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Impact of Financial Literacy, Institutional Framework and Social Network on Financial Inclusion: A Study of Lower Middle Income Group

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ABSTRACT

Aim of the Study: Financial inclusion allows individuals to access financial products and services that help in reducing poverty and encourage economic growth. The aim of this study is to examine the impact of social network, institutional framework and financial literacy on financial inclusion.

Methodology: Current study is based on cross-sectional quantitative research design. This study has employed a sample of 300 lower middle income group household heads residing in District Rawalpindi. Quantitative data has been analyzed through assessment of measurement model and structural model using SMART PLS.

Findings & Implications: The findings of this study found that institutional framework, social network and financial literacy have significant impact on financial inclusion. The results of this study provide insights and implications of financial inclusion for policy makers and regulatory bodies.

Keywords: Financial Inclusion, Social Network, Institutional Framework, SMART-PLS.

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Introduction

Policymakers embrace financial inclusion as an important component for the development of the economy. It prioritize better admittance to the financial products and services that helps in improving welfare of the under privileged group of the society and encourage economic activities for financially excluded segment of the society (Beck et al., 2007; Akoten et al., 2006). Households residing in the developed economies usually acquire credit against guarantee provided by the individual either from the commercial banks or from government agencies who provides lending facilities. They usually make the decision of loan on the basis of on hand information regarding credit risk of the borrower. On the other hand, credit limitations are prevailing in the developing economies because of the two major reasons that include inadequate admittance to the assurance mechanism and be deficient in information concerning borrowers' creditworthiness (Stiglitz & Weiss, 1981; Grant, 2007).

Financial literacy considered as an important element in developed economies in the 1990s and turn out to be an international apprehension after the financial and economic crisis in United States (Damayanti et al., 2018). Financial literacy is essential for individuals and businesses for the financial and economic sustainability (Refera & Kolech, 2015). Developed economies have strong attention on individual financial education that includes management of their income, kids education and planning for their retirement (Oteng, 2019). Financial learning is valuable when it facilitate individuals to build up their financial skills. Financial literacy develops the eminence of existence for individuals. It provides the required awareness to covenant with the financial characteristic of life. Individuals with the good financial literacy can make necessary requirement for retirement, avoid credit with elevated interest rates, vulnerable to stock market invest and broaden the horizons of portfolio. Therefore, financial literacy reduces the financial stress; raise wealth, and leads to satisfactory life (Canfield, 2019).

Social networks are an imperative pointer of social capital. It is illustrated by a meticulous association created and sustain through interactive and constant affiliation, companionship, locality, or protective ties (Putnam et al., 1993).Social networks are entrenched in the culture, economic activities and individuals' financial and personal decision making (Bian, 1997). Social networks applied in diverse contexts such as job hunt, professional encouragement, and information congregation and distribution (Ronald, 1992; Ioannides & Datcher, 2004).

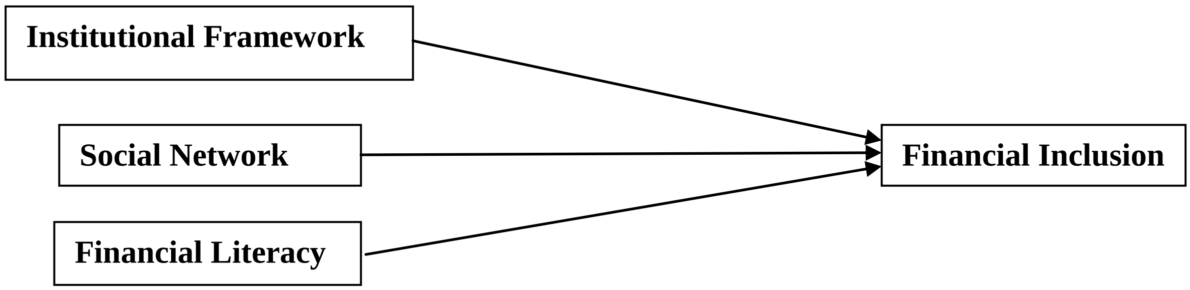
Social networks perform as social security or guarantee adjacent to risks by making sure that representative fulfill their commitments (Biggart & Castanias, 2001). The social affairs among individuals create worth that can be utilized as social guarantee to manage ethical vulnerability and encourage unofficial borrowing (Karlan et al., 2009). The guarantee provided by social networks is also construe by Coleman (1988) and Putnam (2001) highlighted an intense network's capability to examine and endorse any unexpected behavior for the reason that of the repute outcomes.

The employment of social networks for consuming financial products and services is custom (Center for Marketing Research at the University of Massachusetts Dartmouth, 2019). In the most recent decade, social networks instigate to take part in selecting and consuming financial products and services. The evolution of social networks to the stipulation of financial products and services to its consumer is an added expansion of the digitization of socio-economic procedures. The entrance of social networks addicted to the employment of financial products and services to its consumer because the take information related to financial aspects (Ardic et al., 2011).

The extensive dispersion of financial products and services into the social networks is slowed down by the conventional aspects relatively rigid rule of the financial segment. On the other hand, in recent times the litheness of financial administration has improved and modification in the guideline of information sharing. Social networks involvement in consuming financial products and services illustrates by financial inclusion (Game, 2001) and the aspiration of financial intermediaries (Marinescu & Marinescu, 2012). Financial institutions are frequently connected with resolving the difficulty of supplying financial products and services in those areas where banking services are insufficient. Financial institutions hence should make such institutional framework which helps social networks to promote the importance of using financial products and services for poverty reduction and wellbeing of individual lives. The admission of financial institutions into the social network leads to communication atmosphere for financial product and service consumers (Goodfellow, 2016).

The endeavor of this study was to examine the impact of institutional framework, social network and financial literacy on financial inclusion. In existing literature, mostly studies were executed on entrepreneurs, companies or professional individuals. There is a lack of studies found on lower income household individuals. Another reason for conducting this study is that mostly studies were conducted on macro level aspects of financial inclusion and micro level aspects of financial inclusion is still missing in literature. This study has incorporated these aspects to find out the behavioral aspects effecting financial inclusion. There is need to study micro level aspect in the perspective of Pakistan to study the impact of financial literacy, institutional framework and social network on financial inclusion. As the policy makers are making efforts to enhance the intensity of financial literacy in Pakistan. This study will help them to sort out the behavioral aspects that are promoting or hindering financial inclusion.

Figure 1: *Conceptual Framework*



H1: Institutional Framework has positive significant impact on financial inclusion.

H2: Social Network has positive significant association with financial inclusion.

H3: Financial literacy has positive significant connection with financial inclusion.

Methodology

The researcher in this study followed hypothetical deductive method. The study design incorporated in this study is cross sectional research design. The quantitative data has been utilized for the current study. The data was collected through questionnaire adopted from Okello, (2018). There are three independent variables that include institutional framework, social network and financial literacy. One independent variable financial inclusion has been considered for the current study. The items were measured on likert scale.

The population for this study was lower middle income group. The unit of analysis for the current study was individual household heads. Simple random sampling technique has been used for choosing the sample. This study employed a sample of 300 lower middle income group household heads residing in District Rawalpindi, Pakistan. The data was collected in natural settings. Quantitative data has been analyzed through assessment of measurement model and structural model using SMART PLS.For the assessment of the measurement model indicator loadings, cronbach alpha coefficients, convergent validity and discriminant validity was tested. For the assessment of the structural model, collinearity statistics and direct hypothesis was tested.

Data Analysis and Discussion

Table 1 describes the frequency and percentages of the demographics that includes gender, age group, marital status, education and profession.

Table 1: *Demographic Frequency & Percentage*

Demographics		Frequency	Percentage
Gender	Male	299	99.7
	Female	1	0.3
Age Groups	26–33	11	3.7
	34-41	44	14.7
	42-49	136	45.3
	50+	109	36.3
Marital Status	Married	300	100
	Unmarried	0	0

Education	Illiterate	3	1.0
	up to 5 standard	37	12.3
	up to 8 standard	113	37.7
	up to 12 standard	112	37.3
	Diploma/Graduate or Above	34	11.3
Profession	Laborer	19	6.3
	Service without owning any fixed setup	49	16.3
	Own Business	58	19.3
	Government Job	68	22.7
	Private Job	63	21.0
	Retired	42	14.0

N=300

Table 2 describes the descriptive statistics of the endogenous and exogenous variables. The mean, standard deviation, skewness and kurtosis of all the variables that includes the social network, institutional framework, financial literacy and financial inclusion.

Table 2: *Descriptive Statistics*

Variable	Dimension	Mean	Standard Deviation	Skewness	Kurtosis
Social Network	SN1	12.32	2.27	.57	.25
	SN2	13.92	2.31	.23	-.17
	SN3	18.15	3.54	.85	2.40
Financial Literacy	FL1	11.23	2.54	.92	.62
	FL2	18.62	3.98	.42	.91
	FL3	17.23	2.14	.23	.25
	FL4	21.02	2.82	.13	.91
Institutional Framework	IF1	19.68	4.01	.76	2.84
	IF2	28.66	6.41	.11	2.86
	IF3	31.32	6.31	.51	1.97
Financial Inclusion	FI1	46.24	3.80	-.44	-.16
	FI2	43.25	5.03	-.60	.08
	FI3	46.95	7.17	-.31	-.92
	FI4	36.32	4.13	-.39	-.19

Table 3 describes the common method variance which was measured through herman's single factor test. As the data was measured through single source from the same point of time so CMV was tested. The results are showing that the variance is less than fifty percent and showing no issue of common method variance.

Table 3: *Common Method Variance*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.017	6.102	6.102	7.017	6.102	6.102

Note: CMV<50%

Table 4 indicates the loadings, cronbach's alpha coefficients and convergent validity. The loadings of all the items are above 0.70 which represents that the entire items are reliable. The cronbach's alpha coefficients measure the internal consistency reliability of the variables. The convergent validity was measured through AVE values. The statistical values are indicating the no issue of convergent validity.

Table 4: *Measurement Evaluation Model; Loadings, Cronbach's Alpha Coefficients & Convergent Validity*

Variables	Loadings	Cronbach's Alpha Coefficients	Average Value Extracted (AVE)
Social Network		0.91	0.84
SN1	0.891		
SN2	0.757		
SN3	0.891		
Financial Literacy			
FL1			
FL2			
FL3			
FL4			
Institutional Framework		0.81	0.72
IF1	0.924		
IF2	0.904		
IF3	0.930		
Financial Inclusion		0.88	0.73
FI1	0.857		
FI2	0.900		
FI3	0.827		
FI4	0.849		

Note: Indicator Loadings>0.708; AVE>0.50

Figure 2: *Indicator Loadings*

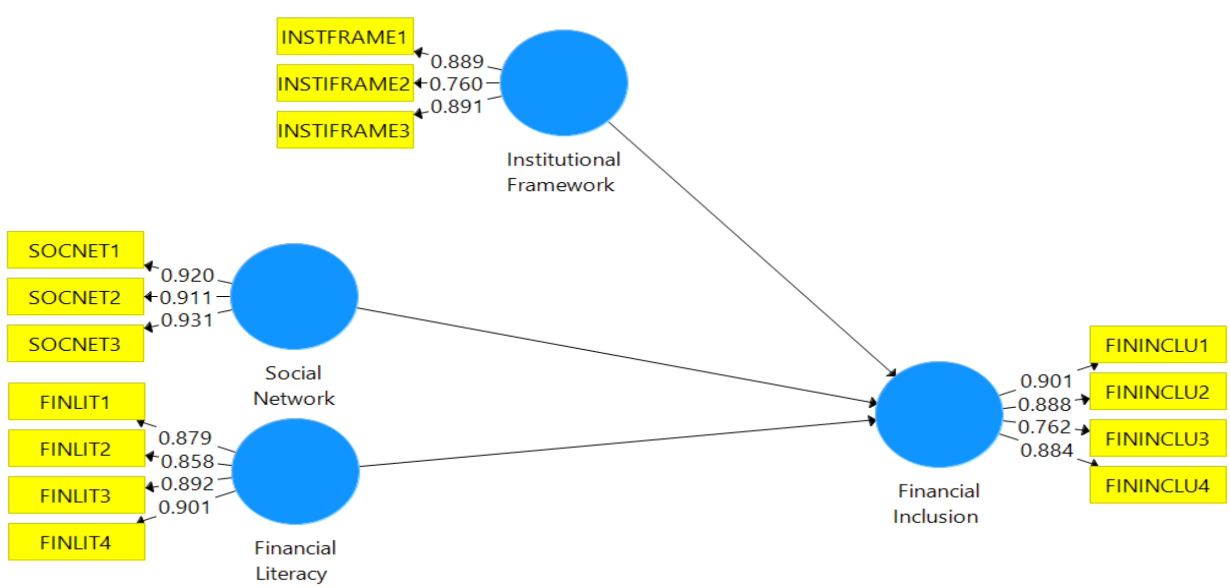


Table 5 describes the discriminant validity which was measure through heterotrait-monotrait (HTMT) ratio of correlation. The results are showing that no value is greater or equal to 0.90 and indicating no issue of the discriminant validity.

Table 5: *Discriminant Validity*

Variables	Financial Inclusion	Institutional Framework
Institutional Framework	0.374	
Social Network	0.165	0.704

Note: HTMT<0.90

Table 6 describes the collinearity statistics of the variables which was measured through VIF. All the variables VIF less are than 5 and showing no issue of the collinearity.

Table 6: *Structural Model: Collinearity Statistics*

Variables	VIF
Financial Inclusion	
FI1	2.976
FI2	2.750
FI3	1.774
FI4	2.613
Financial Literacy	
FL1	2.579
FL2	2.338
FL3	2.828
FL4	2.924
Institutional Framework	
IF1	2.340
IF2	1.651
IF3	1.832
Social Network	
SN1	2.700
SN2	3.755
SN3	3.330

Note: VIF<5

Table 7 describes the direct hypothesis studied under this study. The statistical results are showing that financial literacy positively impact financial inclusion. Financial literacy leads to financial inclusion. Those individuals who are financially literate, they participate in the financial market and can easily access financial products and financial services. Results are also indicating that social network negatively impact financial inclusion. Social networks restrict individual's to access the financial product and financial services. Institutional framework positively impact financial inclusion. Financial institutions play vital role in enhancing the financial inclusion.

Table 7: *Testing Direct Hypothesis*

	Path Cofficient	Standard Deviation	T Statistics	P Values
FL-FI	0.616	0.046	13.439	0.000
SN-FI	-0.067	0.024	2.849	0.004
IF-FI	0.219	0.219	0.022	0.000

Note: P<0.05;

Financial literacy has positive impact on financial inclusion. Financially literate individuals are more likely to be financially included. Low level of financial literacy increases the financial cost (Kaiser et al., 2022) that restricts individual households from using financial products and financial services. Financially literate individuals are more likely to use financial products and financial services. They have financial awareness. Hence financial literacy is much important for increasing the level of financial inclusion.

Social network raise the capability for accessing financial market information. It decreases the cost of searching. Social network perform as a channel in the course of which essential financial information transfer to network members. In reality, social networks are established to be significant rudiments in most of the formal and informal programs (Karlan, 2007).Social networks provide financial information and system of enforcement for accessing financial product and financial services (Biggs et al., 2002; Narayan & Prittchet, 1997). Imperfect information exists all over the world.

Associations between individuals in social networks enhance financial information flow for accessing financial products and financial services (Fafchamps & Minten, 1998; Granovetter, 1973; Burt, 1992). Social networks among lower income group households help in escalating the scale of financial inclusion (Ahlin & Townsend, 2007). Therefore, social network boost the accessibility of the financial information that helps in availing financial products and financial services.

Conclusion, Limitation and Future Research Directions

The results of this study have identified that financial inclusion and institutional framework plays a vital role in improving the level of financial inclusion. Financially literate individuals are more willing to utilize financial products and financial services. Institutional framework plays a positive role in increasing the level of financial inclusion. Social networks plays negative role in promoting financial inclusion. There is need to focus on changing the negative role of social network in the promotion of financial inclusion. Government, regulators and financial institutions should focus on the social groups' financial education. There is need to plan financial literacy programs for social groups for increasing the level of financial literacy.

There are some limitations of this study that includes the specific area has been selected for data analysis under this study. More areas of Pakistan should be covered in future for more in-depth analysis. This study employed quantitative data for data analysis. Further study must use qualitative data for data analysis. Furthermore, variables must be used as mediating or moderating role for studying the role of social network in promoting financial inclusion.

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Conflict of Interest

Authors declared no conflict of interest.

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