

The Determinants of Financial Inclusion and its Mediating effect on Poverty Reduction

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Abstract

In the past few decades, the term Financial Inclusion (FI) gained significant importance due to the popularity of financial services offered by various institutions globally. It is described as the opportunity to access secured savings, properly planned financial aids for low-income people, small and medium scale businesses, insurance, and payment services. FIs have been known to offer different services that include savings mobilization, loans, money transfers and insurance products. This paper focus to examine the relationship between Financial Inclusion and poverty reduction in Sri Lanka. Sample selection of the study is done using Random sampling technique and consist of descriptive survey analysis. Data was collected from Ampara. The questionnaire was issued and 100 families responded. Moreover, collected data using a questionnaire. The questionnaire was coded, cleaned, and analyzed using SPSS (Statistical Package for Social Scientists). It was concluded that there is a positive and significant relationship between Financial Inclusion and Poverty Reduction. The Study recommends in Developing deposit collection and lending strategies in FIs, Minimizing Central bank financial regulations, developing financial product and services which are gender-sensitive and sensitive to low-income earners and finally creating awareness in financial services both urban and rural areas.

Keyword : Financial Inclusion, Poverty Reduction.

1. Background of the study

Apparently, poverty is a multi-dimensional issue. There is a direct contribution to economic, social, and political forces in creating and eradicating poverty in any society. Financial inclusion is defined as the providing of micro-loans to people who never had access to lending, which is considered a powerful source in reducing poverty. Properly designed FI system makes sure that all segments of the society have direct access to secured, appropriate and affordable financial products and services at any given time.

It is essential to have proper financial inclusion system with easy access for poor and vulnerable groups in society to mitigate poverty. It will enable them to possess a savings account to save and invest to ensure their homes or partake of credit and break the poverty chain.

Hence Financial Institution uses many strategies like Savings facilities, Credit facilities, Skills development program, Training, Insurance facilities, Educational programs, Marketing assistance, Supply of inputs and business development services to the poor people in addition to Formal Financial Systems. This research will be mainly targeting Savings facilities' and Credit facilities offered by these institutes.

Commercial banks, non-bank financial organizations, and licensed savings and credit companies are considered as main types of financial inclusion service providers in Sri Lanka. Leading financial institutions are offering savings and credit facilities to the society. However serious gaps are still remaining in the services provided by the financial industry. Very little has been done to develop Insurance, Pensions, Leasing, E-banking, M-banking Services. Many rural areas in Sri Lanka still grossly underserved by financial institutions. Overall, there is insufficient innovation with delivery methodologies which needs to be addressed. Currently, most of the financial institutions are offering Savings and Credit facilities to a limited segment of the potential market, it leaves out underprivileged, an important segment of the society, generally identified as poor.

Like in other Asian countries, Sri Lanka also has an excessive problem of poverty. After several decades of developments efforts, poverty remains a key problem in Sri Lanka. According to the poverty indicators – 2016 report of Department of census and statistic Sri Lanka, aggregate poverty is 4.1% and it was declined from 6.7%, in 2012/13. Estate sector poverty is 8.8% and the rural sector is 4.3% and urban poverty is 1.9% reported in. According to this report, eastern province poverty is 7.3% and Ampara District poverty is 2.6%. Hence researcher selected Ampara District for the research. Most people are depending on paddy and vegetable cultivation, some of them are doing government jobs and private jobs and few of them live with daily income. Specifically, past studies have also shown that financial development raises the incomes of the poor and reduces poverty. Researcher hoped to study the factors influencing to financial inclusion and find a relationship between financial inclusion and poverty reduction.

1.1 Problem statement

Reducing poverty is a difficult and intricate challenge to many of the developing countries like Sri Lanka. The number of poverty mitigation and social welfare programs has been implemented by successive governments intending to reduce poverty in the country (Jayusuriya 2007). Financial inclusion is one of the commonly accepted tools which has been utilized in Sri Lanka in poverty alleviation and globally over decades (Weerasinghe 2015).

FI's has been identified as a strong and essential tool in reducing poverty, generation of employment, wealth creation and enhancing welfare and standards of living in the society and long-term economic development.

This concept carried paramount importance in the past few years since it has been identified as a powerful tool in poverty alleviation which directly affects the economic development of the country.

Governments realized the importance of people entering the financial system which bring in more money and keeping the money left outside is at a minimum level which boosts investment in the country's economy.

If a large part of the population is not provided with adequate financial services, the country's economy will not be able to grow. Access to financial services is a powerful tool that governments use in boosting economic growth. Effective and efficient distribution of available resources resulted in decreased capital cost (Umar, 2013).

Access to financial services helps in creating new job opportunities, reducing vulnerability to economic shocks, escalation investment in human capital and especially it helps economic growth and poverty mitigation. In the absence of IF's both individuals and organizations got to find its own resources and funds to fulfil their financial needs and pursue promising growth opportunities (Aguera 2015). The adequate and proper financial system has potential in making other policies more effective and efficient. According to United Nations(2006) access to well-mannered financial system economically and socially have a great impact on individuals, especially poor people in the society allowing them to fit into the economy of their countries and contribute to their development and protect themselves from economic shocks.

All countries around the world consider FI's as the key element in fighting against poverty with its' sole aim is to mitigate the rate of poverty at both nationally and globally. It considered as one of the sustainable development goals. It has been debated that high rate of FI's resulted in a high rate of investment, increased employment, better income and lesser poverty rate, a further substantial amount of the population should have access to the proper financial system to have sustainable economic growth. As financial inclusion increases the effective demand which induce investment result in new employment opportunities.

According to Dedunu, (2018), Sri Lankan government is facing a critical situation in the development process due to the high rate of poverty which negatively affects the country's economy. Despite the large number of financial institutes providing financial services to the poor's in the society, the knowledge on the effect of financial inclusion is limited. Few previous studies have done in Sri Lanka had analyzed the impact of financial inclusion on poor's income in Polonnaruwa, (Dedunu 2015, Jahfer & Kaluarachchi 2014) Kegalle, (Jayasuriya 2007) Trincomalee (Thilepan & Thiruchelvam 2011) and Anuradhapura (Kumari 2009) districts. The current study is designed to identify the impact of financial inclusion in poverty reduction in Ampara district which fills up a part of the existing literature gap.

Poverty is one of the most suffered problems all around the world, despite all the effort and the strategies developed to mitigate the poverty level it remains unsolved. Sanya and Olumide (2017) identified four types of poverty: absolute abject or long-lasting, relative poverty, disguise poverty and poverty of the mind. Absolute abject or long-lasting poverty is reaching far into the mind of the sufferer beyond the relationship with the basic needs. In addition to the lack of access to basic needs, people are poor in their state of mind. This is mostly found in Africa. Relative poverty is comparing the living standards of people all around the world, this is particularly compared between developed and underdeveloped countries. Disguise poverty described where individuals or groups sabotage the government's effort in eradicating poverty. They find it an easy way to gather wealth and economic benefits being in poverty.

This study focuses on identifying the impact of financial inclusion on lessening poverty and the factors affecting financial inclusion. Further, the role of financial inclusion on poverty mitigation. The study will help financial institutions, policymakers, government, NGOs, and poor people in making decisions. The major objective of this study was to investigate the relationship between financial inclusion and poverty reduction and find the mediating impact of financial inclusion on poverty reduction. In addition, this identifies the determinant of financial inclusion and poverty reduction.

2. Relationship between Financial Inclusion and Poverty Reduction

According to Levine (2005) the basic structure of the financial system contributes to reducing financial information asymmetry, contraction in transaction, costs, which in mitigating poverty and increase economic growth. According to (Collins 2009) as cited by (Onaolupo 2015) access to appropriate financial services and improvement in the welfare and income of the low-income people in the society are interconnected. In support, Demircuc-Kunt, and Klapper (2012) emphasize that inclusive access to finance is not only pro-growth but also pro-poor as well as reducing income disparity and poverty. FI' is an important factor in the development and sustainable economic growth. The new technologies used in financial services streamline the transactions and other services delivered by

financial institutions from depositing money into various government schemes to microloans and microinsurance. An effective financial inclusion contributes to lessening poverty, pro-poor growth and enhancing economic growth (Onaolupo 2015).

3. Conceptual Framework

Basically, how the research is facilitating to conclude an ideology which will examine the reality compared to the ideology developed. It summarized the relationship between dependent and independent variables that are used as the fundamental basis of the study. This framework examines the main effects of the eight independent variables on financial inclusion and poverty reduction and the correlation between financial inclusion and poverty reduction. A number of different variables dimensions for the financial inclusion have been extracted from the previous literature.

Sanya and Olumide (2017) examined financial inclusion as an effective policy tool of lessening poverty in Ekiti state. 12 factors were identified as major determinants of poverty and financial inclusion in Ekiti State during the study period; employment, marital status, educational level, religion, financial discipline, use of banks products and services, distance, household size, access to political contract, gender, income level and age.

Park and Mercado (2015) in their study examined Financial Inclusion, Poverty, and Income disparity in developing Asia and found out that demographic characteristics, per capita income, rule of law affect financial inclusion in Asia. Furthermore, find that financial inclusion has a major impact in reducing poverty. Heenkenda, (2014) investigated disparities in the Financial Inclusion in Sri Lanka and found levels of education, income, gender, age is significantly influence financial inclusion. According to the above literature, this research developed a conceptual framework as follows,

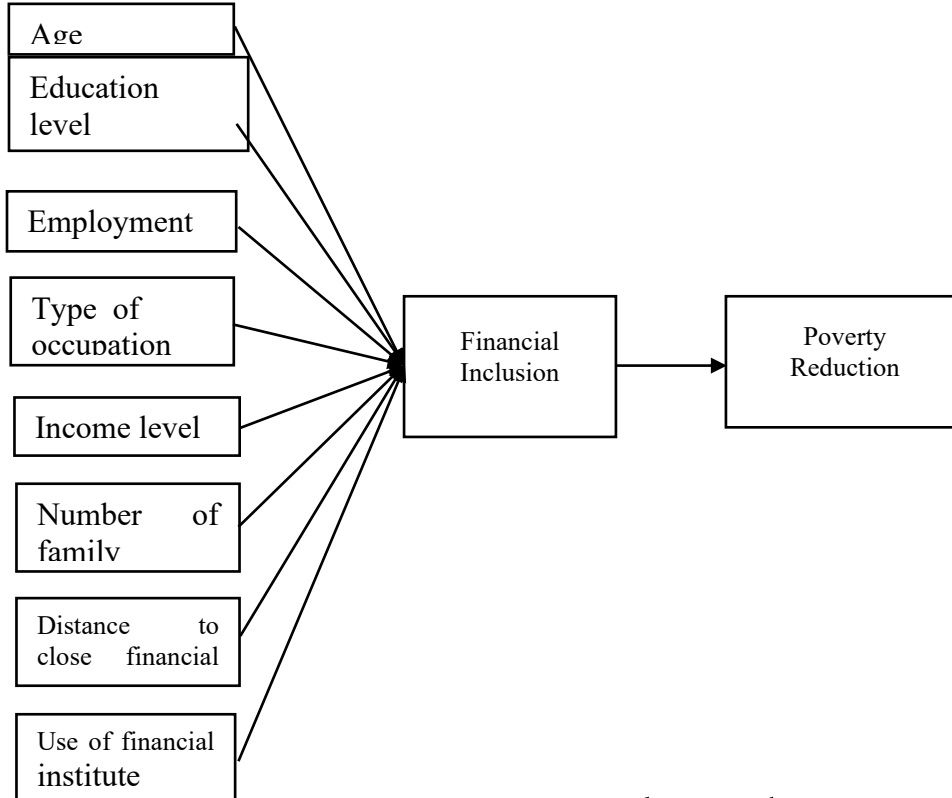


Figure 3. 1: Conceptual Framework

3.1 Statement of Hypotheses

Soumaré et al., (2016) studied the factors determining financial inclusion in Central and West Africa employing the Global Financial Inclusion Database (Global Findex) and found that financial inclusions were driven by gender, education, age, income, residence area, employment status, marital status, household size and degree of trust in financial institutions and FI's are affected by the individual attributes in the Central and West African countries.

According to Soumare et al., (2016) gender is an important determinant of FI's in Central Africa while income is significant in West Africa. According to Olaniyi and Adeoye (2016) in their study carried out in Africa during 2005-2014 identified per capita income, broad money as a percentage of GDP, literacy rate, access to the internet and Islamic banking services are main determinants of financial inclusion.

Siddik et al., (2015) in his study identified household size, the population in the rural areas and literacy rate are significant among the socio-geographic variables, the multi-dimensional index was employed in the research. Paved road networks and internet were found to be significant in determining FI's under infrastructure variables. The deposit penetration in the banking sector was found to be the significant determinants of financial inclusion. According to the above literature, it is hypothesized that below mentioned 8 factors significantly influence on FI's and Poverty reduction.

H1: Age significantly influences on financial inclusion and poverty reduction.

H2: Education level significantly influences on financial inclusion and poverty reduction.

H3: Employment is significantly influenced on financial inclusion and poverty reduction.

H4: Type of occupation is significantly influence on financial inclusion and poverty reduction.

H5: Household's total monthly income is significantly influenced on financial inclusion and poverty reduction.

H6: Number of family members are significantly influence on financial inclusion and poverty reduction.

H7: Distance to close Financial Institute is significantly influence on financial inclusion and poverty reduction.

H8: use of financial institute product and services is significantly influence on financial inclusion and poverty reduction.

3.2 Research Design

This study employed a Descriptive statistics design and random sample techniques to select the sample from Ampara. Descriptive statistics design is used to describe the basic features of the data in the study. The most recognized types of descriptive statistics are the mean, median, and mode. Random sampling is a popular method used in collecting data from the total population and it gives an equal opportunity to all members of the subset to be chosen as a part of the sampling process. 100 respondents were selected from the total population in Ampara District based on simple random sampling method as it was commonly used in previous studies and tested (Thilepan & Thiruchelvam 2011; Jahfer & Kaluarachchi, 2014, Wijewardana & Dedunu 2017; Ogunsakin, Sanya & Olumide 2017). Data was collected using a questionnaire. The questionnaire had both open and closed-ended questions. The questionnaire was analyzed through SPSS software according to the previous studies (Ogunsakin, Sanya & Olumide 2017, Wijewardana & Dedunu 2017).

4.Data Analysis

4.1 Analysis of the Sample Profile of the Study

A sample of 100 individuals was analyzed and the data were presented according to the demographic factors including gender, age, education level, employment and nature of the employment of the household's head. Frequency tables and charts were presented for a better evaluation.

Table 4. 1: Gender status of the household's head

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	74	74.0	74.0	74.0
Female	26	26.0	26.0	100.0
Total	100	100.0	100.0	

Source: survey data (2019)

The table 4.1 the sample composition by the gender. Sample consists of males 79 and females 21. Further, it shows less female respondents than male respondents in gender distribution.

Table 4. 2: Age of the household's head

Age Group	Frequency	Percent	Valid Percent
26-35	5	5	5
36-45	36	36	36
46-55	44	44	44
over 55	15	15	15
Total	100	100	100

Source: survey data (2019)

For the research, purposes researcher has intended to collect data under 5 categories as bellow 25, 26-35, 35-45, 46-55, and older than 55. But selected respondents were only coming under four age groups as shown in above the table and the chart. The majority of respondents were fallen under 46-55 age category which is comprised by 44% of the total respondents and rest were fallen under 36-45, Older than 55 and 26-35 reserving 36%, 15% and 5% of the total number of respondents.

Table 4. 3: Educational level of household's head

Educational level	Frequency	Percent	Valid Percent
Primary	50	50	50
Secondary	41	41	41

Diploma	4	4	4
Degree	5	5	5
Total	100	100	100

Source: survey data (2019)

Majority of the respondents were in primary education level which is counted for 50% of the total number of respondents and then the largest percentage was owned by respondents who had secondary education qualification which is 41% of total respondents. 4 of them were holding diploma qualification and 5% percentages were owned by degree qualification.

Table 4. 4: Nature of employment

Nature of employment	Frequency	Percent	Valid Percent
Farmer	42	42	42
Government sector	11	11	11
Private sector	35	35	35
Self-employed	12	12	12
Total	100	100	100

Source: survey data (2019)

The occupation wise classification of the respondents was as follows. There were 42% farmers and 35 % private-sector employees, and 11% government sector employed.12% was hold by respondents who were self-employed.

4.2 Reliability Analysis

Reliability test of the scale shows the internal consistency of the results produced if the measurements are made respectively, both the consistency and stability of the measurements were tested. The reliability refers to how dependably or consistently a test measures a characteristic without bias and ensures consistent measurement across time. A test that yields a similar result for a person who repeats the test.

Table 4.5: Reliability analysis

Variable	No.of item	Cronbach's Alpha Standard 0.07
Age of the household's head	1	.879
Education level of the households' head	1	.838
Employment	1	.816
Occupation	1	.851
Income level	1	.828
Number of family members	1	.852

Distance to FI	1	.861
Usage of products and services	1	.832
Financial inclusion	5	.874
Poverty reduction	4	.833
Total	17	.969

Source: survey data (2019)

The above table presents the data collected from 100 respondents and used to measure the reliability and validity of the study. According to the Hair et al, (2008) the generally agreed upon lower limit for Cronbach's alpha is 0.7, although it may decrease to 0.6 in exploratory research. According to the table, all Cronbach's alpha values are greater than 0.7 and can be considered that the above factors are reliable to measure the main dependent and independent variables.

4.2 Correlation Analysis

The Bivariate analysis includes the correlation analysis which was used to investigate any relationships between which are the independent variable and dependent variable.

Variables	Pearson Correlation	Sig. (2-tailed)
	Standard value >0.3	Standard value <0.05
Age of the household's head	.343	.001
Education level of the household's head	.738	.000
Employment	.875	.000
Occupation	.672	.000
Monthly income	.792	.000
No of family members	.635	.000
Distance to FI	.442	.000
Usage of financial product and service	.791	.000
Financial inclusion	.942	.000

Table 4.6: Correlation Analysis

Correlation is significant at the 0.05 level (2-tailed)

Source: survey data (2019)

According to correlation analysis, Pearson correlation value should be greater than 0.3 to determine the relationship between variables and p-value should be less than 0.05 to determine significance of the study. According to the correlation analysis, all variables show the Pearson value greater than 0.3 and all p values were less than 0.05. that means all independent variables show that there is a positive relationship with the dependent variable and that relationship significant at 0.05 level.

4.3 Regression Analysis

Regression analysis is a powerful statistical method of examining the relationship between two or more variables.

Table 4.7: Model Summary-1

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.949 ^a	.900	.892	.24685

a. Predictors: (Constant), usage of product and service, age of the households' head, distance to FI, occupation, nu of family members, education level of the households' head, income level, employment

Source: survey data (2019)

Table 4.8. Presented that the R square was .900 (90%) and the adjusted R square was .872 (87%). Identified Adj.R² indicated that 87% financial inclusion explained by, usage of financial product and service, age of the household's head, distance to FI, occupation, nu of family members, education level of the household's head, income level and employment.

Table 4.8: ANOVA Test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	50.085	8	6.261	102.752	.000 ^b
	Residual	5.545	91	.061		
	Total	55.630	99			

a. Dependent Variable: financial inclusion

b. Predictors: (Constant), usage of f product and service, age of the households head, distance to FI, occupation, nu of family members, education level of the households head, income level, employment

Source: survey data

According to the above table, F value is 102.752 and which is significant at 0.000 level. F value tests whether the overall regression analysis model is fit to the data. Higher f value with less p-value show more significant regression model. According to the above table, results indicate that model has a good fit with data.

Table 4.9 : Coefficient Statistics

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.421	.191		-2.153	.032
Age of the households' head	.062	.035	.065	1.782	.076
Education level of the households' head	.105	.042	.117	2.335	.024
Employment	.216	.061	.248	3.394	.001
Occupation	.189	.035	.218	5.233	.000
Income level	.137	.047	.155	2.764	.007
No of family members	.117	.035	.146	3.511	.001
Distance to FI	.049	.035	.055	1.340	.184
Usage of financial products and services	.249	.047	.254	4.993	.000

a. Dependent Variable: financial inclusion

Source: survey data (2019)

According to the coefficient table, sig value of the age of the household's head and financial inclusion are 0. 76. Distance to the financial institution and financial inclusion have 0.184 which are greater than 0.05. it indicates that age of the household's head and distance to close financial institution have not significant impact on financial inclusion. The education level of the household's head, employment, occupation, income level, number of family members, and usage of financial product and services are .024,0.001,0.000,0.007,.0.001, and .000 respectively which are less than 0.05.it indicates that variables have a significant impact on financial inclusion.

Table 4. 4:Model Summary-2

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.948 ^a	.889	.868	.26220

a. Predictors: (Constant), financial inclusion

b. Dependent variable: poverty reduction

Source: survey data (2019)

Table 4.10 presented that the R square was .889 (88.9%) and adjusted R square was .868 (87%). Identified Adj.R² indicated that 87% poverty reduction explained by financial inclusion.

Table 4. 5: ANOVA Test

Model	Sum of Squares	Df	Mean Square	F	Sig.
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	Regression	61.188	1	60.185	845.541	.000 ^b
1	Residual	5.734	98	.069		
	Total	66.922	99			

a. Predictors: (Constant), financial inclusion

b. Dependent Variable: poverty reduction

Source: survey data (2019)

According to the above table, F value is 845.541 and which is significant at 0.000 level. F value tests whether the overall regression analysis model is fit to the data. Higher f value with less p-value show more significant regression model. According to the above table, results indicate that model has a good fit with data.

Table 4. 6: Coefficient Table 2

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1	(Constant)	-.188	.143	-1.315	.192
	Financial inclusion	1.040	.035	.948	.000

a. constant: Dependent Variable: poverty reduction

b. Dependent Variable: poverty reduction

Source: survey data (2019)

According to the coefficient table, sig value of financial inclusion and poverty reduction are 0. 000. which are less than 0.05. it indicates that financial inclusion have significant impact on poverty reduction.

4.4 Mediating Effect-Sobel Test

Sobel test is a method of determining whether there is an effect or mediates of an independent variable on the dependent variable. Generally, it is proved that the independent variable has an indirect effect on the dependent variable. This is done by testing the hypothesis to see whether there is a statistical difference between the mediator and the total effect. If the mediator is applied to a regression analysis model with the independent variable the effect of the independent variable is reduced, and the effect of the mediator remains significant.

Table 4. 7 : Sobel test statistics

Variable	Sobel Statistics	P value (significant<0.05)
Age of the households' head	1.7746045	0.07596321
Education level of the households' head	2.34053135	0.01925632
Employment	3.36796629	0.00075725

Occupation	4.44920743	0.00000862
Income level	2.75886456	0.00580026
No of family members	3.46112715	0.00053792
Distance to financial institution	1.34148795	0.17976208
Usage of financial product and services	4.83274483	0.00000135

Source: survey data (2019)

According to the Sobel test p-value should be less than 0.05 to be it significant. The test statistics for the age of the household's and distance to financial inclusion p values 0.075 and 0.179 respectively. That values are greater than 0.05. which indicates the association between poverty reduction with the age of the household's head and distance to the financial institution not reduced significantly by the inclusion of the mediation.

The education level of the household's head, employment, occupation, income level, nu of family members and usage of financial product and services p values are less than 0.05. which indicates the association between poverty reduction and that independent variable factors are reducing significantly by the inclusion of the mediation

Table 4. 8 : Summary of Hypothesis

Hypothesis	Sig value	Result
H1: Age significantly influences on financial inclusion and poverty reduction.	.076	Not supported.
H2: Education level significantly influences on financial inclusion and poverty reduction	.022	Supported.
H3: Employment is significantly influenced on financial inclusion and poverty reduction	.001	Supported.
H4: Type of occupation is significantly influence on financial inclusion and poverty reduction.	.000	Supported.
H5: Household's total monthly income is significantly influenced on financial inclusion and poverty reduction.	.007	Supported.
H6: Number of family members are significantly influence on financial inclusion and poverty reduction.	.001	Supported.
H7: Distance to close Financial Institute is significantly influence on financial inclusion and poverty reduction.	.184	Not Supported.
H8: Use of financial institute product and services is significantly influenced on financial inclusion and poverty reduction	.000	Supported.

Source: survey data (2019)

5. Conclusion

The study found a positive correlation between financial inclusion and poverty reduction. According to regression analysis, it indicates that financial inclusion have significant impact on poverty reduction. The study investigated the relationship between the education level of the household's head, employment, nature of employment and usage of financial product and services had a positive and significant impact on financial inclusion and poverty reduction. Age of the household's head and distance to the financial institution had a positive relationship but statically insignificant impact on financial inclusion and poverty reduction. According to the Sobel test which indicates the association between poverty reduction with the age of the household's head and distance to the financial institution not reduced significantly by the inclusion of the mediation. That means the age of the household's head and distance to the financial institution do not effect to poverty reduction by mediating financial inclusion. The education level of the household's head, employment, occupation, income level, nu of family members and usage of financial product and services indicates the association between poverty reduction and that factors are reducing significantly by the inclusion of the mediation (financial inclusion).

5.1 Discussion

The primary objective of this research is the investigate relationship between financial inclusion and poverty reduction. According to research finding of correlation analysis identified p-value 0.000 and Pearson correlation 0.942. According to regression analysis p-value is 0.000.that finding shows a positive and significant relationship between financial inclusion and poverty reduction ($p \text{ value} < 0.05$). That mean financial inclusion have a significant effect on poverty reduction. If increase the level of financial inclusion also increase the level of poverty reduction. The result is supported from other studies (Abimbola, Olokoyo & Farouk, 2018; Amadou, 2018; Kheir, 2018; Lal, 2017; Cyn, Young & Royelio, 2017; Schmied & Marr, 2016).

Another objective of the study is identifying the factors effecting to financial inclusion. According to correlation analysis shows Pearson correlation between age of the household's head and financial inclusion .0343 and p-value 0.001. It indicates that ages of the household's head and financial inclusion have a positive relationship but it is not a stronger relationship. According to regression analysis p-value of the ag of household's and financial inclusion, 0.078. that value greater than 0.05. so it indicates that the age of household's and financial inclusion has a positive relationship but statically not significant. That mean age of the household's not significant impact on financial inclusion. The result is supported from other studies (Anwar, Uppun & Reviani, 2016).

According to correlation analysis shows the Pearson correlation between education level and financial inclusion 0.738 and p-value 0.000. it indicate that education level and financial inclusion have a positive and stronger relationship. According to regression analysis p-value of education level and financial inclusion, 0.022. that value greater than 0.05. so it indicates that education level and financial inclusion have a positive relationship. That mean education level of the household's head significantly effects on financial inclusion. The result is supported from other studies (Sanga & Olumide; 2018; Abe, Mutandwa & Roux, 2018; Shrestha & Joshi, 2018; Anwar & Amrallahi, 2017; Grohmann, Klihs & Menkhoff, 2017; Shihandeh, 2017; Quartey & Iddisu, 2017; Mindra, Moya, Zuze & Kodongo, 2016; Nandru, Anand & Rental, 2012; Bhanot, Baput & Bera, 2012).

According to correlation analysis shows the Pearson correlation between employment and financial inclusion 0.875 and p-value 0.000. it indicates that employment and financial inclusion have a positive and stronger relationship. According to regression analysis p-value of education level and financial inclusion, 0.001. that value greater than 0.05. so it indicates that if employed household's head and financial inclusion have a positive relationship. That means employment of household's head significantly effects on financial inclusion. it indicates that the household's head is if employed, they are more intention to financial inclusion. The result is supported from other studies (Sanga & Olumide, 2018; Abe, Mutandwa & Roux, 2018; Shrestha & Joshi, 2018; Anwar & Amrallahi, 2017; Grohmann, Klihs & Menkhoff, 2017; Shihandeh, 2017; Quartey & Iddisu, 2017; Mindra, Moya, Zuze & Kodongo, 2016; Nandru, Anand & Rental, 2012; Bhanot, Baput & Bera, 2012).

According to correlation analysis shows Pearson correlation between nature of employment and financial inclusion 0.675 and p-value 0.000. it indicates that the nature of employment and financial inclusion has a positive and stronger relationship. According to regression analysis p-value of education level and financial inclusion, 0.000. that value greater than 0.05. so it indicates that the nature of employment and financial inclusion have a positive relationship. That means nature of the employment of the household's head significantly effects on financial inclusion. The result is supported from other studies (Sanga & Olumide, 2018; Abe, Mutandwa & Roux, 2018; Shrestha & Joshi, 2018; Anwar & Amrallahi, 2017; Grohmann, Klihs & Menkhoff, 2017; Shihandeh, 2017; Quartey & Iddisu, 2017; Mindra, Moya, Zuze & Kodongo, 2016; Sykes, Elder, Gurbuzer & Princi, 2016).

According to correlation analysis shows the Pearson correlation between monthly income and financial inclusion person value is 0.787 and p-value 0.000. it indicates that the nature of employment and financial inclusion have a positive and stronger relationship. According to regression analysis p-value of monthly income and financial inclusion 0.007. that value greater than 0.05. so it indicates that monthly income and financial inclusion have a positive relationship. That means monthly income of households significantly effects on financial inclusion. If have a higher monthly income that people are more intend to financial inclusion. The result is supported from other studies (Shrestha & Joshi, 2018; Anwar & Amrallahi, 2017; Grohmann, Klihs & Menkhoff, 2017; Shihandeh, 2017; Quartey & Iddisu, 2017; Mindra, Moya, Zuze & Kodongo, 2016; Sykes, Elder, Gurbuzer & Princi, 2016).

According to correlation analysis shows the Pearson correlation between nu of family members and financial inclusion person value is 0.629 and p-value 0.000. it indicates that number of family members and financial inclusion have the positive and stronger relationship. According to regression analysis p-value of a number of family members and financial inclusion, 0.001. that value greater than 0.05. so it indicates that a number of family members and financial inclusion have a positive relationship. That means number of family members of households significantly effects on financial inclusion. The result is supported from other studies (Anwar & Amrallahi, 2017; Grohmann, Klihs & Menkhoff, 2017; Shihandeh, 2017; Quartey & Iddisu, 2017; Mindra, Moya, Zuze & Kodongo, 2016; Sykes, Elder, Gurbuzer & Princi, 2016; Nandru, Anand & Rental, 2012; Bhanot, Baput & Bera, 2012).

According to correlation analysis shows Pearson correlation between usage of financial product and services and financial inclusion person value is .792 and p-value 0.000. it indicates that usage of financial product and services and financial inclusion have the positive and stronger relationship. According to regression analysis p-value of the usage of financial product and services and financial inclusion, 0.000. that value greater than 0.05. so it indicates that usage of financial product and services and financial inclusion have a positive relationship. That means usage of financial product and services of households significantly effects on financial inclusion. The result is supported from other studies (Shrestha & Joshi, 2018; Anwar & Amrallahi, 2017; Grohmann, Klihs & Menkhoff, 2017; Shihandeh, 2017; Quartey & Iddisu, 2017; Mindra, Moya, Zuze & Kodongo, 2016; Sykes, Elder, Gurbuzer & Princi, 2016).

Other objective of this study is to investigate the mediating role of financial inclusion on poverty reduction. According to sobel test results show that the age of the households head p-value 0.0759.it is greater than 0.05. that indicates an association between poverty reduction and age of the household head not reduced significantly by the mediation of financial inclusion. Sobel test results show that the education level of the household's head p value is 0.019.it is less than 0.05. that indicates an association between poverty reduction and education level reducing significantly by the mediation of financial inclusion. That means is the financial inclusion effect to the relationship between education level and poverty reduction. Sobel test statistics for the employment of the household's head p-value is 0.00075.it is less than 0.05. that indicates an association between poverty reduction and employment of household's head reducing significantly by the mediation of financial inclusion. That means is the financial inclusion effect to the relationship between employment and poverty reduction. Sobel test statistics for nature of employment, the p-value is 0.0000.it is less than 0.05. That indicates an association between poverty reduction and the nature of employment of household's head reducing significantly by the mediation of financial inclusion. That means is the financial inclusion effect to the relationship between the nature of employment and poverty reduction. Sobel test statistics for monthly income, p-value is 0.0058.it is less than 0.05. that indicates an association between poverty reduction and monthly income of household's head reducing significantly by the mediation of financial inclusion. That means is the financial inclusion effect to the relationship between monthly income and poverty reduction. Sobel test statistics for a number of family members, p-value is 0.000. It is less than 0.05. that indicates an association between poverty reduction and a number of family member reducing significantly by the mediation of financial inclusion. That means is the financial inclusion effect to the relationship between a number of family members and poverty reduction. Sobel test statistics for usage of financial product and services, the p-value is 0.000001.it is less than 0.05. that indicates an association between poverty reduction and usage of financial product and services reducing significantly by the mediation of financial inclusion. That means is the financial inclusion effect to the relationship between usage of financial product, services and poverty reduction (Gunarsih & Dewanti 2018; Quartey, 2017; Bongomin et al., 2017; Inoue, 2018).

5.2 Recommendations

The need to develop Deposit collection and lending strategies in the financial institution:

In order to enhance financial inclusion in the financial institutions needs to enhance there in deposit collection strategies, as this was found to be positively correlated with poverty reduction. Adjustments on deposits amount, deposit time, the Interest rate on savings and restriction of access to make conditions more favorable to enhance financial inclusion through lending.

Providing suitable and clear knowledge about financial product and services:

This study also recommends that financial institutions should consider educating clients on another financial service they available with the institution, as knowledge on other financial inclusion services was found to be low amongst financial institution customers. Sri Lanka is majorly rural and ignoring marginalized areas of poor people who would otherwise be on the road to financial inclusion. FIs should increase their presence in these areas while amplifying their outreach to tap into this financially excluded group.

The need to develop Self-Employment in Rural areas:

There is need for all the partners in the financial sector to collaborate with the country and national government in creating an enabling environment for self-employment in the country by creation of favourable policies and infrastructure that induce rural residents to self-employment. This will ultimately help to raise the social-economic status.

The need to develop financial services which are sensitive to low-income householders:

The study has revealed that higher-income earners are more likely to use financial services than lower-income earners. Players in the financial market need to look into the needs of low-income earners and come up with new financial services that are attractive to low-income earners. This may take the form of a reduced interest rate on credit for low-income earners.

The need to create awareness on financial services:

Householders are more likely to use sophisticated financial services if they are informed about them. Financial literacy is key in financial inclusion. The government in conjunction with financial players need to create awareness on financial services which exist in the market their benefits and potential risks. This can be achieved through was education programs not only in urban areas but also in rural areas.

5.3 Implication

The results of the study show that access to financial services has paramount importance in improving household income, consumer lifestyle and wealth.

This finding specifies the importance of financial services intermediation in the socio-economic development of rural households and the necessity to promote the easy entrance to financial services by rural households. Further, it shows important implications for policy action as identified in this study and previous studies.

Rural areas need to be provided with adequate access to financial services to improve the welfare of people, it can be done by improving interest in savings or credit disbursement. It is usually argued that rural economies require access to credit facilities. Recent findings emphasize that the most important financial product required by rural economies is savings products that provide opportunities for them to save. Savings in rural areas could be improved by providing suitable savings methods by financial institutions. These savings then can be offered to rural businesses as credit facilities for feasible economic projects and effective deployment of these savings would accelerate the socio-economic development and standards of living of the rural households.

5.4 Limitation of the Study

This study will be conducted based on a sample selected in Ampara district and that may not the suitable representative of the target population in Sri Lanka. Therefore, the results of this study can be significantly different from other areas of Sri Lanka. This study focuses only the impact of financial inclusion and poverty reduction. It does not facilitate to identify the strongest and critical factors which are affected on poverty reduction. This study focuses only the saving and credit representing financial inclusion. Other important financial product and services are not considered in this research. The low level of education with some of the respondents led to communication barriers. As such some questions were not clearly and adequately responded to. Some were left unanswered. This may have affected the reliability of the result. There are few types of research regarding the topic of the relationship between financial inclusion and poverty reduction. This may have affected to studying related literature.

5.5 Suggestion for Future Research

This study was carried out to find out the relationship between financial inclusion and poverty reduction. The researcher recommends that similar researches be done on other districts in Sri Lanka to help policymakers and other players to address the relationship between financial inclusion and poverty reduction.

Further studies can also be done to find out the effectiveness of financial inclusion in the country. This study is however limited to a certain part of the country. Therefore, the findings are not applicable to the entire population of Sri Lanka. Future similar studies could be carried out with samples collected from other regions of the country including both urban and rural population as well as different professions.

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