The Journal of Development Practice
A Peer-Reviewed International Journal of Experiences from the Field
ISSN: 2394-0476

Is Financial Inclusion Effective in Eradicating Poverty?

*Ester Agash, Lucy Jepchoge Rono and Isaac Nabeta Nkote**

Abstract: *This paper examines the relationship between financial inclusion and poverty in Uganda taking into account the effect of social intermediation and financial literacy. We employed a cross-sectional study design in rural western Uganda among 310 clients of Microfinance. Households of married people were more financially included and hence they were able to reduce their poverty status, Social intermediation was positively linked to financial inclusion, a positive link between financial literacy and financial inclusion was established. Education level and Financial Literacy does not have a significant positive effect on Financial Inclusion and Education interacts with Social Intermediation to positively influence the Financial Inclusion. Policies should emphasize the social aspects in the society to derive financial inclusion and hence tackle poverty. The study contributes to the existing research in the area of financial inclusion and enables future researchers to have a wide research base. The theoretical contribution is that we were able to integrate the theory of human capital in explaining financial inclusion from a developing country perspective.*

Keywords: Financial Inclusion, Poverty, Social Intermediation, Uganda

**Ester Agasha and Isaac Nabeta Nkote are affiliated with the Faculty of Commerce, Makerere University Business School, Uganda, and Lucy Jepchoge Rono is affiliated with School of Business and Economics Moi University, Kenya. The authors can be contacted at agashaester660@gmail.com*

Introduction

In the context of inclusive development, financial inclusion is viewed as an important means to mitigate poverty effects and inequality in line with social development goals (SDGs). According to the (UN, 2007), over 2.7 billion people still leave below the poverty line globally. The impact of this is most pronounced in the developing countries and they shield the greatest burden accounting for over 80% in the year 2009. The poor have become a center of attention and a point of focus by international organizations around the world (Morduch and Haley, 2002). The international development goals such as the Millennium Development Goals and currently the Social Development Goals (SDGs) are aimed at tackling poverty for those living below one dollar per day. The developments are a result of the fact that the international poverty line is estimated at US$ 1.90 up from about US$1.25 per person per day (World Development Report, 2013). The world development report, (2013) paints a glaring picture for the Sub-Saharan African region as more than half of the world's poorest people in terms of the poverty gap of about 15.9%. This is five times larger implying that Sub Saharan Africa does not only host the world's largest the number of poor people but also that the region's poor people are on average living much below the US $ 1.90 a day extreme poverty line as measured by the Human Development Index (HDI). The multi-dimension perspective of poverty includes the assumption that poverty does not only cause low incomes (Perry et al. 2006), it also deprives the poor of access to other resources like education, health and credit. It can also result in vulnerability and powerlessness as well as social exclusion (Rajesh, 2011). The above situation has generated interest in and dedication to promoting financial inclusion as seen in the number of countries that committed themselves to the Maya Declaration, the G-20 Financial Inclusion Action Plan as well as strategies and targets set by individual governments (Financial Inclusion in Africa, 2013).

The motivation of this study is premised on the fact that the developments in poverty have compelled the international organizations like the World Bank and G-20 to formulate policies and strategies to promote financial inclusion. As a result, over 50 countries have set formal targets and made ambitious goals for achieving financial inclusion given its significant role in tackling poverty, (The Global Findex Report, 2014). In Uganda, the Government has undertaken several policy initiatives to reduce poverty levels. For instance, the financial inclusion program of Rural Financial Services Project (RFSP) geared towards enhancing financial inclusion and empower the poor to raise their household incomes (Finscope, 2009). Further on the supply side, the government established the Microfinance Support Centre in 2001 to provide wholesale lending to the small microfinance providers. The aim was to enhance access to affordable, sustainable, convenient financial and business development services to active and productive poor Ugandans through Savings and Credit Cooperatives (SACCOs), Credit Unions and Microfinance Institutions (MFIs). Further, the government in partnership with the Central Bank of Uganda (BOU) rolled out a financial literacy strategy (BOU, 2012). The overall strategic objective of the financial literacy strategy was to increase access to financial services and empowers users of financial services to make rational decisions in personal finances to contribute to economic growth. The observations from the above interventions and their impact on poverty are not only mixed but also indicative of the challenges of poverty which stands at 15 million out of a population of 37 million (Poverty Status Report, 2014). The report showed that the proportion of the households living below the income poverty line remain poor in other dimensions especially access to other financial services. More troubling is the fact that policies derived from the global networks may not reflect the circumstance prevailing in a particular country and there are inadequate adjustments to suit such circumstances. Hence, at the end of the evaluation of the policies, there is always a clear indication of success but the poverty remains. Our research centers on whether the developing countries' strategies of financial inclusion are effective in poverty drive.

This paper examines the relationship between financial inclusion and poverty in Uganda, taking into account the social intermediation and financial literacy aspects. The rest of the paper is structured as follows, the literature review is in section two, followed by methodology in section three, the findings and discussion are in section four.

Literature Review

Theoretical Framework. This study is based on Human Capital theory which underscores the link between financial inclusion and poverty eradication. The theory's emphasis is on the competences, knowledge, social and personality attributes (Kolomiiets, 2017). It is argued that training raises the productivity of the labour force by imparting useful knowledge and skills that are key attributes to raising workers' future income. Therefore in the absence of free training, access to credit is the only avenue to invest in human capital via schooling (Krasniqi and Topxhiu, 2016) with the eventual effect of finding better-paying jobs. Reliable access to credit enhances firm performance and enables poor people to pool themselves out of poverty by investing in their human capital and microenterprises thus reducing aggregate poverty (Selvarajan et al., 2007; Hsu et al., 2007; Lumpkin and Dess, 2005; Marimuthu, Arokiasamy and Ismail, 2009). The theory posits that individuals and communities derive economic benefit from investing in people, (Lee, 2010; Zhang and Zhuang, 2011; Haneshek and Woessmann, 2012). Scholars distinguish various avenues of education/training. They avenues range from the formalized education according to (Islam et al., 2016), "informal education, on-the-job training and apprenticeships", (Mincer, 1974), "and the specialized vocational education." It assumed that education increases or improves the economic capabilities of people that positively impact on poverty through health, nutrition and the overall quality of life (Arabi and Abdalla, 2013). This makes the theory applicable in financial inclusion particularly the financial literacy constructs and measuring poverty eradication.

The strength of this theory is in its ability to discern education and training as input and the economic and social benefits as outputs. Therefore increased amounts of schooling are associated with higher individual wages. At the micro-level, this theory postulates that individuals invest in their education, thereby forgoing current consumption and the opportunity cost of learner's time against the benefits that accrue in terms of future better wages, Psacharopoulos and Patrinos (2004). The theory answers the issue of optimality and quality of the individual/social investments in education and the costs/ benefits for individual investments. That notwithstanding, the constraint of this theory, is the opaqueness of how this process through which education and training are translated into higher wages. Extant studies underscore the impact of earned skills on the distribution of income and that the income distribution becomes more dispersed in the reflection of growing rewards to individual skills (Hanushek and Wobmann, 2007). Viewed from hypostasis lens, human education is associated with preservation of wealth or cultural capital, (Bourdieu 2007). It is argued that human capital conflates non-tangible and tangible wealth, in this sense which rhymes with Psacharopoulos (2004)'s conclusion that more training/schooling is associated with higher individual earnings.

Conceptualizing Poverty. There has been a shift in the poverty paradigm with most scholars particularly examining poverty in third world countries. For instance, according to Harper et al (1990) "the widely accepted explanation to causes is best expressed as blame the poor, blame the third world governments, blame the dependence on nature/climate and blame exploitation by the global governance systems." The factors that emerge show similarities with the works of Feagin (1972). They reported a significant relationship between the blame the poor and blame the third world governments. With clarity on the causes, the question is what interventions are ideal to tackle poverty for the development of a country (Essegbey, 2011). The reduction of inequalities within the society is, therefore, best tackled by focusing on the individuals. Therefore tackling the prevailing impediments such as difficult to save, engagement in economic activities and the inclusion in the financial systems to enable the poor invest are viable intervention to pursue, (Khavul, 2012). The main intervention to poverty reduction from a global perspective is to promote financial services to the poor as is estimated that the majority of people who have no access to financial services, will have access to electronic payment instruments, (Pickens, 2014). That notwithstanding, the poor people are not using financial services in Uganda due to not having a governmental identification, limited access to banking services (BIS, 2014), not being able to understand financial services, (Lusardi and Mitchell, 2013).

Financial Inclusion. The concept of financial inclusion has gained extended global interest as an intervention for managing poverty. For decades this has been associated with the Grameen model designed as a poverty reduction strategy (Yunus, 2007). The model's emphasis is to provide financial services to the productive poor and to help them to get out of the poverty trap through hard work. Scholars describe financial inclusion as a process of availing the required financial services at an affordable price, to the productive members of the community, at the right time, right place and in the right form (Lindsay and Gillespie, 2009; Goland, Bays, and Chaia, 2010). It is further conceptualized as a financial system where every member of society has access to appropriate financial products and services for effective and efficient management of their resources. The aim is to avail the needed financial resources and financial leverage to take up business opportunities that lead to an increase in income for the poor, (Chima, 2011). Several scholars (Bihari, 2011; Rangarajan Committee, 2008; Sentamu, 2009) view financial inclusion as a process that aims at providing timely delivery of various financial services at an affordable price to the financially excluded households and microentrepreneurs, which according to Sentamu.

The quest for financial inclusion has also included looking at other factors such as social intermediation and financial literacy. These are assumed to be vital ingredients for borrower behaviour and reducing the fragility of loan losses (Leora, 2011). For instance, on one hand, education provides a means through which the people acquire knowledge, values and skills to manage their investments, savings, debts and other assets they possess (Jacob et al., 2000; Jacob, Hudson & Bush, 2000; Lusard & Mitchell, 2006). Indeed Chibba, (2009) is categorical on financial literacy and argues that financial education is a significant solution in tackling poverty. On the other hand, social intermediation has been associated increasing human capability of low-income earners, reducing processing costs of microfinance services and reducing the financial risk associated with providing credit to the poor (Mecha, 2017).

Recent developments in financial inclusion point to the different means of achieving financial inclusion and the different distinctive circumstance to define it, (Deb, 2012). Financial inclusion must cover three issues of access, usage and quality according to the Maya Declaration, (AFI Global 2014). The declaration provides the ground for the expansion of financial inclusion and establishes a measurable set of commitments while keeping the local influence of solutions. The same measure is however not necessarily used in all regions and hence solutions may differ from country to country. The theoretical implications of financial inclusion are widely discussed in the literature to include an inclusive financial system that enhances efficient allocation of productive resources and associated benefit of potentially reducing the cost of capital, Kempson, Atkinson, and Pilley, 2004) These financial products have proven to be great tools that mitigate the effects of low, irregular and unreliable incomes which keep many people below the poverty line.

***Financial Literacy*.** Financial literacy remains a topical issue in countries ‘economies that has elicited much interest in the recent past with the rapidly changing financial landscape (Wachira and Kihiu, 2012). Noting the contribution of scholars such as Noctor, Stoney, and Straddling, (1992:4) financial literacy builds the ability (knowledge, skills, attitudes and behaviours of people) to make informed judgment and decisions regarding the use of and management of finances (GFEP, 2009). The (OECD, 2008) perceives it as a wide concept that takes into consideration a deeper understanding of economics and how household’s decisions are affected by economic conditions and circumstances. In a nutshell financial literacy looks at a simple understanding of how money works; that is an individual’s ability to acquire essential knowledge, skills, and confidence to make decisions with an awareness of the possible financial consequences.

According to Beck et al, (2007), the individuals’ familiarity with financial products enhances the demand for them as households with high financial literacy and greater financial sophistication regularly participate in financial markets to invest more efficiently Calvert et, al. (2005). Indeed the works of Cole et al. (2009) reveal that higher financial literacy is significantly associated with greater use of bank services underscoring the fact that financial literacy greatly impacts financial inclusion. This collaborates the findings of Hilgert et al. (2003) that individuals with lower levels of financial literacy are less interested in financial matters hence accept financially exclusion. This, therefore, proves that there is a profound relationship between financial literacy and financial inclusion.

Financial Inclusion and Poverty Reduction. The lack of access to financial services at an affordable cost creates persistent poverty traps and income inequality, (Beck et al 2007; World Bank, 2008). Financial inclusion is considered to be one of the interventions for poverty reduction. Indeed Rajesh, (2011) notes that GDP growth in itself is not a sufficient strategy to deep-rooted poverty problems. The advanced argument is that inclusive growth can be a solution to poverty eradication since it’s a necessity for sustainable development. Chibba, (2009) adds that financial inclusion is a public relations strategy that offers an incremental and contemporary solution to deal with poverty. Abdin, (2016) found a significant and theoretically meaningful relationship between financial development and poverty reduction. This has been empirically established by Cyn-Young Park and Mercado, (2015) in 37 selected developing Asian economies when they conclude that financial inclusion significantly reduces poverty and lowers income inequality. Their work further suggests that stronger rule of law, enforcement of financial contracts and financial regulatory oversight, will broaden financial inclusion, thereby contributing to poverty reduction and lower-income inequality, Vasudha (2014). Therefore it is quite logical that financial inclusion helps in building a well-informed resilient, self-sustaining, self-employed and entrepreneurial community. This will increase the level of employment, thus leading to the eradication of poverty.

Method

This study and analysis are based on a survey of clients of a microfinance institution in western Uganda. The study was cross-sectional in nature and primary data was collected at one point of time since the study did not necessitate any regard for time differences for data collection. Out of a population size of 6,260 clients of Rural-Urban Savings Association Ltd (RUSCA), a sample size of 310 was determined according to Krejcie and Morgan (1970). The simple random sampling method was used to select the respondents from the population as applied by Starnes et.al. (2008) because of the ease to get key informants for this particular study. The source of data was primary and was obtained through the use of a self-administered questionnaire. The questionnaire was designed into two main parts. The first part consisted of questions relating to the demographic characteristics of the respondent. These included; gender, age, marital status, education background. The second part consisted of statements intending to provide correct answers relating to the constructs of the variables under study. These were anchored on a five-point Likert-type scale ranging from 5(strongly agree) to 1(strongly disagree) Vagias, Wade. (2006).

We further tested for the validity of the instrument was measured through seeking views from experts both academicians and practitioners in the area of finance and accounting who assisted on the relevance of the scales in the instrument. The reliability of the tools was enhanced through pre-testing of pilot samples in a simulated environment from the field which enabled the re-phrasing of some questions if they did not pass the test. Also, the reliability of the items was done with the application of the Cronbach Coefficient Alpha for the computation to check for the internal consistency of the items. Since all the variables had Cronbach alpha values greater than 0.7 it meant that the items had a relatively high internal consistency.

We used correlation for the associations and hierarchical regression models too because of the hierarchical data structure, Raudenbush and Bryk (2002). We hence opt for multilevel modelling to facilitate inferences from the data as recommended by Afshartous, and de Leeuw, (2005). The estimated model used in the study involved working with the independent variables; X_1 =social intermediation and X_2 =financial literacy. The financial inclusion function model was estimated using one functional form of a linear equation to be stated as;

$Y= a_0 +b_1 X_1 + b_2 X_2 + b_3X_3 \ldots\ldots + b_n X_n + U_i$

The estimated model is specified as:

$Y= a_0 +b_1 X_1 + b_2 X_2 + b_3X_3 \ldots\ldots + b_n X_n + U_i \ldots\ldots\ldots\ldots$ *Eqn. (i)*

Where

a_0 *= Constant*

$X_i \ldots\ldots X_n$ *= Explanatory variables*

B_i *= Parameters to be estimated (i = 1, 2, 3, - - - -- n)*

U_i *= Error term or disturbance term*

Y = Dependent variable (financial inclusion)

X_1 *= Social Intermediation*

X_2 *= Financial literacy*

X_3*= Gender*

X_4 *=Age*

X_5 *= Education level*

X_6 *= Number of years with served by the MFI in question*

X_7 *= Marital status*

The Ordinary Least Squares (OLS) were used to derive estimates of the parameters of explanatory variables in the equations. The best-fit equation was selected based on the value of R^2, t – test and F – test of the overall equation.

Therefore Equation 1:

$Y= Bo+ B_1X_1+ B_2X_2+ \ldots\ldots + U_i$ becomes: $Y= -1.002+ 0.248X_1+ 0.221X_2$

Descriptive statistics

To present sample characteristics, frequency tabulations were used to indicate variations of respondents based on gender, age, marital status, level of education and number of years being served by RUSCA. The sample characteristics were presented basing on responses in Table 1.

Table 1: Descriptive Characteristics

Total N = 218,				
		Count	**Valid Percent**	**Cumulative Percent**
Gender	Male	108	49.5	49.5
	Female	110	50.5	100.0
		Count	**Valid Percent**	**Cumulative Percent**
Age Group	Less than 30 yrs	139	63.8	63.8
	30 - 39 yrs	46	21.1	84.9
	40 - 49 yrs	24	11.0	95.9
	50 yrs and Above	9	4.1	100.0
		Count	**Valid Percent**	**Cumulative Percent**
Marital Status	Married	110	50.5	50.5
	Single	92	42.2	92.7
	Widow	14	6.4	99.1
	Widower	2	.9	100.0
		Count	**Valid Percent**	**Cumulative Percent**
Highest level of education	Below Diploma	172	78.9	78.9
	Diploma	28	12.8	91.7
	Bachelor’s Degrees	18	8.3	100.0

Source: Primary data

It was noted that the majority of the respondents were female, though their representation was not greater than that of the males by even 5%. On a related note, these individuals were mainly below 39 years as indicated by a cumulative distribution percentage of 84.9% for the age brackets below 39 years. Further, the marital status showed that most of the respondents were married (50.5%), with the majority in the sample showing that they were holders of qualifications that were below Diploma (78.9%). These results show a great diversity in the profiles of the respondents and thus it was quite unlikely that there would be any bias resulting from the gender, age group or marital status distributions.

Data Analysis

The analysis was based on the works of Venkatesh, Brown, and Bala (2013). We examined the relationships by comparing the mean of the dependent variable between two or more groups within the independent variable. In addition to the first stage of the descriptive analysis to understand how the data distribution, the second stage involved performing two ANOVAs of gender and education against the variables. The Analysis of Variance results was presented as shown in tables 2 and 3 below to examine the degree to which the subgroups differ with the variables in the study.

Table 2: ANOVA results for the Gender by Variable

Total N = 218		**N**	**Mean**	**SD**	**Std. Error**	**F**	**Sig.**
Social Intermediation	Male	108	3.32	1.04	.10		
	Female	110	3.23	1.04	.10	.401	.527
Financial Literacy	Male	108	3.22	.94	.09		
	Female	110	3.00	.88	.08	3.192	.075
Financial Inclusion	Male	108	3.06	1.08	.10		
	Female	110	2.98	.88	.08	.307	.580

Source: Primary data

Results in table 2 above show that the Gender groups in the study do not significantly differ in all the study variables in the study as indicated from the levels of significance. However, It was observed that for all the study variables, the means had a slightly higher mean that than of the females though these means were not significantly different (sig. >.05).

For the ANOVA on education levels, we note that there were comparisons at three levels as shown in table 3 below, it was noted that the levels of education do not differ significantly on the study variables for all the study variables (sig. >.05). However, it was clear that Diploma holder's subgroup had the greatest mean on both the financial literacy and the financial inclusion. This was different from what the expectations would be in a scenario where the Bachelor's Degree holders are expected to have the greatest mean on these study constructs.

Table 3: ANOVA Results For the highest level of education by variable

Total N = 218		**N**	**Mean**	**SD**	**Std. Error**	**F**	**Sig.**
Social Intermediation	Below Diploma	172	3.33	1.01	0.08	2.657	0.072
	Diploma	28	3.28	1.10	0.21		
	Bachelor's Degrees	18	2.74	1.09	0.26		
Financial Literacy	Below Diploma	172	3.08	0.94	0.07		
	Diploma	28	3.37	0.87	0.17	1.431	0.241
	Bachelor's Degrees	18	2.98	0.60	0.14		
Financial Inclusion	Below Diploma	172	2.99	0.96	0.07		
	Diploma	28	3.36	1.10	0.21	2.318	0.101
	Bachelor's Degrees	18	2.78	0.90	0.21		

Source: Primary source

Zero Order Correlations Model

The correlation is one of the most common and most useful statistics. A correlation is a single number that describes the degree of relationship between two variables. The results are presented in Table 4 below:

Table 4: Correlation results

		1	2	3
Social Intermediation	1	1.000		
Financial Literacy	2	.302**	1.000	
Financial Inclusion	3	.376**	.304**	1.000
**. Correlation is significant at the 0.01 level (2-tailed).				

Source: Primary data

The results in table 4 above showed that there is a significant and positive relationship between social intermediation and financial literacy (r = 302**, p<.01). On a related note, the social intermediation was noted to be significantly and positively related to financial inclusion (r = .376**, p<.01). The results show that financial literacy has a slightly weaker effect on social intermediation.

Hierarchical Regression

Regressions tests are carried out to establish the predictor variable on the dependent variable. We entered cumulatively pre-specified order dictated by the purpose and logic of this study on financial inclusion and the normally require the determination of R – squared and partial regression coefficients of each of our set of variables at the stage the variables add to multiple regression. In line with Tabachnick and Fidell (2007), we entered the background demographics, social intermediation and financial intermediation in the regression in stage one, stage two and stage three respectively.

The hierarchical multiple linear regression was carried out using blocks of SPSS by entering the stage on background characteristics variables in block 1, stage 2 variable in block 2 and stage 3 variables in stage 3. The magnitude of the Background characteristics, Social Intermediation and Financial Intermediation is shown in the Hierarchical regression model below.

Table 5: Hierarchical Regression

	Model 1			**Model 2**			**Model 3**		
	Coef.	T		Coef.	t		Coef.	t	
(Constant)	3.565	10.345	***	2.124	5.314	***	1.593	3.849	***
Gender	.051	.382	No	.020	.164	No	.027	.225	No
Age Group	.034	.401	No	.006	.079	No	.018	.230	No
Marital Status	.248	2.394	**	.169	1.741	No	.202	2.133	**
Educational level	.025	.439	No	.072	1.347	No	.073	1.402	No
Benefit	.043	.687	No	.106	1.800	No	.124	2.163	**
Social Intermediation				.372	5.994	***	.304	4.824	***
Financial Literacy							.260	3.702	***
Dependent Variable: Financial Inclusion									
R	.175			.414			.472		
R Square	.031			.172			.222		
Adjusted R Square	.008			.148			.196		
Std. The error of the Estimate	.977			.906			.880		
R Square Change	.031			.141			.051		
F Statistic	1.338			35.930			13.707		
Sig.	.250			.000			.000		
Average Tolerance	**.911**			**.900**			**.880**		
Average VIF	**1.102**			**1.115**			**1.140**		

***** p<.001, **p<.05, "No" for No Significance**

Source: Primary data

Table 5 above presents the results of the hierarchical regression. The models were selected based on the variables of the study and using the models helps to understand the dynamics of the independent variables that impact financial inclusion and hence poverty reduction. In particular, the first model I captures the background characteristics notably the gender, age group, marital status, educational level and benefit among others. The model is statistically non-significant (p > .05) except for marital status that is a significant predictor of financial inclusion (sig. <.05). However, it was noted that the VIF values were acceptable as they were above 5.00. These results show that the multicollinearity was not a problem at all in this study.

Considering the next model II, the results show that when we introduced social intermediation, the model is statistically significant and the social intermediation is a statistically significant predictor (sig. <.01). In this case, the adjusted R Square rises to .148 up from .008 in the first model. This shows that the background characteristics combined with social intermediation can account for 14.8% of the variance in financial inclusion.

In the third and final model 3, the addition of the financial literacy improves on the model and the predictive power is 19.6% (Adjusted R Square = .196) at a level of 99% confidence interval level. However, the social intermediation has a slightly greater significant positive effect on the financial inclusion (Beta = .304**, p<.01) than the financial literacy (Beta = .206**, p<.01).

Table 6: Interaction between demographic characteristics against social intermediation and financial literacy.

	Model 1	Model 2	Model 3	Model 4
(Constant)	3.564**	2.269**	1.753**	1.640**
Gender	.056	.036	.011	.045
Age Group	.058	.054	.086	.032
Marital Status	.235*	.142	.172	.197*
Social Intermediation		.340**	.272**	.039
Financial Literacy			.246**	.492**
Interaction Terms				
Education*Financial Literacy				.146
Education*Social Intermediation				.186*
Benefits*Financial Literacy				.025
Benefits*Social Intermediation				.000
Dependent Variable: Financial Inclusion				
R	.166	.390	.445	.478
R Square	.028	.152	.198	.228
Adjusted R Square	.014	.136	.179	.195
Std. Error of the Estimate	.974	.912	.889	.880
R Square Change	.028	.125	.046	.030
F Statistic	2.018	31.280	12.177	2.048
Sig.	.112	.000	.001	.089
Average Tolerance	**.986**	**.974**	**.929**	**N/A**
Average VIF	**1.014**	**1.027**	**1.079**	**N/A**

***** p<.001, **p<.05, "No" for No Significance**

Source: Primary data

The results in the table 6 above shoed that there in the first model (Model 1) when we include the background characteristics which include the Gender, Age Group and Marital Status, the model is statistically non-significant (p > .05) even though the marital status is a significant predictor of Financial Inclusion (B = sig. <.05). It was noted that the Average VIF values were acceptable as they were below 1.50 for all models. These results show that the multi-co linearity was not a problem at all in this study. Also, the results show that in Model 2 when we include the Social Intermediation, the model is statistically significant and the Social Intermediation is a statistically significant predictor of the Financial Inclusion (sig. <.01). In this case, the R Square rises from 2.8% to 15.2% in the first model. In the third and last model (Model 3), Inclusion of the Financial Literacy improves on the model and the variance explained this time is 19.8% (R Square = .196) at a level of 99% confidence interval level. The Social Intermediation has a slightly greater significant positive effect on the Financial Inclusion (B = .272**, p<.01) than the Financial Literacy (B = .246**, p<.01).

When we include the interaction term, we can note that the Interaction of Education level and the Financial Literacy does not have a significant positive effect on the Financial Inclusion (B = .146, p> .05). However, the interaction between Education and Social Intermediation to positively influence the Financial Inclusion (B = .186*, p<.05). That means even with the presence of the Social Intermediation present, we need relevant educational training for the individuals if we are to realize the desired levels of financial literacy.

Conclusion and Policy Implications

The paper uses cross-sectional data of 218 respondents to estimate the features of financial inclusion and therefore poverty. Several analyses were used to manage the data including zero correlation and multiple linear regression. Consistent with the model specifications, the empirical results provide evidence that demographic characteristics like marital status positively impact financial inclusion and therefore the poverty levels of the surveyed households. The finding indicates that household that is married are more likely to be financially included and their poverty status is likely to reduce as financial providers will be more than willing to deal with married households that than single households to the riskiness of such households. However, the study findings show limited linkage with the other demographics such as age, education, and gender.

Further, the results indicate that social intermediation is significantly linked to financial inclusion. This in line with the works of Kistruck (2013) who asserts that structuring decisions made by intermediaries seeking to alleviate poverty by connecting base- of- the- pyramid markets with more developed markets.

The positive significant link between financial literacy and financial inclusion implies that the more the poor are exposed to financial literacy their familiarity with financial products will enhance financial inclusion and there less poverty. This is line with (Beck et al, 2007 Calvert et, al. (2005 and Cole et al. (2009) whose works revealed significant association with greater use of bank services underscoring the fact that financial literacy greatly impacts financial inclusion.

The difference in the level of prediction of social intermediation and financial literacy is attributed to the fact that social behaviours more than the knowledge of financial product influence the decision process of the household to be financially included and therefore poverty reduction.

The key policy implications derived from the study findings are that rather than focus on financial literacy, more policies emphasising the social aspects in the society will derive financial inclusion and hence tackle poverty. Social cohesion is vital in financial inclusion decision by the poor in the society. They hence rely on what their fellow members are doing rather listen to financial literacy campaigns.

The social cohesion is underscored by the marital status greatly influencing financial inclusion behaviours. Therefore the key to African society is the family and marital status in a way corresponds to stability and responsibility. Therefore measures to enhance marital status are crucial to the advancement of financial inclusion. Here the religious communities should play a role in rooting for marriages as a key to poverty reduction

References

Abdin, J. (2016). Financial Development and Poverty Reduction: Exploring the Links between the Issues Using Evidence from Bangladesh. *International Journal of Financial Research*. Vol. 7(4).

Adams, R. H. and Cuecuecha, A. (2013). The impact of remittances on investment and poverty in Ghana. *World Development*. Vol.50.pp.24-40.

Afshartous, D. and de Leeuw, J. (2005). Prediction in multilevel models. *J. Educat. Behav. Statist*. Vol. 30(2).pp.109-139.

AFI Global (2012). Maya Declaration on Financial Inclusion. Maya.

AFI Global (2014). Maya Declaration Commitments. Retrieved August 21, 2015, from http://www.afiglobal.org/maya-declaration commitments. Maya.

Aghion, P. and Bolton, P. (1997). A theory of the Trickle-Down Growth and Development. *Review of Economic Studies*. Vol.64.pp.151-172.

Ahlin, C., Lin, J., and Maio, M. (2011). Where does microfinance flourish? Microfinance institution performance in macroeconomic context. *Journal of Development Economics.* Vol.95(2).pp.105-120.

Aker, J. C. and Mbiti, I. M. (2010). Mobile phones and economic development in Africa. *The Journal of Economic Perspectives*. Vol.24(3).pp.207-232.

Andrianaivo, M. and Yartey, C. A. (2010). Understanding the Growth of African Financial Markets. *African Development Review*. Vol.22(3).pp.394-418.

Anyanwu, J. C. (2013). Determining the correlates of poverty for inclusive growth in Africa. *African Development Bank.*

Arabi, K. A. M. and Abdalla S. Z. S. (2013). "The Impact of Human Capital on Economic Growth: Empirical Evidence from Sudan." *Research in World Economy*. Vol.4(2).

Baguma, D. (2010). *Uganda Microfinance Industry Assessment.* Kampala: Association of Microfinance Institutions of Uganda.

Banerjee, A. and Newman, A. F. (1993). "Occupational Choice and the Process of Development." *Journal of Political Economy*. Vol.101.pp.274-298.

Beck, T., Demirgüç-Kunt, A. and Levine, R. (2007). Finance, inequality and the poor. *Journal of economic growth*. Vol. 12(1).pp.27-49.

Beck, T., Demirguc-Kunt, A. and Peria, M. S. M. (2007). Reaching out: Access to and use of banking services across countries. *Journal of Financial Economics*. Vol.85(1).pp.234-266.

Beck, T., Levine, R. and Loayza, N. (2000). Finance and the Sources of Growth. *Journal of financial economics*. Vol.58(1).pp.261-300.

BIS. (2014). Innovations in retail payments -Bank for International Settlement.

Bourdieu, P. (2007). The forms of capital. In- *Education, Culture, Economy and Society.* Halsey, A. H., Lauder, H., Brown, P. and Wells, A.S. (Eds.). Oxford: Oxford University Press.

Calvert, L. E., Campbell, J. Y. and Sodini, P. (2007). Down or Out: "Assessing the Welfare Costs of Household Investment Mistakes." *Journal of Political Economy*. Vol. 115(5).pp.707- 747.

CGAP (2013). International Remittances through Branchless banking, 2013.

Chibba, M. (2009). Financial Inclusion, Poverty Reduction and the Millennium Development Goals. *European Journal of Development Research*. Vol. 21.pp.213–230.

Chima, O. (2011). "Financial Services Still Shallow in Africa" http://www.thisdaylive.com/articles.

Cyn-Young, P., Rogelio, V. and Mercado, Jr. (2015). Financial Inclusion, Poverty and Income Inequality in Developing Asia. Publication Stock No. WPS157060-3.

Dee, T. (2004). "Are there civic returns to education?" *Journal of Public Economics.* Vol.88.pp.1697-1720.

Deb, A. and Kubzansky, M. (2012). *Bridging the gap: The business case for financial capability*. New York: Monitor Group and Citi Foundation.

Demirgüç-Kunt, A. and Klapper, L. F. (2012). Measuring financial inclusion: The GlobalFindex database.

Demirgüç-Kunt, A. and Leora, K. 2012. "*Measuring Financial Inclusion: The Global Findex Database*." Policy Research Working Paper no. 6025. Washington: World Bank.

Demirgüç-Kunt, A., Beck, T. and Honohan, P. (2008). *"Finance for All? Policies and Pitfalls in Expanding Access".* World Bank Policy Research Report. Washington: World Bank

Eide, E. and Showalter, M. (2010). Human capital. In- *Education*. Brewer, D. and McEwan, P. (Eds.) San Diego, CA: Elsevier

Eric, A. H. and Wobmann, L. (2007). " *The role of School Development in Economic Development*"

Essegbey, G. O. and Frempong, G. K. (2011). Creating space for innovation—The case of mobile telephony in MSEs in Ghana. *Technovation.* Vol.31(12).pp.679-688.

Feagin, J. R. (1972). Poverty: We still believe that God helps those who help themselves. *Psychology Today*. pp.101-129.

Green, M. and Hulme, D. (2005), " From correlates and Characteristics to Causes: Thinking about Poverty from a Chronic Poverty Perspective." *World Development.* Vol. 33(6). pp.867-879.

Harper, R., John C. M. and Eugenio, M. (1990). Higher-order modules and the phase distinction. In- *ACM Symposium on Principles of Programming Languages (POPL).* San Francisco, Californi. pp.341 354.

Hanushek, E. A. (2002). The Seeds of Growth. *Education Next*. Vol. 2(3).pp.10–17.

Hanushek, E. A. and Woessmann, L. (2012). Schooling, Educational Achievement, and the Latin American Growth Puzzle. *Journal of Development Economics.*

Hanushek, E. and Woessmann, L. (2010). Education and economic growth. In- *Economics of Education* Brewer, D. and McEwan, P. (Eds.). San Diego, CA: Elsevier.

Hsu, I. C., Lin, C. Y. Y., Lawler, J. J. and Wu, S. H. (2007). Toward a model of organizational human capital development: Preliminary evidence from Taiwan. *Asia Pacific Business Review.* Vol.13(2).pp.251-275.

Honohan, P. (2004). *Financial development, growth, and poverty: how close are the links?* New York: The World Bank Publications.

Hughes, B. B. and Irfan, M. T. (2007). Assessing strategies for reducing poverty. *International Studies Review.* Vol.9(4).pp.690-710.

IFC (2015). Achieving Interoperability in Mobile Financial Services.

Imai, K. S., Gaiha, R., Thapa, G. and Annim, S. K. (2012). Microfinance and poverty—a macro perspective. *World Development,* Vol. 40(8).pp.1675-1689.

Islam R., Ghani. A.B.A., Kusuma. B. and Theseira, B.B. (2016). “Education and Human Capital

Effect on Malaysian Economic Growth” *International Journal of Economic and Financial issues*. Vol.6(4).pp.1722-1728.

Johnson, S. and Arnold, S. (2012). Inclusive financial markets: is transformation underway in Kenya? *Development Policy Review*. Vol.30(6).pp.719-748.

Kempson, E. (2009), *“Framework for the Development of Financial Literacy Baseline Surveys: A First International Comparative Analysis*”, OECD Working Papers on Finance, Insurance and Private Pensions, No. 1, OECD Publishing. DOI: 10.1787

Khavul, S. and Bruton, G. D. (2013). Harnessing innovation for change: sustainability and poverty in developing countries. *Journal of Management Studies.*Vol.50(2).pp.285-306.

Kikulwe, E. M., Fischer, E. and Qaim, M. (2014). Mobile money, smallholder farmers, and household welfare in Kenya. Vo.9(10).pp.e109804.

Klein, M. U. and Mayer, C. (2011). Mobile banking and financial inclusion: The regulatory lessons. In- *Understanding Financial Inclusion*. Lindsay, K. And Gillespie, M. (Eds). Friends Provident Foundation.

King, R. G. and Levine, R. (1993). Finance, entrepreneurship and growth. *Journal of Monetary Economics*. Vol.32(3).pp.513-542.

Kistruck, G. M., Israr A. Q., Paul, W. B. and Sutter, C. J. (2013) Social Intermediation in Base-of-the-Pyramid Markets: *Journal of Management Studies*. Vol. 50(1). pp.31-66.

Kolomiiets U, (2017). “ The human capital theory. Encouragement and Criticism.” Socio-Economic Challenges. Vol.1(1).

Krasniqi, F. X. and Topxhiu R.M. (2016). “The importance of investment in Human Capital. *Journal of Knowledge Management, Economics and Information technology*. Vol. VI(4).

Levine, R., Loayza, N. and Beck, T. (2000). Financial intermediation and growth: Causality and causes. *Journal of Monetary Economics,* Vol.46(1).pp.31-77.

Lumpkin, G. G. and Dess, G. T. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *Academy of Management Executive*, Vol.19(1).pp.147-156.

Margaret M (2009). (World Bank) - “*Access Finance*” Issue No. 27 – A newsletter published by The Financial and Private sector.

Manji, A. (2010). Eliminating poverty? ‘Financial inclusion’ access to land and gender equality in international development. *The Modern Law Review*. Vol.73(6).pp.985-1004.

Mankiw, N. G. (2005). *Macroeconomía.* Antoni Bosch (Ed.).

Marimuthu, M., Arokiasamy, L. and Ismail, M. (2009). "Human Capital Development and its Impact on firm performance: Evidence from Developmental Economics.*" The Journal of International Social Research*, Vol.2/8.

Mehrotra, A., Khan, S., Anthony, L. and Kuijper, D. (2015). Agent Network Accelerator Survey Kenya Country Report, 2014.

Mincer, J. (1974). *Schooling, Experience and Earnings*. New York: Columbia University Press.

Mmolainyane, K. K., and Ahmed, A. D. (2015). The impact of financial integration in Botswana. *Journal of Policy Modeling.*

Noctor, M., Stoney, S. and Stradling, R.. (1992). Financial Literacy: *A Discussion of Concepts and Competencies of Financial Literacy and Opportunities for its Introduction into young People's Learning*, Report prepared for the National Westminster Bank, National Foundation for Education Research, London.

Oyelaran-Oyeyinka, B. (2014). The state and innovation policy in Africa. *African Journal of Science, Technology, Innovation and Development*. Vol.6(5).

Pikens, M., Porteous, D. and Rotman, S. (2014). Scenarios for Branchless Banking in 2020.pdf. CGAP.

Prahalad, C. K. and Hammond, A. (2002). Serving the world's poor, profitably. *Harvard Business Review*. Vol.80(9).pp.48-59.

Psacharopoulos and Patrinos (2004) *"Human capital and rates of return"*

Rajesh S, (2011). Need for financial inclusion for poverty alleviation and GDP growth. *International Journal of Multidisciplinary Research*. Vol.1(6).

Raudenbush, S. W. and Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods*. 2nd Ed. Newbury Park, CA: Sage.

Sinclair, S., McHard. F., Dobbie, L., Miller, M., Julia, R., Christian, S. and Bilal Z. (2013). "Can You Help Someone Become Financially Capable?" A Meta-Analysis of the literature.

Tabachnick, B. G. and Fidell, L. S. (2007), *Using multivariate statistics*. 5th Ed. Boston: Pearson International.

Vasudha K, (2014)**.** Financial Inclusion and Poverty Eradication; A Theoretical Perspective. *I.J.E.M.S.*, Vol.6 (4).pp.170 - 175.

Venkatesh, V., Brown, S. and Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems.

Wedgwood, R. (2007). Education and poverty reduction in Tanzania. *International Journal of Educational Development*. Vol.27(4).pp.383-396.