profit from the business (Sharma & Roy, 2012). The idea of SHG serve the principle by the women, of the women and for the women (Kumar et al., 2014). Microfinance has empowered women and designed products and channel which are friendly and suitable to poor women (Keshava, 2014). SHGs are helpful in empowering women, and providing financial training and discipline leads the poor to avail long term socio-economic benefits (Kumar, 2012). SHGs are helpful in empowering women and making them financially viable, increasing savings habit among members for further investment for development (Devi & Narasaiah, 2017). Financial literacy assists individuals to negotiate emerging trends and challenges in the financial landscape from digital financial services to sustainable finance. Financial literacy is essential for promotion of financial inclusion as people need the knowledge and skill to effectively use financial instruments well (Annamaria Luisardi et al. 2023).

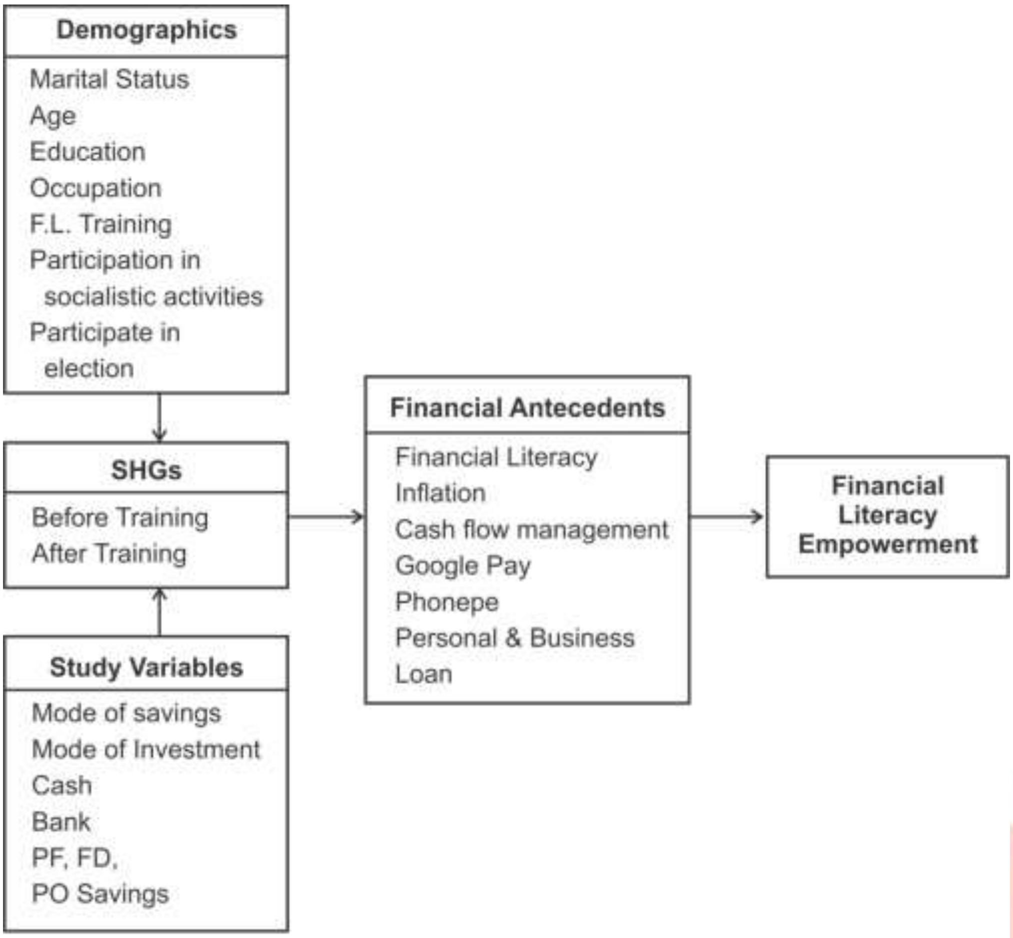
According to 2001 population the urban poor consist 35 to 40% of the population but surprisingly only 0.01% of them have banking relationship. The urban centers contribute 6.2% of GDP. Approximately 89% of workers on the informal sector are women whose contribution appear invisible to state planners and policy makers. So far the planners concentrated microfinance services only to the rural poor and urban poor women are devoid of any microfinance activities. The poor living in the urban centers faces the problems like poor in the rural areas. Despite development taking place in the banking system and ATMs of cities many poor people find their financial needs largely unmet.

Financial literacy empowers women so as to take independent decisions. Further, financial literacy helps women in taking correct decisions during the emergencies or unforeseen circumstances, understanding budgeting, savings, investing and debt management allows urban poor women to make informed choices and manage their economic activities properly and hence it has become almost a necessity to be financially literate so that wrong decisions may be avoided.

Statement of the problem :

Financial literacy impacts an overall decision making. Lack of financial literacy knowledge result in poor financial choices that can be harmful to individuals and SHGs. The lack of financial literacy knowledge is the main constraint in expanding financial services to the poor and marginalized (Chakrabarty, 2009). SHG members require financial knowledge in order to access to suitable financial products. Financial literacy programs aim to empower individuals with the required skills and knowledge to form financial decisions. It is significant for the SHG members to acquire financial knowledge and skill regularly through proper financial literacy training. Financial literacy knowledge helps to create a balance between income and expenditure and makes SHG members less worried during crisis. Financial literacy guides repayment of loan investment in firms and payment of installments. It provides an awareness about banks crop loan, governments loan waive off, compensation payable in case of crop loss due to excess rains etc., One of the biggest challenge of our country is economic women empowerment which can only attained by making women educated, economically liberated and independent (Chetna Singh et al. 2017). Financial literacy provides an awareness to know how money works in normal concise of action. The importance of financial literacy can be gauged from that it enhances life expectancy, shifts risk, and changes in the structure of family.

Before and after realistic frame work and financial literacy empowerment



Source: Author's Creation

Review of literature

Shobha and Shalini (2015) conducted a survey on the perception of women about personal financial planning in the city of Bengaluru. The study found that Indian Women give priority to family and children's requirements more than her requirements for financial needs of individualistic financial security. Further, there is a difficulty in convincing spouse and family and still it is a biggest challenge for the women to create their financial plans. The study also reveals that women still feel that gold, real estates, bank deposits, insurance products and provident funds are the most safe instruments for investing, while they felt that mutual funds, derivatives, chits, stocks and shares as riskier investment. Lack of knowledge on the part of women influence their ability to earn return for them.

Thanvi Sabastian et al. (2016) in their survey they revealed that majority of the women professionals are having financial knowledge. But as per the authors having a basic financial knowledge is not sufficient. They still remain as financially illiterate on the concepts of money management and investment. The analysis shows that urban women do make decisions on the their personal investments and money management along with the different financial decisions of the family.

Baneswar Kapasi et al. (2022) stated that SHGs can be felt as an important way poverty alleviation, micro entrepreneurs, financial inclusion and women empowerment. The members of women SHGs belonging to different demographics. An empirical assessment was made in the study where the Dhaniakhali block of the Hoogly district of West Bengal was taken as a study area. A field survey was conducted to gather primary data through questionnaire. The object was attained by computation of Financial Literacy Score (FLS) and by application of binary logistic regression model and non-parametric test statistics like Kruskal Wallis test and Pearson Chi-square test. The findings of the study ensured the significant impact of age, marital status education, and family income of members of FLS as well as on variations of their level of financial literacy. More than 70% of members were scored as holders of an average of financial literacy. The level of financial literacy among the member of SHGs in the study can be improved by providing training relating to financial education.

A study by Suganya (2017) was conducted in Virdhunagar district of Tamil Nadu, India, to probe the influence of financial literacy through micro credit schemes on economic empowerment of Self Help Group Women members. The study used financial literacy scale and economic empowerment questionnaire which were developed and standardized by the investors. The study reveals that financial literacy like saving skills, financial knowledge, borrowing skill and investment skill, financial knowledge, borrowing skill and investment skill are playing a very critical role in economic empowerment of SHG women members. In addition to financial literacy the moderator variables also facilitating economic empowerment among the SHG members.

Hasan, M. et al. (2021) one of the opinion that financial literacy is considered as one of the vital factors of financial inclusion. The rural people's financial knowledge about financial services was studied and the researchers expressed that proper understanding of financial products is essential. The study reveals about the approaches to getting financial access i.e., banking, microfinance and Fin Tech (Mobile banking). Further the study highlights that financial literacy had a positive effect on access to finance.

Sandeep Kumar et al. (2020) expressed that financial literacy is about enlightening women investors about their financial knowledge which helps them proper knowledge to evaluate different investments. The present study showed evidence to support that there is a significant mean score difference in women's awareness level about various investment avenues based on their qualification level.

Objectives :

1. To study moderator variables impacting on the study.
2. To analyze the mode of savings of respondents before and after joining SHGs.
3. To study the type of investments taken by the respondents before and after joining SHGs.
4. To study the level of financial literacy on antecedents of financial literacy before and after joining SHGs.

Hypothesis

1. There exists no significant variations in the demographics of respondents and hence do not impact on the study.
2. There is no significant variations in the mode of savings and no difference before and after joining SHGs.
3. There is no significant variations in the type of investments taken by the respondents.
4. There is no significant variation in the data on antecedents about financial literacy before and after joining.

Research questions

1. What are the reasons behind demographics not impacting on the study?
2. What is the level of savings of SHG members before and after joining SHGs?
3. What type of investments preferred by respondents before and after joining SHGs?
4. What is the level of financial literacy on the antecedents of financial literacy before and after joining SHGs?

Research methodology

Coverage of the study : The present study is confined to Bangalore Urban District containing 5 taluks viz., Anekal, Bangalore East, Bengaluru North, Bengaluru South and newly joined Yelahanka.

Participants : The participants of the study belongs one selected village SHG members of a taluk. There are 5 taluks and from each taluk one grama panchayat is selected and one village has been considered and interviewed by the researcher.

Data source : The study is based on both primary and secondary data. Primary data gathered by administering a well drafted questionnaire and the contents of questionnaire got from different research works. Secondary sources include journals, net and NRLM data on microfinance. Data has been collected from different published sources of NABARD and NRLM data.

Sample and Sampling Techniques

Name of the sub district	Villages	Grama Panchayat	No. of SHGs	Total Number	Sample village	SHGs	Male	Sample
Anekal	212	28	1533	22697	Haragadde	71	1121	27
Bengaluru East	162	11	445	7241	Manekuru	70	1236	30
Bengaluru North	184	11	675	11054	Chikkbidarakallu	20	320	8
Bangalore South	198	18	950	14725	Agara	92	1477	36
Yelahanka	165	19	868	13277	Hesaraghatta	50	791	19
Total	1421	87	4471	60994	5 Sample villages	313	4945	120

Source : NRLM : http://nrlm.gov.in > SHG Report.

The study performed convenient sample technique while visiting the 5 villages.

Line of analysis : The line of analysis follows for the present study if of descriptive type. The collected data has been arranged in tabular form for further analysis leading to the fulfillment of objectives. To measure the demographic profiles of respondents chi-square and contingency co-efficient techniques were performed. To know the level of financial literacy Kendall's co-efficient of concordance was performed. To measure the mode of savings of respondents before and after joining SHGs and the type of investment before and after a comparative pre and post joining of SHGs were performed.

Study variables :

Dependable variable : Type of investments and savings and financial literacy are dependent variables of the study.

Independent variables : Investments like Fixed deposit, R.D., P. O. Savings, Physical gold, shares etc., and the type of savings SHGs, cash in hand, chit fund, Bank etc., are independent variations.

Moderate variables : The demographics of respondents like marital status, age, education, occupation income, financial literacy training etc., are the moderate variables.

Survey Findings

Data presentation and analysis : Demographic profile of respondents - I

Table-1 divulge data about socio economic characteristics of respondents. There are 105 respondents married, 10 remained single and 5 separated. 60 respondents belongs to the age group of 30-40 years, 21 to the 40-50 years, 15 to the 20-30 years and 12 each < 20 years and more 51 years. 54 studied up to 10th standard, 25 studied up to 7th standard, 18 each PUC and ITI and 10 are degree holders. 47 respondents occupation is push car vegetable selling, 36 selling seasonal fruits, 22 involved in sale of textile pieces, 10 doing the service of provision supply and 5 are owners of petty shop. There are 52 respondents getting a monthly income of 20-30K followed by 51 in between 30-40K, 9 above 40K and 8 < 20K. 58 are living outskirts, villages, 38 are settled in developing areas, 13 living in slums and 11 well settled in developed areas. Further, the table reveals 98 respondents participated in social activities, 75 are financial literacy trained, 25 waiting and 20 not possible to attend financial training programs conducted by lead banks. 105 respondents participated in decision and context in elections at local areas. The study reveals the existence of significant relationship with high degree of relationship.

Data Presentation and Analysis – II

The type of savings preferred by respondents before and after joining SHGs was probed and the relevant mode preferred by the respondents presented in the table -2. Table - 2 clearly reveal that 37.5% of the respondents had savings after joining SHGs and more of them had savings before joining SHGs. It was also found that there was no respondent having the habit of savings money in the hand after joining SHGs, but before joining SHGs most of the respondents nearly 41.67 per cent had preferred the habit of saving money in their hands resulting in idle investments. The habit of parking money in the bank before joining was 5% but it stood at 27.5% after joining SHGs which clearly reveals that SHG members deposited clear savings in the banks. It is worth to mention out of the study that no respondent had the habit of saving money deposited with neighbors / friends / relatives after joining SHGs but before joining SHGs 16.67% respondents has money with their relatives / friends / neighbors. The percentage of respondents parked their money as savings cum investment in provident fund has increased to 15 per cent in the post SHG period from no one preferred to invest in profit fund during pre-SHG period. No respondent was found to have invested in chit funds after joining SHGs. This indicates clearly a health awareness among the members of the society about the fraudulent activities of chit funds. The results evident by support fig-1 Hypotheses H_1 of this study.

The mode of investments considered by respondents of study are before and after joining SHGs was analyzed and relevant data was presented in the Table-3. Table-3 clearly reveals that 20.83 of the respondents had taken fixed deposits before joining SHGs but only 5.00 of them had taken fixed deposits after joining SHGs. Respondents to the extent of 25 percent (30) had taken recurring deposits before joining SHGs but after joining the number of respondents reduced to 6.7%. Further, it was found that respondents of 8.33%, taken LIC followed by, physical gold coin 4.17%, shares / bonds / mutual funds 3.33% before joining SHGs but after joining the SHGs the some type of investments increased to 20% in case of Life Insurance policies, physical gold coin to 12.5% and shares etc., to 11.66%. The investors in real estate before joining SHGs stood at 3.33% but it has increased to 9.17%. Further the investors in physical gold coin were 4.17% before joining SHGs but after joining the same stood at 12.5%. It is worth monitoring that inclination level of respondents on life insurance policies has increased from 8.33% to 20% after joining SHGs. The results evidently support second hypotheses (H_1) of the study.

Table – 4 & 5 reveals data about respondents level of knowledge on antecedents of financial literacy before and after joining SHGs. Table-4 divulge data on antecedents of financial literacy before joining SHGs. There were 95 respondents who stated strongly agree about the stated antecedents followed by 15 agree and 10 somewhat agree. Out of 95 who said strongly agree a majority of 13 said about personal loan, 8 about life insurance policies. The "w" before joining SHG is 0.09 and Table-5 reveals data on the some after joining SHGs. After joining SHGs 92 respondents stated strongly agree, 18 agree and 10 stated somewhat agree. The "w" after joining was 0.69. After joining there is an overall improvement in case of online banking / mobile banking, where in before joining the strength was only 7 and after joining it stood at 41 an astronomical increase due to adoption of technology. The difference between "w" of before and after is 0.69 - 0.09 = 0.6 and the calculated value being 21.6 higher than the critical TV = 21.026 and hence it is concluded that there exist significant variation and respondents are benefitted after joining SHGs.

Discussion :

One of the main objective of the present study is to probe how far socio economic characteristics of the respondents. Further, the study conducted to know the mode of savings and investment before and after joining, SHGs and the level of financial literacy on antecedents of financial literacy before and after joining SHGs. All the demographic profile of respondents shows a significant variation in the data with high degree of relationship. As far as savings and investment are concerned respondents shown improvement after joining SHGs. Savings in the mode of bank deposits, PF, found improvement where as investment taken by the respondents show improvement in the type of life insurance, policies, purchase of gold coin, PPF, real estate. The study found respondents rejecting savings parking in the chit funds, relatives / friends / neighbors and disliked to hold cash in the hand that means they are interested to invest. Investments like RD, PO savings, fixed deposits were not preferred for investment where as they preferred to invest on LIC, physical gold, shares, PPF and real estate. Antecedents like online banking / mobile banking, dividend, debit and credit card, commodity / stock market, etc., tend improvement in their level of knowledge over financial literacy antecedents. The collected data presented in the form of tables and relevant statistical tools were performed to analyze the data.

Conclusion:

Financial literacy is essential for SHG women in urban centers as it enables them to take sound financial decision. Further, financial literacy has a cascading impact on the macro economic growth and development of a nation as they are highly influenced by financial decisions taken by individuals. Increased access to knowledge about money and finances can help women to identify and understand the financial implications of business decision. The knowledge about financial literacy give women the ability and confidence to speak up and contribute to discussion, creating a more inclusive environment. The study reveals the socio economic variables supporting data as they are significantly varying with high degree of relationship. Respondents shown preference to save and invest after joining SHGs. The literacy level on antecedents of financial literacy found improvement after joining SHGs. Since Chikkaballapura is well known for vegetables, sericulture, milk and now it is turning as a tourist centre, maximum attention may be given for the women development as earnings are better than previous.

References :

Annamaria Lusardi., & Flore-Anne Mesy. (2023). The importance of financial literacy and its impact on financial well being. **Journal of Financial Literacy and wellbeing,** 1, 1-11 doi:10.1017/HW.2023.8.

Baneswar Kapasi., & Sourav Sarkar. (2022). Financial literacy of women in India - A study on the select SHG members in the Dhanikhali Block of the Hoogly district, West Bengal. **International Journal of Economic Perspectives,** 16(3) (2022).

Chetna Singh., & Raj Kumar. (2017). Financial literacy among women - Indian scenario. **Universal Journal of Accounting and Finance,** 5(2), 46-53. doi: 10.13189/ujaf2017.050202.

Devi, K. U., & Narasaid, L. (2017). Women empowerment through SHGs. An empirical study in Kurnool district of Andhra Pradesh. **International Journal of applied research,** 3(1), 101-105.

Hasan, M., Le, T. Hoque. (2021). How does financial literacy impact on inclusive growth? Financial innovation, 7(4) https://doi.org/10.1186/540854-021-0059-9.

Keshava, S.R. (2014). The changing dimension of microfinance through SHGs in Idna. An anlaysis. **Shiv Shakti International journal in multidisciplinary and academic research,** 3(3), 130-145.

Kumar, A.A., & Kalva., U.K. 92014). Women's Parota Cipratin in Economic Development of India through SHGs**. Journal of International Academic Research for multidisciplinary,** 2(5), 72-81.

Kumar, S. (2012). SHGs in Socio-economic transformation with special reference to Coimbatore. **International journal of research in commerce, Economic and Management,** 2(9), 87-93.

Rai, K. (2015). Microfinance through SHG, empowering women: In Indian context. **International journal of management and social research review,** 1(8), 58-62.

Sandeep Kumar., & Nidhi Walia. (2020). Enhancing Women's financial empowerment through financial literacy in the changing world of work. **Pacific Business Review International,** 13(2), 158-166.

Sandya Ruhela., & Ajai Prakash. (2017). Saving Preference of financial literacy of SHGs a study of Uttar Pradesh. **Manthan Journal of Commerce and Management,** 4(2), 82-92, doi:10.17492/manthan.v4io2.11459.

Sharma, A., Ray, B., & Chakraborty, D. (2013). Potential of SHGs as an entrepreneur. A case study from Uttar Dinajpur district of West Bengal, **Journal of Social Science,** 30(1), 83-87.

Shobha, T.S., & Shalini (2015). A study on the perception of women towards financial planning in the city of Bengaluru. **Asia Pacific journal of Advance Research in Science and Engineering,** 4 Special issue (01) - ISSN - 2319 - 8354 (E) 2015.

Suganya. (2017). Study of financial literacy in relation to economic empowerment among SHG women members in Virudhunagar. **Semantic Scholar,** https://www.Semantic scholar. Thesis submitted to Kalasingam University, Anand Nagar Krishnakoi.

Thanvi Sebastian, Middi Appala Raju. (2018). A study on the financial literacy of professional women in the district of Ernakulam, Kerala. **International Journal of Technology enhancement and Engineering Research,** 4(7), ISSN2347-4289.

Table-1 : Socio-economic characteristics of respondents

Demographics	x^2	TV @ 0.05	df	Result of x^2	"c"	Result of "c"
Marital Status	158.75	5.911	2	Significant	0.75	High Degree
Age in years	69.75	9.488	4	Significant	0.60	High Degree
Education	82.70	11.070	5	Significant	0.67	High Degree
Occupation	51.42	9.488	4	Significant	0.54	High Degree
Monthly Income (INR)	61.66	7.815	3	Significant	0.58	High Degree
Living conditions	59.92	7.815	3	Significant	0.57	High Degree
Participation in social activities	48.14	3.841	1	Significant	0.53	High Degree
Financial literacy training	46.24	5.911	2	Significant	0.52	High Degree
Participation in election supporting a candidate	67.50	3.841	1	Significant	0.60	High Degree

Source: Field Survey

Note : x^2 = Chi-square

'c' = $\sqrt{(x2 / x2 + N)}$

Where 'c' = Contingency Co-efficient, N = Number of Observations

When the value 'c' is equal or nearer to 1, it means that there is high degree of association between attributes. Contingency co-efficient will always to be less than 1. High degree is considered here if 'c' is 0.50 and above.

Fig - 1: Demographic profile of Respondents

Fig-1: Demographics of respondents

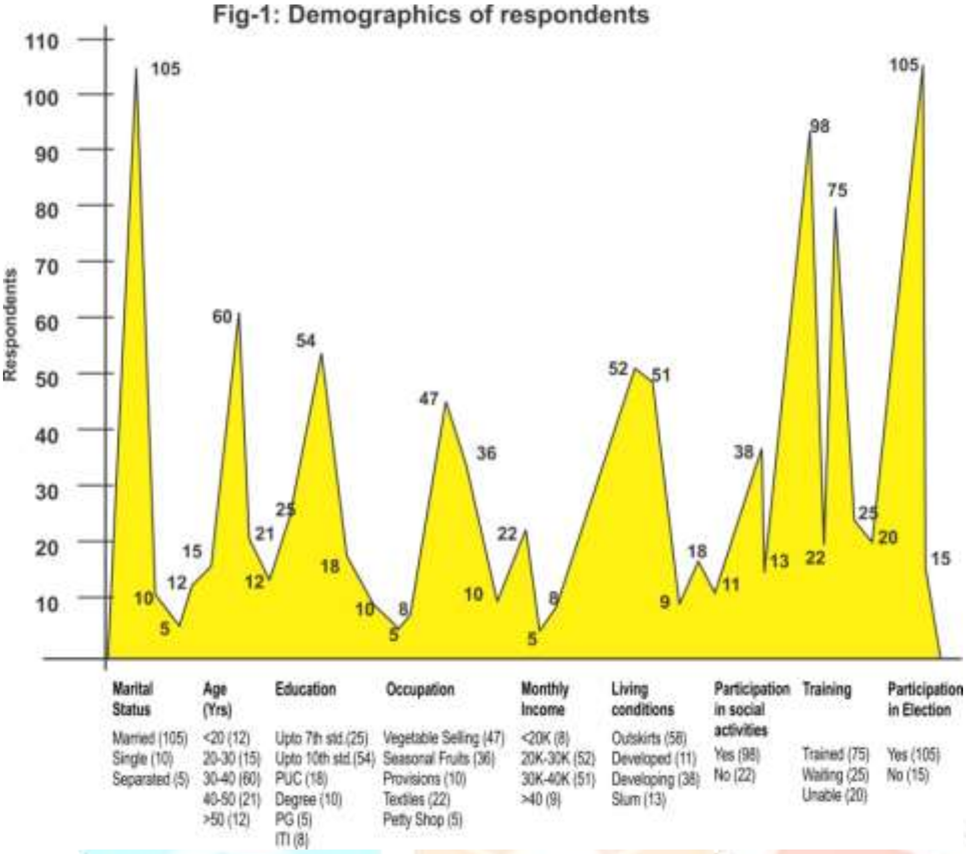


Table - 2 : Mode of savings of respondents before and after joining SHGs.

Mode of savings	Pre-SHG Period		Post-SHG Period	
	N	%	N	%
Self Help Groups	0	0.00	45	37.50
Cash in hand	50.00	41.67	0	0.0
Bank	6.00	5.00	33	27.50
Chit fund	22.00	18.33	0	0.0
Post office	22.00	18.33	10	18.33
Provident Fund	0.00	0.00	20	16.67
Relatives / friends / neighbors	20.00	16.67	0	-
Others	0.00	0.00	0	-
Total	120	100.00	120	100.00

Source : Field Survey

Table - 3 : Type of investments taken by respondents before and after joining SHGs.

Type of investments	Pre-SHG Period		Post-SHG Period	
	N	%	N	%
Fixed deposits	25.00	20.83	6	5.00
Recurring deposits	30.00	25.00	8	6.67
Life Insurance policies	10.00	8.33	24	20.00
Post office savings	22.00	18.33	10	8.33
Physical gold coin	5.0	4.17	15	12.50
Shares / bonds / mutual funds	4.0	3.33	14	11.66
Public provident fund	0.0	0.00	18	15.00
Real estate	4.0	3.33	11	9.17
Land	4.0	3.33	3	2.50
Jewelries	16.0	13.35	11	9.17
Total	120.0	100.00	120.00	100.00

Source : Field Survey

Table - 4 : Level of knowledge about Financial literacy on antecedents of financial literacy before joining SHGs.

Sr. No.	Respondents level of knowledge about antecedent of financial literacy	SA	A	SWA	RT	RT^2
1	Inflation	4	-	-	4	16
2	Simple & Compound interest	6	1	1	8	64
3	Depreciation and appreciation	2	1	-	3	9
4	Shares / stock / gold / e-gold	6	2	1	9	81
5	Dividend	9	2	-	11	121
6	Debit and credit card	7	-	1	8	64
7	PPF	5	-	2	7	49
8	Google Pay / Phonepe	7	2	1	10	100
9	Personal loan	13	2	1	16	256
10	Business loan	7	2	1	10	100
11	Commodity market / stock market	7	1	-	8	64
12	Life Insurance policies	8	2	1	11	121
13	Life Insurance policies	14	-	1	15	225
	Total	95	15	10	120	1270

Source : Field Survey

Note : SA = Strongly Agree, A = Agree, SWA = Somewhat Agree, RT = Row Total

$SSR = \Sigma RT^2 - (\Sigma RT)^2 / N$

$= 1270 - (120)^2 / 13 = 1270 - 14400 / 13$

$= 1270 - 1107.69 = 162.31$

Use the sum of squares (SSR) in the following formula to obtain Kendall's 'w'.

$W = 12 \times SSR / K^2N (N^2 - 1)$

$w = 12 \times 162.31 / 9 \times 13 (169 - 1)$

$= 1947.72 / 19656 = 0.09$

Table - 5 : Level of knowledge about Financial literacy on antecedents of financial literacy after joining SHGs.

Sr. No.	Respondents level of knowledge about antecedent of financial literacy	SA	A	SWA	RT	RT^2
1	Inflation	5	1	1	7	49
2	Simple & Compound interest	5	1	1	7	49
3	Depreciation and appreciation	4	1	-	5	25
4	Shares / stock / gold / e-gold	5	2	1	8	64
5	Dividend	4	2	1	7	49
6	Debit and credit card	6	2	1	9	81
7	PPF	36	3	2	41	1681
8	Google Pay / Phonepe	6	1	1	8	64
9	Personal loan	3	-	-	3	9
10	Business loan	4	1	-	5	25
11	Commodity market / stock market	5	2	1	8	64
12	Life Insurance policies	4	-	-	4	16
13	Life Insurance policies	5	2	1	8	64
	Total	92	18	10	120	2240

Source : Field Survey

Note :

SSR = $\Sigma RT^2 - (\Sigma RT)^2 / N$

= $2240 - (120)^2 / 13 = 2240 - 1107.69$

= 1132.31

Use the sum of squares (SSR) in the following formula to obtain Kendall's 'w'.

W = $12 \times SSR / K^2N (N^2 - 1)$

w = 12 x 1132.31 / 9 x 13 (169 - 1)

= 13587.72 / 19656 = 0.69

Now find the difference between 0.69 and 0.09

0.69 - 0.09 = 0.0.6

Test the significance of "w" by using the chi-square statistic.

x2 = k (n-1) w

= 3 (13-1) 0. 6

= 3 x 12 x 0.6 = 21.6

Decision: At 12 df (13-1) with 0.05 level of significance the TV = 21.026. The calculated value being 21.6 is higher than the critical TV and hence "w" fails to accept H_0 and accepts H_1. Therefore, there exists significant relationship before and after joining SHGs and members enhanced their level of knowledge about financial literacy.