

Microfinance for Microenterprise Fosters Socio-economic Development: A Study with Special Reference to Delhi

By Dr. Yasha Bothra¹ and Prof Ritu Sapra²

ABSTRACT

Microfinance is regarded as a tool for reducing poverty since the time it became popular in Bangladesh in 1970s. Millions of low-income borrowers who were previously beyond the reach of formal financial institutions now have access to loans due to the microfinance sector. The provision of financial services, in particular lending for microenterprises (income generating activities), will lead to the upliftment of the underprivileged. The microfinance sector is largely focused on providing loans to the underprivileged without the need for any type of collateral security. The majority of microfinance companies in India employ the self-help group (SHG) or joint liability group (JLG) models of group lending to issue loans since peer pressure acts as social collateral in these models. Offering microloans to microenterprises has been acknowledged as a crucial strategy for socioeconomic development in terms of improving the lives for microfinance beneficiaries and their households. The review of literature helps to identify gaps in research that may be succinctly stated. First, the examined literature reveals that there are several research on microfinance and its effects on socioeconomic development from various parts of the globe based on diverse theories, but there aren't many studies examining these effects in connection to metropolitan areas. Studies on the impact of microfinance in the Delhi region are particularly scarce. Second, while the majority of researchers have examined the effects of microfinance generally, few have sought to determine whether there are differences based on the beneficiary's group type such as whether they are SHG microfinance beneficiaries or JLG beneficiaries. The present study attempted to fill the above-mentioned gaps by examining the impact of microfinance on socio-economic development (microfinance beneficiary and their household) with special reference to Delhi.

The study is a cross sectional study based on primary survey. A total of 391 responses were analysed and subjected to empirical testing. Validity and reliability were ensured. Hypotheses testing was conducted using multiple linear regression. In pursuance of the research objectives and using the results of multiple linear regression, the study has been able to see the impact of microfinance by specifically analysing the impact of accessibility to microfinance loan, microfinance loan experience and microfinance group type on socio-economic development. Accessibility to microloans has been proven to significantly improve overall socio-economic development. Additionally, microfinance beneficiaries who have taken out more than one loan have greater overall socioeconomic development than beneficiaries who have taken out only one loan. As a result, the study found that joining a microfinance group and borrowing money for a microenterprise has a beneficial effect on socioeconomic development. Through the empirical testing of a conceptual framework for the influence of microfinance on socioeconomic development and its dimension, the study has theoretically contributed to the literature on microfinance. Based on primary data obtained from microfinance borrowers in Delhi the study

¹ Dr. Yasha Bothra is Guest faculty at Bharati College, University of Delhi. E-mail Id-yasha.bothra@gmail.com

² Prof. Ritu Sapra is Professor at Department of Commerce, Delhi School of Economics, University of Delhi. Email Id-rsapra@commerce.du.ac.in

increases understanding of microfinance and demonstrates that there is a significant and beneficial impact of microfinance on socio-economic effects at the household and individual level.

INTRODUCTION

Microfinance is viewed as a credit approach that frees microentrepreneurs from financial restrictions and utilises a reliable alternative to collateral (Hubka & Zaidi, 2005). Since microfinance first gained popularity in Bangladesh in the 1970s as a result of Dr. Muhammad Yunus's work, it has been intended to be a long-term tool for decreasing poverty. Many people at the bottom of the pyramid struggle to find suitable jobs that pay enough to cover their requirements and are unable to establish their own businesses because they lack the resources to do so. It was once difficult for those with low incomes and those living in developing nations like India to obtain loans from the conventional financial system. Lack of access to formal financial services has contributed to these people's capacity to start an enterprise (or other income-generating endeavour) that will assist them and their families satisfy their requirements. (Helms, 2006). The poor were excluded from these services for a number of reasons, including information asymmetry about them, a lack of knowledge about their credit histories, and a lack of collateral to use as security for loans (Pathak and Varshney 2017). Robinson has given a comprehensive definition of Microfinance. According to that "Microfinance refers to small-scale financial services—primarily credit and savings— provided to people who farm or fish or herd; who operate small enterprises or microenterprises where goods are produced, recycled, repaired, or sold; who provide services; who work for wages or commissions; who gain income from renting out small amounts of land, vehicles, draft animals, or machinery and tools; and to other individuals and at the local levels of developing countries, both rural and urban. Access to microfinance services is very helpful for low-income people. This enables them to reduce risk, increase their productivity, to get more return on investments, increased incomes and improved the quality of life of the household. (Robinson M. S., 2001)

In Indian context microfinance programs are usually operated through groups like SHG (Self help group) and JLG (joint liability group) as in this methodology peer pressure serves as social collateral. Numerous research have been done on the socioeconomic effects of microfinance. As stated by Hulme (1997) "behind all microfinance programs is the assumption that intervention will change human behaviours and practices in ways that lead to the achievement (or raise the probability of achievement) of desired outcomes". The microfinance services have an impact on the recipients of microloans in terms of numerous economic, social, and psychological parameters like income, investments, expenses, growth of jobs and employability, awareness and reduction of migration (Khandker, 1998) (Panda & Atibudhi, 2010) (Panda D. , 2016) (Pitt , Khandker, Choudhury, & Millimet, 2003).

A thorough analysis of the pertinent literature identifies gaps in research that may be succinctly stated. First, the examined literature reveals that there are several research on microfinance and its effects on socioeconomic development from various parts of the globe based on diverse theories, but there aren't many studies examining these effects in connection to metropolitan areas. Studies on the effects of microfinance in the Delhi region are particularly scarce. Second, while the majority of researchers have examined the effects of microfinance generally,

few have sought to determine whether there are differences based on the beneficiary's group type, such as whether they are SHG microfinance beneficiaries or JLG beneficiaries.

The study makes an effort to bridge the aforementioned gaps. The study has attempted to analyse if Microfinance (accessibility to microfinance loans, microfinance loan experience and microfinance group type) impact the socio-economic development in Delhi in terms of improvement in living standard and personal empowerment of microfinance beneficiary.

LITERATURE REVIEW

Theoretical Underpinnings

The benefit of getting credit for enterprise has been explained with the help of Theory of Change (Loiseau & Walsh, 2015). This theory emphasises the need for microfinance institutions to develop products that make it easier for entrepreneurs with limited access to credit to use them. As a result, with the help of money obtained from a microfinance loan, an investment can be made in an existing business or to start a new one. In other words, small businesses will see an increase in sales and earnings as a result of this microfinance loan investment. Now that household income will grow as a result of this, household expenditure on a variety of items, including food, healthcare, education, and housing, will also increase. Additionally, because women are the primary audience for these services, these clients will become empowered as a consequence. It will raise one's status in society, give them more authority to make decisions, and boost their involvement in local affairs.

Microfinance and its Socio-Economic Impact

Different organisations and governments from varied nations have different definitions of microfinance. However, microfinance is typically defined as the delivery of a wide array of services (both financial and non-financial) to the underprivileged and low-income clients, but primarily as financial capital for their extremely small firms, or microenterprises. (Banerjee and Jackson 2017)(Copestake 2007) (Sharma and Zeller 1997). "Microfinance" is defined as "the provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semi-urban and urban areas for enabling them to raise their income level and improve living standard" as per the definition given by the task force on microfinance established by RBI.

To help the impoverished in their respective target regions, these microfinance loans are given through either individual or group lending procedures.(Kovseos and Randhawa 2004).According to the report of Malegam Committee (2011)," Microfinance is an economic development tool whose objective is to assist the poor to work with their way out of poverty. It covers a range of services which include, in addition to the provision of credit, many other services such as savings, insurance, money transfers, counseling etc...."

In an economy, raising people's standards of life is the main goal of development efforts. (Baghel 2015).Microfinance is viewed as a development strategy in Asian, African, and South American nations to reduce poverty. Microfinance aids in the marked improvement of the impoverished. It enables them to begin money-generating activities. Microfinance, according to Otero (1999, p-8) is "the provision of financial services to low-income poor and very poor self-employed people"

The microfinance services have an impact on the beneficiaries of micro finance and their household in terms of numerous economic, social, and psychological parameters (like income, investments, expenses, growth of jobs and employability, awareness and reduction of migration)(Khandker, 1998)(Panda & Atibudhi, 2010)(Panda D. , 2016)(Pitt , Khandker, Choudhury, & Millimet, 2003).The aim of microfinance programs is to alleviate the social and economic inequalities.There are evidences that microfinance intervention improves the living conditions of the people.In a study in Bangladesh(Ahmed et al. 2011)also found that the families in which woman have taken loan also showed improvement in spending on sanitation and healthcare of family members.(Sarkar & Dharin, 2011) in their book on Microfinance have written that microfinance is a useful tool that helps in capacity building of the poor.

Thus, it was determined that microcredit is crucial for enhancing the socioeconomic standing and means of subsistence of disadvantaged households. Poor households will be helped through microfinance to escape the cycle of poverty. Having a variety of income sources enables households to reduce risk and prepare for shocks.(Sebstad & Monique , 2000).

In an empirical study, in the Kupwara area of Jammu and Kashmir.socioeconomic development was taken into account as both financial and non-financial results.The influence on income, spending, saving, asset accumulation, housing, health, children's education, and women's empowerment have been the main points of attention. It was determined that microfinance had a substantial impact in the economic wellbeing of the disadvantaged. Additionally, it aids in their economic and social empowerment. According to certain Indian research on SHG, microfinance loans through SHG have a favourable effect on empowering women, enhancing children's education, and releasing male family members from social vices like intoxication.Ahmad and Choudhary (2021),(Dahiya, Pandey, & Karol, 2001).(Prathap, Mahesh, & Karthik, 2018)According to a research that included SHG/MFI participants participating in microfinance activities, microfinance significantly affected family living standards in both economic and social parameters. According to a study on the two group lending models, SHG and JLG, each has advantages based on the situation and external environment.(Sarma and Menta 2014)

Studies have put forward that microfinance brings improvements in the lives of all the members of household which has been benefitted by increased income from microfinance(Satpathy, 2017)(Verma, Aggarwal, & , 2014)(Mutai & Achieno, 2014).(Herath, Guneratne, & Sanderatne, 2015),(Copestake, Dawson, Fanning, McKay, & Revollo, 2005)

Conceptual Framework& Hypothesis Development

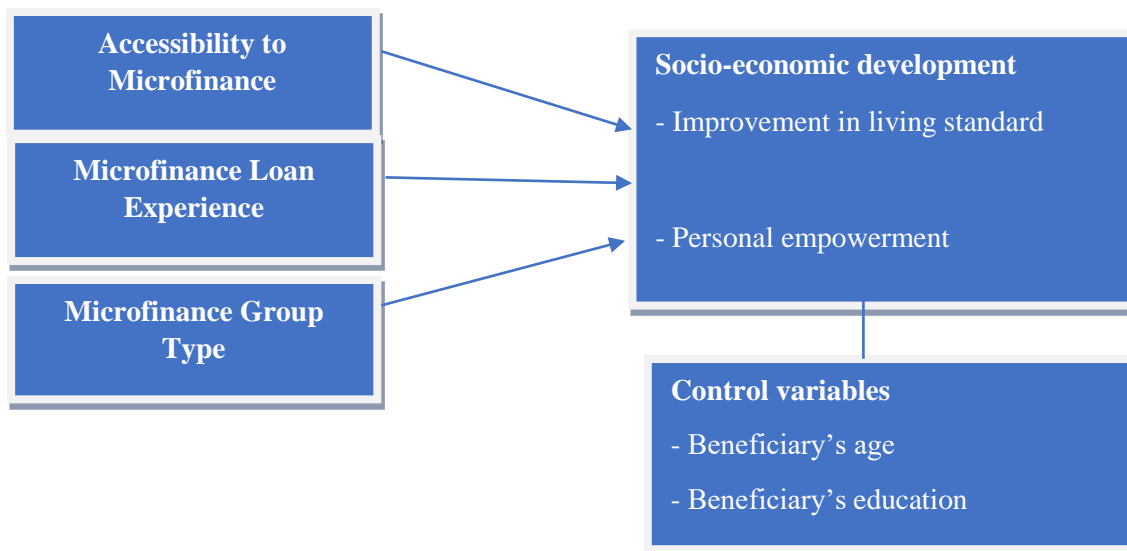
Until now, microfinance has mostly provided microcredit intended for very small businesses of poor and very low income families. Since they lack the means to sustain their microenterprises, impoverished and low-income households need microfinance.

According to a number of earlier research, microfinance has improved the socioeconomic situation of beneficiary households. Along with the microfinance recipient, all household members are impacted when a microloan is given for business.

Various researchers have defined socio-economic development differently and there appears to be no consensus on a single meaning of the word. According to Todaro (1988), Socio-economic development entails increase in income, business growth, consumer habits, education, health and infrastructure among other things. Smith and Rees view socio-economic development as improvement in living standards (Smith, 1998). In context of microfinance studies, it is generally viewed as improvement in wealth, health education and other factors.

So it is understood in terms of all aspects on which its influence was assessed or all aspects that seem to be in some way impacted by receiving microfinance and therefore result in better living conditions. The socioeconomic impacts of microfinance often involve a notable improvement in people's lives, better education for children, improved health, and empowered women because microfinance clients are typically women. The study has defined microfinance as the access to a microloan for a microenterprise by a microfinance beneficiary who is a member of a microfinance group (SHG/JLG) based on the literature review.

Thus, three independent variables (accessibility of microfinance, microfinance experience, type of microfinance group) are taken. The socio-economic development in the study has been taken in two dimensions. The first dimension is taken as improvement in living standard and the second dimension is personal empowerment of microfinance beneficiary. The framework also considers beneficiary's age and education as control variables. Following figure is the diagrammatic presentation of conceptual framework for the impact of microfinance on socioeconomic development (in context of microfinance beneficiary's households and microfinance beneficiary).



On this basis following null hypothesis were developed to be tested:

Primary Hypothesis

- H¹: There is significant impact of accessibility to microfinance loan on socioeconomic development.
- H²: There is significant impact of microfinance loan experience on socio-economic development.
- H³: There is significant impact of microfinance group type on socio-economic development.

Secondary Hypothesis

- H⁴: There is significant impact of accessibility to microfinance loan on improvement in living standard of microfinance beneficiary's household.
- H⁵: There is significant impact of microfinance loan experience on improvement in living standard of microfinance beneficiary's household.
- H⁶: There is significant impact of microfinance group type on improvement in living standard of microfinance beneficiary's household.
- H⁷: There is significant impact of accessibility to microfinance loan on personal empowerment of microfinance beneficiary.
- H⁸: There is significant impact of microfinance loan experience on personal empowerment of microfinance beneficiary.
- H⁹: There is significant impact of microfinance group type on personal empowerment of microfinance beneficiary.

METHODOLOGY

Sample and Data Collection

In this study a questionnaire was designed to address the mentioned hypothesis and empirically test the model. The study is a cross sectional study based on primary survey. For the present study, the universe consists of all the microfinance beneficiary who have taken the first microfinance loan for microenterprise between the year 2015-2018 by being a member of a group (SHG/JLG) in the NCT of Delhi. The areas were covered on the basis of the operation of the select MFIs/SHG in the area. The questionnaire was in Hindi language and it was checked for validity. The data was collected from 410 respondents out of which only 391 were complete and used in the final study.

Sampling Technique

The study has followed multistage sampling technique. Microfinance beneficiaries who have taken first loan for microenterprise between the years 2015-2018 were approached through the select NBFC-MFIs and SHPIs. Information about MFIs in Delhi were taken from MFIN report and information about SHPI were taken from bank in Delhi having highest number of saving linked SHG to it. From the select MFIs and SHPIs information about microfinance beneficiaries were obtained.

Measures

The constructs used for this study were derived from past research studies, and minor adjustments were made to achieve this study's research objectives. The questions that were on five-point Likert type scale required respondents to express how much they agree or disagree with a particular statement. Here quantitative values are assigned to qualitative data for the purpose of analysis. The construct 'Accessibility to microfinance' has been measured using Five-point scale. It has six items under it which are taken after referring to

various studies such as (Bernard, Kevin, and Khin 2016)(Mahmood and Mohd Rosli 2013)(Fayyaz, Abdul Hakim, and Khan 2016)(Suja 2012).Microfinance loan experience of beneficiary has been taken as the number of loans accessed by the beneficiary.The third dimension under microfinance is taken as the type of group. Since in India we have mainly two types of microfinance groups i.e., SHG or JLG.The dimension ‘living standard’ of household of microfinance beneficiary is composed of twelve items.These were identified by referring to (Dhaneshwar Singh and Ramananda Singh 2012)(Fayyaz et al. 2016)(Baghel 2015)(Hossain et al. 2016). And the dimension of personal empowerment of women is composed of nine items .These were identified by referring to (Herath et al. 2015), (Arane 2002)(Hossain et al. 2016)(Murali 2012).

All the constructs confirmed the highreliability of the measurement scales adopted for this study.The questionnaire contained question on some variable that were intended to be used as control variables.

Factorial Structure for Socio-economic Development Variable

The Principal Component Analysis with Varimax Rotation method was used to evaluate the factorial structure for the socio-economic development construct. Testing for sphericity and adequate sampling were done.The KMO value is above 0.6 and Barlett’s test has p value of 0.000 which indicates that it is highly significant. Thus, this shows that PCA is applicable.

Table 5.9: KMO and Barlett’s Test-Socio-economic Development

KMO and Bartlett’s Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.934
Bartlett’s Test of Sphericity	Approx. Chi-Square	6973.401
	df	210
	Sig.	.000

Source: SPSS Output

. The factor solution to be the best one must have at least three or more items that must load on a component (Pallant 2001). On this basis we got two components. These components were consistent with the proposed dimension of variable representing improvement in living standard and personal empowerment of microfinance beneficiary. The total variance that is explained by these two components is 62.067%.

Table 5.10: Total Variance Explained-Socio-economic Development

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.162	53.150	53.150	11.162	53.150	53.150	8.074	38.449	38.449
2	1.872	8.916	62.067	1.872	8.916	62.067	4.960	23.618	62.067

Extraction Method: Principal Component Analysis.

Source: SPSS Output

Dimensions of Socio-economic Development		
	Number of items	Cronbach's alpha
Living standard of beneficiary household	12	.949
Personal empowerment of beneficiary	9	.891

The study tested its hypotheses using multiple linear regression.

ANALYSIS & RESULTS

To analyse the cause-and-effect relationship between microfinance and socio-economic development regression analysis has been used. By bootstrapping the data, the assumptions of normality and heteroscedasticity in particular have been met. For the assumption of multicollinearity, the checking was done for Variance Inflation Factor (VIF) and Tolerance statistics (Hosseini et al. 2017). When the VIF score is less than 10 and the tolerance score is greater than 0.2, the assumption of no multicollinearity is satisfied. (Field, 2013). All the VIF values were below 10.

The three models (equations) were framed to test all the hypotheses related to the impact of microfinance on socio-economic development.

Age of Respondents

From the results shown in table 1.1 for age of respondents (microfinance beneficiary) it is clear that most of the respondents were under 40 years of age. Since to be a member of SHG or JLG one has to be of at least 18 years old therefore it can be observed from the table that there are 287(73.4%) respondents between the age of 18 to 40 years. Since the highest age of respondent in the data is 60 years therefore there are 26.6% of respondents who are in the age group of 41-60 years. This shows that comparatively young people are more likely to take up loan for microenterprises.

Table 1.1: Age of Microfinance Beneficiary

Age group (years)	Frequency	Percent
18-40	287	73.4
above 40 years	104	26.6
Total	391	100

Microfinance Beneficiary's Education

In terms of respondents' education levels, table 1.2 shows that 40.2% of respondents had more education than the primary level, compared to 59.8% of microfinance beneficiaries.

Table 1.2: Microfinance Beneficiary's Education level

	Frequency	Percent
Below Primary	234	59.8
Above Primary	157	40.2
Total	391	100.0

Model 1: Regression Analysis - Impact of Microfinance on Improvement in Living Standard

The model analyses the impact of independent variables accessibility to microfinance loan, microfinance loan experience and microfinance Group type on improvement in living standard of microfinance beneficiary household, controlled for microfinance beneficiary's age and education.

The following equation has been framed

$$SE_LS = \alpha + \beta_1 (MF_Acc) + \beta_2 (MF_loanexp) + \beta_3 (MF_grjlg) + \beta_4 (resage_40\& \text{ below}) + \beta_5 (resedu_aboveprimary) + \epsilon_i$$

Where,

SE_LS represents the dependent variable, Improvement in Living standard

MF_Acc represents the independent variable, accessibility to microfinance loan

Mf_loanexp represents the independent variable, microfinance loan experience

MF_grjlg represents the independent variable, microfinance group type

resedu_aboveprimary and resage_40& below represents beneficiary's education and beneficiary's age respectively.

Table 2(a): Model Summary (Dependent Variable SE_LS)

Model Summary						
Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
5	.490 ^a	.240	.230		.65414	1.892

Source: SPSS Output

Table 2(b): ANOVA (Dependent Variable SE_LS)

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
5	Regression	52.083	5	10.417	24.344	.000 ^b
	Residual	164.739	385	.428		
	Total	216.822	390			

Source: SPSS Output

Table 2(c): Regression Result (Dependent Variable SE_LS)

	Unstandardized Coefficients		Standardized Coefficients	t	Bootstrap Sig. (2-tailed)
	B	Std. Error	Beta		
(Constant)	.823	.325		2.534	.013
Mf_acc	.670	.070	.440	9.539	.001
MF_loanexp	.257	.068	.172	3.772	.001
Mf_grjlg	.032	.071	.021	.456	.650
resage_40& below	.017	.077	.010	.222	.821
resedu_aboveprimary	.057	.070	.038	.821	.419

Source: SPSS Output (p<0.05)

The result in the above tables explains the impact of microfinance on improvement in living standard of beneficiary's household. According to the result of multiple regression the $R^2 = .240$, Adjusted $R^2 = .230$, $F(5,385) = 24.344$, $p = <.01$. The model represents 24% of the explained variance in the improvement living standard of household. The F ratio is found to be statistically significant at 1 percent level of significance. Table 2(c) above depicts that the variables accessibility to microfinance loan and microfinance loan experience significantly impact the improvement in living standard of the household of microfinance beneficiary. Both are significant at 1% level of significance. On the basis of the beta values, it can be said that positive relationship exists between the accessibility of microfinance and improvement in living standard. Also, positive relationship exists between the microfinance loan experience and improvement in living standard. In the literature also there has been various studies that signifies a positive relationship between microfinance and the living standard (Idowu and Salami (2011); Mahmood et al. (2016); Mohammad (2007); Chaudhury (2016); Baghel (2015)). However according to the results there is no significant impact of microfinance group type on living standard of household. This implies that it does not matter whether a beneficiary is from JLG or SHG in context of improvement in living standard of household.

Model 2: Regression Analysis: Impact of Microfinance on Personal Empowerment of Women

The model analyses the impact of independent variables accessibility to microfinance loan, microfinance loan experience and microfinance Group type on personal empowerment of microfinance beneficiary, controlled for microfinance beneficiary's age and education.

The following equation has been framed on the basis of the above hypothesis

$$SE_{PE} = \alpha + \beta_1 (MF_Acc) + \beta_2 (MF_loanexp) + \beta_3 (MF_grjlg) + \beta_4 (resage_40\& \text{ below}) + \beta_5 (resedu_aboveprimary) + \epsilon_i$$

Where,

SE_PE represents the dependent variable, Personal empowerment

MF_Acc represents the independent variable, accessibility to microfinance loan

Mf_loanexp represents the independent variable, microfinance loan experience

MF_grjlg represents the independent variable, microfinance group type

resedu_aboveprimary and resage_40& below represents beneficiary's education and beneficiary's age respectively.

Table 3(a): Model Summary (Dependent Variable SE_PE)

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
6	.452 ^a	.204	.194	.54731	1.932

Source: SPSS Output

Table 3(b): ANOVA Table (Dependent Variable SE_PS)

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
6	Regression	29.616	5	5.923	19.774	.000
	Residual	115.326	385	.300		
	Total	144.943	390			

Source: SPSS Output

Table 3(c): Result of Regression Analysis (Dependent Variable SE_PS)

	Unstandardized Coefficients		Standardized Coefficients	t	Bootstrap Sig. (2-tailed)
	B	Std. Error	Beta		
(Constant)	1.568	.272		5.766	.001
Mf_acc	.509	.059	.409	8.650	.001

MF_loanexp	.179	.057	.146	3.141	.002
Mf_grjlg	.001	.059	.001	.025	.981
resage_40& below	.127	.065	.092	1.969	.047
resedu_aboveprimary	-.012	.058	-.009	-.201	.852

Source: SPSS Output (p<0.05)

The table above shows the multiple linear regression result for the impact of microfinance on personal empowerment of microfinance beneficiary(women). According to the result of multiple regression the $R^2 = .204$, Adjusted $R^2 = .194$, $F(5,385) = 19.774$, $p < .01$. The model represents 20.4% of the explained variance in the personal empowerment of beneficiary. The F ratio is found to be statistically significant at 1 percent level of significance. Table above depicts that there is significant relation between accessibility to microfinance, microfinance loan experience, beneficiary age and personal empowerment of microfinance beneficiary. Both are significant at 1% level of significance.

In the literature also there has been various studies that signifies a positive relationship between microfinance and personal empowerment of women.(Krishnan; S, Sivramkrishna and U (2017); Rajasekaran and Sindhu (2013); Afrane (2002)(Hossain, Islam, and Majumder (2016). As per the regression result microfinance group type does not have a significant impact on personal empowerment of beneficiary.

Additionally, it has been discovered that people over forty years of age are less likely than people under forty to feel personally empowered. This shows that younger women are becoming more powerful than generally older women. This might be the case because older people already have control over their lives or because they are unable to use microloans productively enough to feel personally empowered.

Model 3: Regression Analysis: Impact of Microfinance on Socio-economic Development

The model analyses the impact of independent variables – Accessibility to microfinance loan, Microfinance loan experience and Microfinance Group type on overall socio-economic development, controlled for microfinance beneficiary's age and education.

The following equation has been framed on the basis of the above hypothesis

$$SED_Overall = \alpha + \beta_1 (MF_Acc) + \beta_2 (MF_loanexp) + \beta_3 (MF_grjlg) + \beta_4 (resage_40\& \text{ below}) + \beta_5 (resedu_aboveprimary) + \epsilon_i$$

Where,

SED_Overall represents the dependent variable, Socio-economic Development

MF_Acc represents the independent variable, accessibility to microfinance loan

Mf_loanexp represents the independent variable, microfinance loan experience

MF_grjlg represents the independent variable, microfinance group type

resedu_aboveprimary and resage_40& below represents beneficiary's education and beneficiary's age respectively.

Table 4(a): Model Summary (Dependent Variable SED_Overall)

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
3	.511 ^a	.261	.252	.53969	1.949

Source: SPSS Output

Table 4(b): ANOVA Table (Dependent Variable SED_Overall)

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.695	5	7.939	27.257	.000 ^b
	Residual	112.138	385	.291		
	Total	151.833	390			

Source: SPSS Output

Table 4(c): Result of Regression Analysis (Dependent Variable SED_Overall)

	Unstandardized Coefficients		Standardized Coefficients	t	Bootstrap Sig. (2-tailed)
	B	Std. Error	Beta		
(Constant)	1.268	.264		4.799	.001
Mf_acc	.589	.058	.463	10.167	.001
MF_loanexp	.218	.056	.174	3.878	.001
Mf_grjlg	.017	.058	.013	.289	.803
resage_40& below	-.072	.064	-.051	-1.133	.245
resedu_aboveprimary	.023	.058	.018	.396	.701

Source: SPSS Output ($p < 0.05$)

The table above shows the multiple regression result for the impact of microfinance on personal empowerment of microfinance beneficiary(women). According to the result of multiple regression the $R^2 = .261$, Adjusted $R^2 = .252$, $F(5,385) = 27.257$, $p = <.01$. The model represents 26.1% of the explained variance in the personal empowerment of beneficiary. The F ratio is found to be statistically significant at 1 percent level of significance. Table4(c) above depicts that there is significant impact of accessibility to microfinance and microfinance loan experience on overall socio-economic development. From the coefficient table of the results of the regression it is found that the independent variable accessibility to microfinance loan and microfinance loan experience are significant at one percent level of significance.

Their respective coefficient values of 0.463 and 0.174 demonstrate that microfinance loan experience and accessibility to microfinance have a beneficial impact on socioeconomic development in the context of microloan beneficiaries and their households. Accessibility to microfinance has the biggest impact on overall socioeconomic changes. As per the regression result microfinance group type does not have a significant impact on socio-economic development.

Table 6.18: Summary of Hypotheses Testing on the basis of Multiple Linear Regression

H ₀ ¹ : There is significant impact of accessibility to microfinance loan on socio-economic development.	Fail to reject
H ₀ ² : There is significant impact of microfinance loan experience on socio-economic development.	Fail to reject
H ₀ ³ : There is significant impact of microfinance group type on socio-economic development.	Reject
H ₀ ⁴ : There is significant impact of accessibility to microfinance loan on improvement in living standard of microfinance beneficiary's household.	Fail to Reject
H ₀ ⁵ : There is significant impact of microfinance loan experience on improvement in living standard of microfinance beneficiary's household.	Fail to Reject
H ₀ ⁶ : There is significant impact of microfinance group type on improvement in living standard of microfinance beneficiary household.	Reject
H ₀ ⁷ : There is significant impact of accessibility to microfinance loan on personal empowerment of microfinance beneficiary.	Fail to Reject
H ₀ ⁸ : There is significant impact of microfinance loan experience on personal empowerment of microfinance beneficiary.	Fail to Reject

H ₀ ⁹ : There is significant impact of microfinance group type on personal empowerment of microfinance beneficiary.	Reject
---	--------

CONCLUSION

The multiple linear regression was used to see the impact of accessibility to microfinance loan, microfinance loan experience, group type on socio-economic development and its dimensions. Following are the major findings of the study in this regard:

- There is significant impact of accessibility to microfinance loan on socio-economic development.
- There is significant impact microfinance loan experience on socio-economic development.
- There is significant impact of accessibility to microfinance loan on living standard of microfinance beneficiary household.
- There is significant impact microfinance loan experience on living standard of microfinance beneficiary household.
- There is significant impact of accessibility to microfinance on personal empowerment of microfinance beneficiary.
- There is no significant impact microfinance loan experience on personal empowerment of microfinance beneficiary.

However, the improvement in living standards, beneficiaries personal empowerment, and consequent socioeconomic development were not significantly impacted by the type of microfinance group. The study concluded that a microfinance beneficiary's membership in a JLG or a SHG has no bearing on their socioeconomic development (in context of microfinance beneficiaries and their household)

This suggests that having access to microfinance has a very beneficial overall effect on socioeconomic development. Additionally, microfinance recipients who have taken out multiple loans have greater socioeconomic overall development than recipients who have only taken out one loan. As a result, the study found that borrowing money through membership in a microfinance group had a favourable effect on socioeconomic development.

Group type did not, however, significantly affect overall socio-economic development (for microfinance beneficiary and their household). According to research, persons who are poor or have limited income and do not have collateral security may be able to get small loans for microenterprises, which could improve their standard of living and empower women (microfinance beneficiary)

BIBLIOGRAPHY

- Copestake, J., Dawson, P., Fanning, J.-P., McKay, A., & Revollo, K. (2005). Monitoring the Diversity of the Poverty Outreach and Impact of Microfinance: A Comparison of Methods Using Data from Peru. *Development Policy Review* , 23 (6), 703-723.
- Dahiya, P., Pandey, N., & Karol, A. (2001). Socio-economic evaluation of self-help groups in solan district of Himachal Pradesh: Impact, Issues and policy implications. *Indian Journal of Agricultural Economics* , 56 (3), 486.
- Field, A. (2013). *Discovering Statistics using IBM SPSS statistics*. Sage.
- Helms, B. (2006). *Access for All : Building Inclusive Financial Systems*. Washington,DC: World Bank.
- Herath, H. M., Guneratne, L. H., & Sanderatne, N. (2015). Impact of microfinance on women's empowerment: a case study on two microfinance institutions in Sri Lanka. *Sri Lanka Journal of Social Sciences* , 38 (1), 51-61.
- Hubka, A., & Zaidi, R. (2005). *Impact of Government Regulation on Microfinance*. Washington, DC: World Bank.
- Khandker, S. R. (1998). *Fighting poverty with microcredit: experience in Bangladesh*. New York: Oxford University Press.
- Krejcie, R., & Morgan, D. (1970). Determining sample size for research activities. *Educational and Psychological Measurement* , 30, 607-610.
- Loiseau, J., & Walsh, C. (2015). *Where Credit is Due*. Cambridge: MA: Abdul Latif Jameel Poverty Action Lab and Innovations.
- Mutai, R., & Achieno, G. (2014). Impact of microfinance on economic empowerment of women: the case of microfinance institutions' clients in Narok town. *Journal of Global Business and Economics* , 8 (1), 1-23.
- Panda, D. K., & Atibudhi, H. N. (2010). Impact of group-based creditlending project on the income of rural households: A non nonexperimental evidence from an Indian state. *Journal of Rural Cooperation* , 38 (2), 173-186.
- Panda, D. (2016). Microfinance Spurs Microenterprise Development: An Exploration of the Latent Processes. *Strategic Change* , 25 (5), 613-623.
- Pitt, M., Khandker, S., Choudhury, O., & Millimet, D. (2003). Credit Programs for the Poor and the Health Status of Children in Rural Bangladesh. *International Economic Review* , 44 (1), 87-118.
- Prathap, B., Mahesh, K., & Karthik, K. (2018). Impact of Microfinance on Poverty Alleviation. *Journal of Management* , 5 (4), 278-286.
- Sarkar, S., & Dharin, S. (2011). *Microfinance: Concepts, systems, Perceptions and Impact: A review of SGSY Operations in India*. New Delhi: Readworthy Publications (P) Ltd.

Satpathy, S. (2017). Access to Microfinance: A Review of the Existing Literature. *Account and Financial Management Journal* , 2 (10), 918-953.

Sebstad, J., & Monique , C. (2000). Microfinance, Risk Management, and Poverty. *AIMS Project Report, USAID/G/EG/MD*. Washington, D.C: Management Systems.

Smith, C. &. (1998). *Economic Development* (2 ed.). London: Macmillan.

Verma, S., Aggarwal, K., & . (2014). Financial inclusion through microfinance institutions in India. *International Journal of Innovative Research & , 3* (1), 178-183.