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Original Research Article

Micro entrepreneurs and their access on micro credit: A study of Moderating Effects of Family size, Education, Age and experience

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Microfinance is considered as an important key to access the micro entrepreneurs to assist them in poverty alleviation, health nutrition, education and self employment opportunity etc. Micro credit is one of the ingredients of microfinance. This study seeks regarding the moderating effects of Family size, education, age and experience on their access of micro credit in rural areas of Sri Lanka. Quantitative method was used for gathering information and stratified sampling method has been used to collect the data from 337 respondents through close ended questionnaires. Data analysis was based on descriptive statistics using various statistical tools by using the SPSS package. Regression analysis and coefficient test were used to identify the moderating effects of Family size, education, age and experience on women entrepreneurs through the access of micro credit. This study revealed that the 84.3 percent of the respondents belong to 18- 55 Age group level. 60.2 percentages have more than three family members. 62.6 percentages have below the G.C.E (A/L) Qualification and 73% have below 5years experience. Based on the findings, it has been concluded that there is no moderating effects of age, family size, education and experience on women entrepreneurs through the access of micro credit. It is suggested that more attention should be given to the training and education facilities other than credit delivery to enhance the entrepreneurship development in the rural areas.

Keywords: Demographic factors, micro credit, rural women empowerment and moderating effect.

BACKGROUND OF THE STUDY

The support of thousands of microfinance customers in Sri Lanka reveals that access to financial services facilitates poor people to boost their household income, make assets, and cut their vulnerability. Micro credit is the extension of small loans to those in poverty designed to encourage self employment. The term microfinance usually entails very small loans to low-income clients for self-employment who lack access to traditional banking services. Micro credit is part of microfinance, which has been originated by the Grameen Bank of Bangladesh. In Bangladesh, microfinance has enabled poor people to employ in self employment projects and allow them to create income and begin to rigid prosperity and exit poverty.

According to Bagati (2003) many micro credit programs give a role to women in the economy and it will translate into positive changes in their status, empowering women like a 'magic wand'. The United Nations (UN) declared 2005 the International Year of Micro credit (Delfiner, Pailhe and Peron, 2006). Though, Grameen Bank lends both men and women at equal rates initially, presently women became ninety-five percent of the bank's clients. Seventy-five percent of the micro credit recipients are women worldwide (Delfiner, Pailhe and Peron, 2006). Since 1980s, other than lending to women who have higher repayment rates, and accepts smaller loans than men. Further, many micro credit institutions have used the goal of empowering women to justify their disproportionate loans to women. Micro credit is a tool for socioeconomic development also.

The thirty years war in the North and East of Sri Lanka came to an end in May 2009. There were more than one million people who were killed and 300,000 Tamil civilians and combatants who were held in Internally Displaced Camp (IDPs) in the various geographical areas of the North East of Sri Lanka (World Bank, 2012). The Ministry of Child Development and Women's Affairs has revealed that, in late September 2010, there were 89,000 war widows in the North and East, below the age of 40 years and most of them have three children without any form of income. Further, other than widows the women who were disabled and mentally disturbed due to war. A country like Sri Lanka will need to address multifaceted socioeconomic issues in respect of women affected by the war in the postwar economy. The present study has a significant importance in economic concept and it analyses the moderating effect of family size, age, education and experience for women entrepreneurs through access to

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micro credit. Further, this study would help to understand to what extent the micro credit can go to determine the women entrepreneurs' empowerment in rural areas in Sri Lanka.

2. Research Problem

As revealed by the literature review by Dubreuil, & Mirada, (2010), there are a number of variables considered when taking potential impacts of micro credit through self employment in women. The demographic factors such as age, family size, education and experience also have a moderating effect on women empowerment. In Sri Lanka, in the post war context, the micro credit has an important tool to enhance the women's standard of living and their self empowerment opportunity. The government has a great responsibility to secure the women from various challenges. Micro credit is one of the ingredients of micro finance and it helped to the poor people in various ways facing problems by tsunami in 2004. Therefore, it is believed that the micro credit is an important tool from the experience in tsunami effects and from the other developing countries such as India, Pakistan, and Bangladesh etc.

However, a little research has been undertaken to look beyond microfinance's economic benefits, at social mobilization, empowerment, stabilization, peace building and harmony, through social capital enhancement. Most of the authors investigated the developments and the situation of the regions in their Reports and articles which were conducted by the aid of the NGOs and Other World nations now focused on the demographic factors. However, the demographic factors which influencing on micro credit and empowerment of women, there were a little researches on this regards. To fill this research gap the following research question is arising as the research problem.

"Does there is any moderating effect of demographic factors on women entrepreneurs through micro credit?"

3. Objectives of the study

This study has the following objectives:

The main objective of this study is to identify the moderating effect of demographic factors on access of micro credit of women entrepreneurs, and the following sub objectives have been derived from the main objective.

- To investigate the moderating effect of age on women entrepreneurs through the access of micro credit.
- To investigate the moderating effect of family size on women entrepreneurs through the access of micro credit.
- To investigate the moderating effect of education on women entrepreneurs through the access of micro credit.
- To investigate the moderating effect of experience on women entrepreneurs through the access of micro credit.
- To suggest some possible solutions for improving the degree of women entrepreneurship development through microcredit.

4. Literature Overview

The framework of Dubreuil, & Mirada, (2010), explained that the micro credit has a direct impact on women empowerment through self employment and micro enterprises. Further, the demographic factors such as age, education and experience also have a moderating effect on women empowerment. They considered various parameters and variables such as age, education, micro enterprises, micro credit programs, etc.,

Mushtaq, (2008) explained that the role of micro credit on poverty alleviation increases the education and training, income and savings, nutrition and adequate food accommodation, clean water and hygienic environment through the employment. Further, it was concluded that the micro credit program is effective in giving employment and to meet short term needs such as debt taken, paying fees, treatment, etc.,

Asim, (2008) investigated that the impact of micro credit on indicators of women empowerment it has been evaluated in the household level instrument which contains information on different dimensions of household decisions. In his study the three channels to improve the position of women within the household through micro credit.

I. Empowerment brought about by increases in independent income;
II. Empowerment through 'control' over credit and savings;
III. Stemming from their ability to bring a 'valuable' asset to the household economy through the increased worth of women within the family.

It is assumed that lending to women result in multiplier effect because they pass on benefits to the children through spending on the household education and nutrition (Macissac, 1997). Age, educational level and type of main livelihood venture, were found to influence significantly women borrowers' ability to reduce vulnerability context associated with their livelihood ventures as a way of improving their livelihood sustainability. Also, women borrowers who received a relatively higher amount of loan were found to have improved on their livelihood asset holdings and better prepare to withstand vulnerability context associated with their enterprises than those who received a relatively small amount of loan.

The study of Noreen (2011) concluded that the age effects positively and, more significantly, but its variation is not much. Older women are much mobile and have a greater access to resources and to make decision both inside and outside the home. The conclusion of this study was that the level of women empowerment is not as much satisfactory at the household level. It also highlights that age, education of husband, marital status, and number of sons, father assets and loan amount are influential factors rather than many other factors.

Ahmed, Siwar and Aini Hj (2011), concluded that micro credit program increases empowerment of rural women through initiating group dynamics and skill development training, women's education, adequate and timely availability of credit for income generating and productive activities among rural women.

The study of Parveen and Leonhauser (2004) concluded that education, training and exposure to information media have the potential to increase women's empowerment. According to the study of Bharathamma, (2005) majority of the people improved their communication ability followed by increased confidence level respect from the society and family member by taking up of income generating activity. Further, it was mentioned that the education, land holding, the income of the family, social participation and mass media participation showed highly significant association with empowerment. However, age, marital status, caste family type, family size, material possession, and extension participation had no association with the empowerment of rural women.

The following assumptions have been developed as hypothesis to prove whether those can be accepted or not from the results. Based on the past findings, this study has developed the following hypotheses.

H_1: Age moderates the relationship between micro credit and women entrepreneurship development.

H_2: Family size moderates the relationship between micro credit and women entrepreneurship development.

H_3: Education moderates the relationship between micro credit and women entrepreneurship development.

H_4: Experience moderates the relationship between micro credit and women entrepreneurship development.

5. Methodology

The women entrepreneurs are the major respondents in this study. To conduct the study the quantitative method has been used and the primary and secondary sources have been used to collect the data. Altogether 337 questionnaires have been selected for the analyses which were fully completed by the respondents. The stratified random sampling technique has been applied in selecting entrepreneurs. Besides information on micro credit and entrepreneurship development, the survey collected detailed information on demographic factors on age, family size, education and experience. Information relating to the size of the loan, recovery of loan, date of joining and other membership characteristics also collected from them. Primary and secondary data were used for the study. Primary data were collected from the questionnaire developed by the researcher and direct interview with the branch managers and field officers of Samurdhi Bank, Officers from Divisional Secretariat's Office and secondary data were collected from the books, journals and other reports.

The statistical tools of descriptive and regression analysis tests have been used to find out the moderating effect of the demographic factors on women entrepreneurship development through micro credit by using SPSS.

The following topic and tables illustrate the frequency of demographic factors among respondents.

6. Data presentation and analysis

6.1. Descriptive analysis

The analysis regarding the form of sample respondents and their age interval, no. of family members, education and experience are revealed in the following diagrams of 6.2, 6.3, 6.4 and 6.5 respectively.

6.1.1. Percentage of respondents by District

First category of respondents has been collected from Northern Province that consisted of 5 districts such as Jaffna, Kilinochchi, Mannar, Mullaitivu and Vavuniya. In this connection the results of the empirical study have been revealed in figure 6.1.

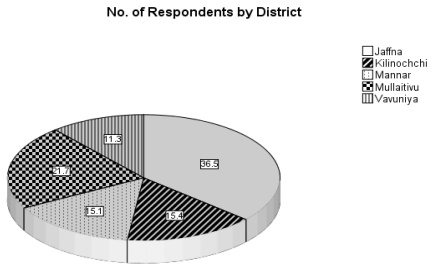

Figure 6.1: Percentage of respondents by District

Figure 6.1 depicts that the highest percentage of respondents composing about 36.5 percent were from the Jaffna District, which is higher than Kilinochchi, Mannar, Mullaitivu and Vavuniya district that constitutes, 15.4, 15.1, 21.7 and 11.3 percent respectively. The highest percentage of respondents were selected from Jaffna district because Jaffna is one of the biggest populated districts. The least number of respondents who represents 11.3 percent were from the Vavuniya district, however, where is the highest population smaller in Tamil. From this population only the self employable women headed families who have 2 years experience have been selected for the survey. The following tables illustrate the demographic factor variations among respondents.

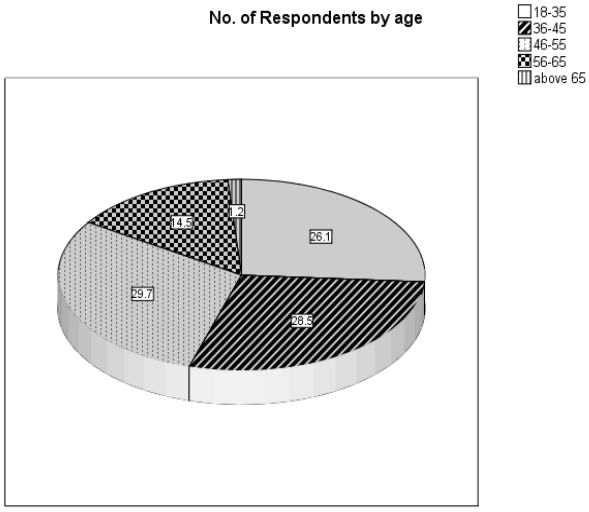

Figure 6.2 Age Interval

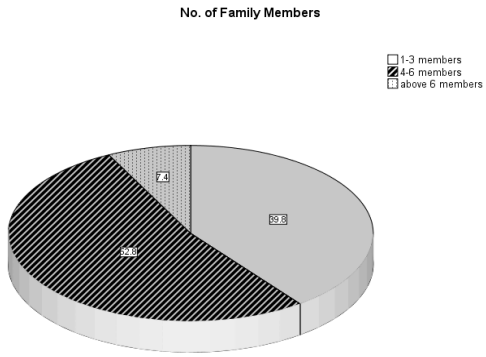

Figure 6.3 No. of family members

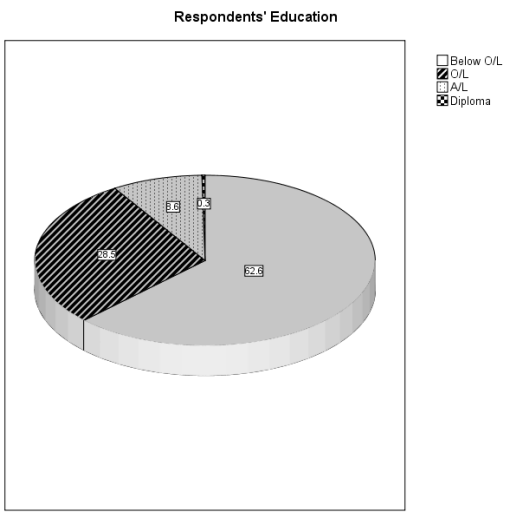

Figure 6.4 Education

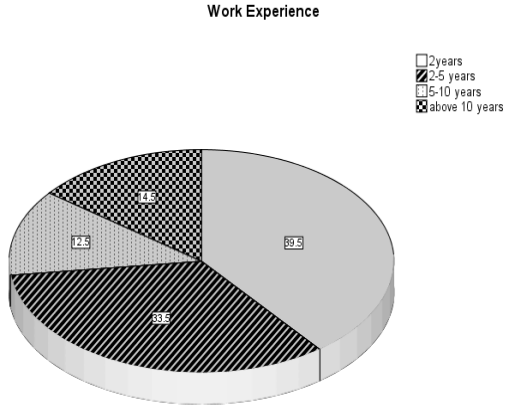

Figure 6.5 Experience

6.1.2. Age

Age plays an important role in the entrepreneurship development process. This analysis has been made in the figure 6.2. From figure 6.2 it is clear that the sample entrepreneurs 29.7 percent are in the age group 46 to 55 years, followed by 28.5 and 26.1 percentage is within the age interval of 36 to 45 years and 18 to 35 years respectively. While remaining 14.5 percent and 1.2 percent belong to the age group of 56 to 65 years and above 65 years respectively. Thus, it can be observed that the sample entrepreneurs took an entrepreneurship at a comparatively early age of their life. Mostly 84.3 percent of women were in between the age group of 18 to 55 years. Remaining 15.7 percent were above the age of 55 years.

6.1.3. Family size

Family size has been considered in order to judge the socioeconomic condition of the sample respondents. A person with big family may run short of funds to invest in the expansion of her activity after meeting the expenses of her family. Moreover, the persons who are having a big family may not have sufficient time to develop their activities and may be uninterested in taking risk. In this connection, the results of the empirical study have been revealed in figure 6.3. It illustrates from one to three members around 39.8 percentages and remaining 60.2 percentages have more than three members.

6.1.4. Education

The collected data on education has been shown in figure 6.4. The education level of the entrepreneurs was measured by asking questions through the questionnaire with pre-determine options as shown in Figure 6.4. The figure depicts the

frequencies of the respondents' education level as provided by them which reveals that 62.6 percent respondents are in below General Certificate of Ordinary Level (G.C.E.O/L) education, followed by 28.5 percent having an educational background of the General Certificate of Ordinary Level (G.C.E.O/L), 8.6 percent and 0.3 percent sample respondents having educational qualification of G.C.E.A/L and Diploma/Graduate level education respectively. It is clear that the majority of the entrepreneurs are uneducated and some of them were unable to fill the questionnaire also and researcher assists them to complete the questionnaire when collected data.

6.1.5. Experience

In Figure 6.5, highest number of entrepreneurs (39.5 percent) have an experience in between 1 to 2 years. 33.5 percent entrepreneurs have an experience of 3 to 5 years and 14.5 percent entrepreneurs having an experience exceeding 10 years. While remaining 12.5 percent entrepreneurs belong to the range of 5 to 10 years. It is also noticed that a substantial number of entrepreneurs have the experience of 2 years because of the postwar context most of the individual women are involved in the self employment activities due to rehabilitation and revitalization activities.

6.2. Moderating Effects of Demographic Variables between Micro credit and Women empowerment

After controlling the predictor and moderator variables, the product explains a statistically amount of variance independent variable. So it can be concluded that the effect of the predictor variable (micro credit) on the dependent variable (women empowerment) is, indeed moderated by the demographic variables (Age, Family size, Education and Experience).

6.2.1. Age moderates the impact of micro credit on women empowerment

The production of Micro credit and Age and the dependent variable women entrepreneurship development have been shown in the Table 5.48. R for model 1 and 2 which reflects the degree of association between the regression models 1 is 0.279 and 2 is 0.280. R^2 for Model 1 and 2 both represents the amount of variance (7.4% and 7.7%) that is explained by the model.

In table 2, the ANOVA for model 1 and 2 explain that the model, overall, results a significantly better degree of prediction of the women empowerment ($p = 0.000$). However, it does not tell about the individual contribution of variables in the model.

In table 3, the model 1, 0.238, and the model 2, 0.196 is the Unstandardized slope or gradient coefficient, which is the change in the outcome associated with a one unit change in the predictor variable. This means that for every 1 point that micro credit level is increased the model 1, that predicts an increase of 0.238 for women empowerment and 0.196 in model 2. In model 2 Micro credit, Age and micro credit x Age product term are also included. The standardized regression coefficient (b) 0.241 represents the strength of the association between the predictor and the criterion variable. Since, it is significant ($P>0.05$), the predictor variable is significantly associated with the criterion variable. The Unstandardized slope or gradient coefficient 0.064 is the change in the outcome associated with a one unit change in the predictor variable. This means that for every 1 point that age is increased and that the model predicts an increase of 0.064 for women empowerment. In model 1, the standardized regression coefficient (b) 0.133 represents the strength of the association between the predictor and the criterion variable. Since it is significant ($p<0.05$), that the value of b (0.133) is significantly different from 0 so, the predictor variable is significantly associated with the criterion variable.

In model 2, the Unstandardized slope or gradient coefficient for the interaction term is 0.018 and the standardized regression coefficient for the product term is 0.162 and it is not significant ($P>0.05$), that the value of b = 0.162 is not significantly different from 0 (i.e., the interaction term is not significantly associated with the criterion variable). In model 2, the Unstandardized slope or gradient coefficient for the interaction term is -0.053 and the standardized regression coefficient for the product term is -0.173 and it is not significant ($P>0.05$), that the value of b = 0.053 is not significantly different from 0 (i.e., the interaction term is not significantly associated with the criterion variable). There are no moderating effect and the hypothesis H_1 'Age moderates the relationship between micro credit and women entrepreneurship development' is rejected.

6.2.2. Family size moderates the impact of micro credit on women empowerment

The product of Micro credit and Family Size and the dependent variable women empowerment has been shown in the Table 4. R for model 1 and 2 which reflect the degree of association between the regression models is similarly 0.278. R^2 for Model 1 and 2 both represent the amount of variance (7.7%) that is explained by the model. There is no r^2 change and F change from model 1 to model 2.

Table 1: Model Summary - Micro Credit and Age

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.279a	.078	.072	.49151	.078	14.103	2	334	.000
2	.280b	.078	.070	.49214	.000	.148	1	333	.700

Table 2: ANOVA - Micro Credit and Age

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	6.814	2	3.407	14.103	.000[a]
Residual	80.688	334	.242		
Total	87.503	336			
Regression	6.850	3	2.283	9.427	.000[b]
Residual	80.653	333	.242		
Total	87.503	336			

a. Predictors: (Constant), Age, Microcredit
b. Predictors: (Constant), Age, Microcredit, Age * MC
c. Dependent Variable: Women Empowerment

Table 3: Coefficients - Micro Credit and Age

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. error	Beta		
1 (Constant)	2.382	.220		10.801	.000
MicroCredit	.238	.052	.241	4.590	.000
Age	.064	.025	.133	2.538	.012
2 (Constant)	2.552	.495		5.159	.000
Micro Credit	.196	.121	.199	1.621	.106
Age	-.010	.194	-.020	-.050	.960
Age*MC	.018	.047	.162	.385	.700

a. Dependent Variable: Women Empowerment

Table 4: Model Summary - Micro Credit and Family Size

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	Df1	df2	Sig. F Change
1	.278[a]	.077	.071	.66082	.077	13.936	2	334	.000
2	.278[b]	.077	.069	.66169	.000	.115	1	333	.735

a. Predictors: (Constant), Family size, Microcredit
b. Predictors: (Constant), Family size, Microcredit, Family size * MC

Table 5: ANOVA - Micro Credit and Family Size

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	12.171	2	6.085	13.936	.000[a]
Residual	145.851	334	.437		
Total	158.022	336			
Regression	12.221	3	4.07	9.304	.000[b]
Residual	145.800	333	.438		
Total	158.022	336			

a. Predictors: (Constant), family size, Microcredit
b. Predictors: (Constant), family size, Microcredit, Familysize * MC
c. Dependent Variable: Women Empowerment

Table 6: Coefficients - Micro Credit and Family Size

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. error	Beta		
1 (Constant)	2.736	.306		8.938	.000
MicroCredit	.321	.070	.242	4.609	.000
Age	-.144	.059	-.130	2.466	.014
2 (Constant)	2.995	.824		3.635	.000
Micro Credit	.257	.200	.194	1.288	.199
Family size	-.299	.459	-.268	-.651	.516
Family size *MC	.038	.112	.147	.339	.735

a. Dependent Variable: Women Empowerment

In Table 5, the ANOVA for model 1 and 2 explains that the model overall results a significantly better degree of prediction of the women empowerment (p = 0.000). However, it does not tell about the individual contribution of variables in the model. In Table 6, Y Intercept for Model 1 is 2.736 Model 2 is 2.995, both are significantly different from 0. Moreover, in model 1, 0.321, and in model 2, 0.257 is the unstandardized slope or gradient coefficient, which is the change in the outcome associated with a one unit change in the predictor variable. This means that for every 1 point that access of micro credit level is increased the model 1, predicts an increase of 0.321 for women empowerment, and 0.257 in model 2. In model 2 Micro credit, family size and micro credit x family size product term are also included. The standardized regression coefficient (b) is 0.242 represents the strength of the association between the predictor and the criterion variable. Since, it is significant (P>0.05), the predictor variable is significantly associated with the criterion variable. The Unstandardized slope or gradient coefficient of family size is -0.144 is the change in the outcome associated with a one unit change in the predictor variable. This means that for every 1 point that family size is increased the model predicts a decrease of 0.144 for women empowerment. In model 1, the standardized regression coefficient (b) is -0.130 represents the strength of the association between the predictor and the criterion variable. Since it is significant (p<0.05), that the value of b (-0.130) is significantly different from 0 so, the predictor variable is significantly associated with the criterion variable. In model 2, the Unstandardized slope or gradient coefficient for the interaction term is 0.038 and the standardized regression coefficient for the product term is 0.147 and it is not significant (P>0.05), that the value of b = 0.147 is not significantly different from 0 (i.e., the interaction term is not significantly associated with the criterion variable). There is no moderating effect and the hypothesis of H_2 'Family size moderates the relationship between micro credit and women entrepreneurship development' is rejected.

6.2.3. Education moderates the impact of micro credit on women empowerment

The product of Micro credit and Education and the dependent variable women empowerment has been shown in the Table 7. R for model 1 and 2 which reflects the degree of association between the regression models are 0.201 and 0.208 in respectively. R^2 for Model 1 is 4% and Model 2 is 4.3% both represent the low amount of variance that is explained by the model. R^2 change only 3% F change 0.947 and no significant F Change (p>0.05).

Table 7: Model Summary – Micro Credit and Education

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	Df1	df2	Sig. F Change
1	.201[a]	.040	.035	.56310	.040	7.043	2	334	.001
2	.208[b]	.043	.035	.56314	.003	.947	1	333	.331

a. Predictors: (Constant), Respondents' Education, Microcredit
b. Predictors: (Constant), Respondents'Education, Microcredit, Education * MC
c. Dependent Variable: Women Empowerment

Table 8: ANOVA – Micro Credit and Education

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.467	2	2.233	7.043	.001[a]
Residual	105.905	334	.317		
Total	110.372	336			
Regression	4.767	3	1.589	5.010	.002[b]
Residual	105.605	333	.317		
Total	110.372	336			

a. Predictors: (Constant), Respondents' Education, Microcredit
b. Predictors: (Constant), Respondents' Education, Microcredit, Education * MC
c. Dependent Variable: Women Empowerment at Household level

Table 9: Coefficients – Micro Credit and Education

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. error	Beta		
1 (Constant)	2.344	.249		9.416	.000
MicroCredit	.215	.060	.195	3.614	.000
Education	-.030	.047	-.035	.648	.517
2 (Constant)	2.878	.603		4.775	.000
Micro Credit	.084	.147	.076	.573	.567
Education	-.340	.383	-.393	-.887	.376
Education *MC	.090	.093	.458	.973	.331

In table 8, The ANOVA for model 1 and 2 explains that the models, overall results a significantly good degree of prediction of the women empowerment (P<0.05). However, it does not tell about the individual contribution of variables in the model. In table 9, In model 1, 0.215, and in model 2, 0.084 is the unstandardized slope or gradient coefficient which has the change in the Outcome that associated with a one unit change in the predictor variable. This means that for every 1 point that micro credit level is increased the model 1 that, predicts an increase of 0.215 for women empowerment and 0.84 in model 2. In model 2 Micro credit, Education and micro credit x family size product term are also included. The standardized regression coefficient (b) 0.195 represents the strength of the association between the predictor and the criterion variable. Since, it is significant (P>0.05), the predictor variable is significantly associated with the criterion variable.

The Unstandardized slope or gradient coefficient 0.030 is the change in the outcome associated with a one unit change in the predictor variable. This means that for every 1 point that Education is increased the model that predicts an increase of 0.030 for women empowerment. In model 1, the standardized regression coefficient (b) 0.035 represents the strength of the association between the predictor and the criterion variable. Since it is not significant (p>0.05), that the value of b (0.035) is not significantly different from 0. So, the predictor variable is not associated with the criterion variable.

In model 2, the Unstandardized slope or gradient coefficient for the interaction term is 0.090 and the standardized regression coefficient for the product term is 0.458 and it is not significant (P>0.05), and the value of b = 0.458 is not significantly different from 0 (i.e., the interaction term is not significantly associated with the criterion variable). There are no moderating effect and the hypothesis H_3 'Education moderates the relationship between micro credit and women entrepreneurship development' is rejected.

6.2.4. Experience moderates the impact of micro credit on women empowerment

The product of Micro credit and Experience and the dependent variable women empowerment at household level have been shown in the Table 10. R for model 1 and 2 which reflect the degree of association between the regression models are 0.246 and 0.247 in respectively. R^2 for the Model 1 is 6% and Model 2 is 6.1% both represents the low amount of variance that is explained by the model.

Table 10: Model Summary - Micro Credit and Experience

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	Df1	df2	Sig. F Change
1	.246[a]	.060	.055	.66671	.060	10.752	2	334	.000
2	.247[b]	.061	.053	.66753	.001	.183	1	333	.669

a. Predictors: (Constant), Experience, Microcredit
b. Predictors: (Constant), Experience, Microcredit, Experience * MC

Table 11: ANOVA – Micro Credit and Experience

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	9.559	2	4.779	10.752	.000[a]
Residual	148.463	334	.445		
Total	158.022	336			
Regression	9.640	3	3.213	7.212	.000[b]
Residual	148.381	333	.446		
Total	158.022	336			

a. Predictors: (Constant), Experience, Micro credit
b. Predictors: (Constant), Experience, Micro credit, Experience * MC
d. Dependent Variable: Women Empowerment

Table 12: Coefficient – Micro Credit and Experience

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. error	Beta		
1 (Constant)	2.497	.297		8.404	.000
MicroCredit	.325	.070	.246	4.631	.000
Experience	-.011	.034	-.017	-.315	.753
2 (Constant)	2.277	.595		3.827	.000
Micro Credit	.379	.145	.287	2.623	.009
Experience	-102	.266	.157	.383	.702
Experience *MC	.028	.065	-.181	-.428	.669

Dependent Variable: Women Empowerment at HH level

In Table 11, the ANOVA for model 1 and 2 explain that the models, overall results a significant good degree of prediction of the women empowerment (p=0.000). However, it does not tell about the individual contribution of variables in the model. In table 12, 0.325 in the model 1, and 0.379 in the model 2 are the Unstandardized slope or gradient coefficient, which is the change in the outcome associated with a one unit change in the predictor variable. This means that for every 1 point that micro credit level is increased the model 1, predicts an increase of 0.325 for women empowerment and 0.379 in model 2. In model 2 Micro credit, Experience and micro credit x Experience product term is also included. The standardized regression coefficient (b) 0.246 represents the strength of the association between the predictor and the criterion variable. Since, it is significant (P>0.05), the predictor variable is significantly associated with the criterion variable.

The Unstandardized slope or gradient coefficient -0.011 is the change in the outcome associated with a one unit change in the predictor variable. This means that for every 1 point that Experience is increased the model that predicts a decrease of 0.011 for women empowerment. In model 1, the standardized regression coefficient (b) - 0.017 represents the strength of the association between the predictor and the criterion variable. Since it is not significant (p>0.05), that the value of b (-0.017) is not significantly different from 0. So, the predictor variable is not associated with the criterion variable.

In model 2, the Unstandardized slope or gradient coefficient for the interaction term is - 0.028 and the standardized regression coefficient for the product term is -0.181 and it is not significant (P>0.05), that the value of b = -0.181 is not significantly different from 0 (i.e., the interaction term is not significantly associated with the criterion variable). There is no moderating effect and the hypothesis H_4 'Experience moderates the relationship between micro credit and women entrepreneurship development' is rejected.

Table 13: Hypotheses Testing

H_1	Age moderates the relationship between micro credit and women entrepreneurship development.	Rejected	(P>0.05)
H_2	Family size moderates the relationship between micro credit and women entrepreneurship development.	Rejected	(P>0.05)
H_3	Education moderates the relationship between micro credit and women entrepreneurship development.	Rejected	(P>0.05)
H_4	Experience moderates the relationship between micro credit and women entrepreneurship development.	Rejected	(P>0.05)

7. Conclusion

As revealed by Dubreuil, & Mirada, (2010), there are a number of variables considered when taking potential impacts of micro credit on women's entrepreneurs' activities. The demographic factors such as age, education and experience also have a moderating effect on women empowerment. The study of Noreen (2011) concluded that the age effects positively and, more significantly but its variation is not much. Older women are much mobile and have a greater access to resources and to make decision both inside and outside the home. The conclusion of this study was that the level of women empowerment is not as much satisfactory at the household level. It also highlights that age, education of husband, marital status, number. of sons, father assets and loan amount are influential factors rather than many other factors.

Ahmed, Siwar and Aini Hj (2011), concluded that micro credit program increase empowerment of rural women through initiating group dynamics and skill development training, women's education, adequate and timely availability of credit for income generating and productive activities among rural women. The study of Parveen and Leonhauser (2004)

concluded that education, training and exposure to information media have the potential to increase women's empowerment.

From the above discussion researcher can conclude that there is a positive relationship between micro credit activities and empowerment of women entrepreneurs and there are no significant differences among these variables ($p<0.05$). However, the other factors such as self confidence, attitude change of clients, monitoring and guiding activities, cultural norms also have an impact on women empowerment. Finally, it is concluded that there is no moderating effect of demographic variables on women entrepreneurship development.

8. Contribution of the Study

This study would contribute greatly to the literature of micro credit, women empowerment and impacts of micro credit on women empowerment in Sri Lanka. Besides the suggestive recommendations will have much effect on women empowerment, micro credit programs and the economic development. The appropriate strategy formulation, based on the findings of the study, to the best interest of the micro clients as well as the country will go a long way to open a new era in the field of the country's economic development and growth in the post war development. Since, women's development is important to the development of the country, it is believed that the suggestions for women empowerment through micro credit leads to a sound economic development in the country.

Although this study focuses primarily on micro lending methodologies, the researcher need to acknowledge that empowerment can take place through individual lending as well as encouraging further study in this area. There a number of other areas related to the empowerment of further study but could not be addressed in the scope of this study, which include the contribution of micro insurance and savings to empowerment, technology transfer, the relationship between participation in microfinance programs, empowerment and the effects of cultural norms, and particularly religion as the ability of microfinance program to women entrepreneurship development.

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