IMPACT OF FINANCIAL LITERACY (FL) AND ACCESS TO BANKING SERVICES (AC) ON FINANCIAL WELL-BEING (FWB): AN EMPIRICAL STUDY

Dr. Jitender Kumar

Assistant Professor, Department of Management Studies, Deenbandhu Chhotu Ram University of Science and Technology, Murthal, Sonapat, Haryana, India

Garima Bansal

Research Scholar, Department of Management Studies, Deenbandhu Chhotu Ram University of Science and Technology, Murthal, Sonapat, Haryana, India

ABSTRACT

This paper aims to examine the mediating role of AC between the financial literacy (FL) level and financial wellbeing (FWB) of select individuals residing in National Capital Region of India. The sample study considers 476 conveniently selected individuals. The authors' suggest that FL helps in enhancing financial knowledge and in developing skills of individuals so that they can compare and choose best finance oriented products and services which ultimately increase access to banking services. Thus, results demonstrate that without AC, FL alone can't enhance the level of FWB among individuals residing in National Capital Region of India. No doubt, prior studies have explored association between FL and FWB; however, the mediating role of AC within this domain has remained unexplored. Findings will enable Governments and policymakers to target vulnerable groups and design financial strategies and policies to increase their FL level which increases their access to banking services which ultimately help in advancing the level of FWB. The study ignores the qualitative study through interviews. Further study focuses only on one dimensions of financial inclusion, thus ignoring other dimensions.

Key words: Financial Knowledge, Financial Inclusion, Financial Access, Mediating role, Financial Well-being.

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1. INTRODUCTION

In this complex and sophisticated financial environment, financial literacy has been considered as an imperative skill for individuals. Financial literacy (FL) helps individual for making good financial planning and in understanding risk-return characteristics of complex finance related products and services available in market. It enables them in assessing and understanding financial services and making better financial decisions. It promotes consumers participation in the banking and credit system that is beneficial to their financial well-being (Braunstein and Welch, 2002). It helps people in making better financial choices, in knowing why long term investments are better and in knowing about financial services. This will improve overall growth of the country and the life of poor people (Damodaran, 2013).

However, various international and Indian studies indicate low FL level among individuals and recommend that measures are required to overcome this problem. In financial decisions area, it is imperative to understand how individuals' FL affects individuals' access to banking services (AC) like savings, affordability of financial services, etc. Previous studies like Caskey (2006), and Chakravarty and Pal (2013) show that how AC influences individuals' wellbeing. The studies observe that developing countries are facing finance gap and inadequate AC. Thus, for the long term growth, countries are focusing on financial access and financial wellbeing (FWB) of individuals. However, despite various innovations in the arena of finance and technology for promoting financial literacy and increasing the access to finance oriented products & services provided by banks, individuals are not well developed.

The observations of the studies suggest that AC has remained unexplored which contributes to FWB of individuals. The present study will help government and policymakers in framing national strategies and designing policies suitable for groups who lack financial literacy and access to banking services. It is assumed these contributions vindicate this study.

2. CONCEPTUAL FRAMEWORK

2.1 Financial literacy concept

Potrich et al. (2016) consider financial literacy an imperative element for financial growth, development and stability. Remund (2010) study highlights two aspects of financial literacy i.e. comprehension of fundamental financial concepts and possession of confidence to manage personal finances. Financial literacy concept has got attention in recent years, still complex phenomena. In the view of Angela et al. (2009), "financial literacy is knowledge of basic economic and financial concepts, as well as the ability to use that knowledge and other financial skills to manage financial resources effectively for a life time well-being". Organization for Economic Co-operation and Development (OECD), 2013 defined, "financial literacy is a combination of awareness, skill, attitude, knowledge and behaviour necessary to make sound financial decisions and ultimately achieve individual financial well-being".

2.2 Financial literacy (FL) and access to banking services (AC)

Recent studies like (Allen et al. 2016) reveal that financial inclusion results in more financial depth, availability of financial accounts at low cost or accessibility of financial institutions. Lusardi (2002) study shows financial literacy as an important determinant of savings behaviour. Poor people don't save as they lack financial literacy. Savings provide protection against financial shocks. Therefore, the government should promote financial literacy. Cohen and Nelson (2011) argue that financial literacy acts a key accelerator in attaining the goal of financial inclusion. It tackles the imbalances caused by information asymmetry and institutional abuses, integrates financial knowledge, develops skills and promotes attitude that helps in comparing and choosing financial products & services and ultimately purchasing and

using the best ones. Ghosh and Vinod (2017) investigate factors that hinder to understand and use of finance among women in India and reveal as education level improves people access more from formal institutions and borrow less from informal sources. The review thus summarizes following hypothesis:

H₁: FL significantly affects AC among select individuals in NCR (India).

2.3 Financial literacy (FL) and financial well-being (FWB)

Hogarth (2006) view financial literacy as one important step for financial well-being. The study highlights association between financial well-being and financial education and show that financial literacy prevents people from getting into financial crisis, provides information about the risk & return characteristics of finance oriented products & services and makes changes in consumers' attitudes & behaviours. Widdowson and Hailwood (2007) also explain that good financial literacy level can results in effective management of budget, prudent investment, planned debt level, a better understanding of sophisticated finance oriented products and services, improved financial wealth, better risk-return decisions and enhanced standard of living. Nye and Hillyard (2013) also confirm that consumers who are literate financially, they are able to make progressive financial decisions and will experience a great sense of personal financial well-being . Thus, individuals should find credence and motivation to use financial knowledge in making wise financial and investment decisions for enhancing one's financial well-being (Riitsalu and Murakas, 2019). The current study therefore, hypothesize that

H₂: FL significantly affects FWB among select individuals in NCR (India).

2.4 Access to banking services (AC) and financial well-being (FWB)

Schaner (2016) highlights positive relation between access to financial products and well-being of individuals. Thus, we hypothesize that

H₃: AC is positively connected with FWB among select individuals in NCR (India).

2.5 Mediating role of access to banking services (AC)

AC has got concern over the past years in both developed and developing countries. Kumari and Aluthge (2018a) point that access to banking services provides equivalent opportunities, empowers financially and socially prohibited individuals to incorporate better into the economy and secure themselves against financial stuns. Bonga and Mlambo (2016) also demonstrate that FL is significant for everybody and is connected to financial stability. This stability and quality of finance oriented products and services offer aid in development of the financial sector. Thus,

H₄: AC mediates the relation between FL and FWB among select individuals in NCR (India)

3. OBJECTIVES

- To analyze the association of FL level with AC of select individuals;
- To investigate the association of FL level with FWB of select individuals;
- To examine the association of AC with FWB of select individuals;
- To study AC as mediator between FL and FWB of select individuals.

4. PROJECTED THEORETICAL MODEL

Figure 1 Projected theoretical model

5. METHODOLOGY OF RESEARCH

5.1 Research design

Mindra and Moya (2017) and Kesmodel (2018) suggest cross section research design for assessing association between variables at a given point in time.

5.2 Population and Sample

Target universe for the present paper include individuals of aged above 18 residing in NCR of India and sample is drawn from the same.

Questionnaires were circulated to more than 500 individuals visiting bank branches in the chosen area and approached directly. After neglecting the less responded questionnaires finally we got 476 and response rate around 95.2% which is very high.

5.3 Sampling Procedure and Measurement of Variables

The current study uses convenience sampling technique to carry out the research. Mohtar *et al.* (2014) claim convenience sampling as the best method of collecting basic information rapidly and proficiently in exploratory research.

Questionnaire involves three issues namely financial literacy, access to financial services and financial well-being. The current study adopts the dimensions suggested by Agarwalla *et al.* (2013); OECD (2013) and Potrich *et al.* (2016) to measure financial literacy.

Sarma (2010); Gupte *et al.* (2012) and Yorulmz (2013) work provide base for measuring access to banking services. Prawitz *et al.* (2006) and Consumer Financial Protection Bureau (CFPB), 2015 work provide base for measuring financial well-being. All statements use 5 point likert scale. The study findings report that Cronbach's alpha (α) coefficients of all the items range between 0.912, 0.909 0.903, 0.767 and 0.872 for FK, FB, FA, AC and FWB respectively.

The study uses confirmatory factor analysis to check validity of instrument. Table 1 shows the standardized loading of all the variables. All the variables had standardized loadings larger than 0.50. To check the convergent validity, Hair *et al.* (2010) suggest that value should be more than 0.7 for composite reliability (CR) and more than 0.5 for average variance explained (AVE). Lastly, CR should be greater than AVE.

Table 1 Confirmatory Factor Analysis (Measurement Model)

Construct	Variables	Standardized Loadings	Composite Reliability (CR)	Average Variance Explained (AVE)
Financial Knowledge (FK)	FK ¹	0.81	0.886	0.567
	FK ²	0.76		
	FK ³	0.77		
	FK ⁴	0.80		
	FK ⁵	0.75		
	FK ⁶	0.67		
	FK ⁷	0.62		
	FK ⁸	0.72		
	FK ⁹	0.69		
Financial Attitude (FA)	FA ¹	0.70	0.778	0.539
	FA ²	0.85		
	FA ³	0.76		
	FA ⁴	0.72		
	FA ⁵	0.89		
	FA ⁶	0.74		
	FA ⁷	0.70		
	FA ⁸	0.62		
Financial Behaviour (FB)	FB ¹	0.71	0.911	0.512
	FB ²	0.85		
	FB ³	0.76		
	FB ⁴	0.72		
	FB ⁵	0.89		
	FB ⁶	0.75		
	FB ⁷	0.69		

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Access to Banking Services (AC)	AC ¹	0.52	0.815	0.471
	AC ²	0.51		
	AC ³	0.73		
	AC ⁴	0.75		
	AC ⁵	0.57		
	AC ⁶	0.53		
Financial Well Being (FWB)	FW ¹	0.51	0.895	0.549
	FW ²	0.73		
	FW ³	0.69		
	FW ⁴	0.72		
	FW ⁵	0.66		
	FW ⁶	0.62		
	FW ⁷	0.71		
	FW ⁸	0.73		

6. DATA ANALYSIS AND FINDINGS

6.1 Demographic profile of respondents

The sample consists of 53.9% male and 43.1 % female. Most of the respondents belong to 25-35 years age group i.e. 45.83 %. Majority of respondents are post graduate i.e. 51.8% which show majority of respondents are literate. 70.83% of the total respondents fall in the category of service. More respondents belong to Rs. 5,00,001- Rs. 10,00,000 income group i.e. 33.07% and least belong to above Rs. 10,00,000 income group i.e. 13.55%. Majority of the respondents are married i.e. 64.32%.

6.2 Findings

Figure 2 demonstrates that FL ($\beta = 0.41$, $p = 0.000$) significantly and positively influence AC of select individuals. This suggests that when individuals have an understanding of fundamental financial concepts, they can know the significance of financial services and hence results in advancement of FI. Thus, hypothesis H₁ cannot be rejected. The results of the study support the findings of Grohmann (2018) & Cole, Sampson and Zia (2009). Figure 3 shows that FL ($\beta = 0.45$, $p = 0.000$) influences FWB of select individuals. Thus, hypothesis H₂ can't be rejected. The findings are in conformity with Riitsalu and Murakas (2019) & Philippas and Avdoulas (2020) findings which show that FL results in better and informed financial decisions and an ultimately higher level of FWB. FL results in the management of day to day finance related activities i.e. budget preparation, wise investment, improved risk-return decisions, enhanced financial wealth and ultimately better living standard. The results also reveal significant association between AC and FWB of the select individuals ($\beta = 0.55$, $p = 0.000$), therefore, H₃ of the current study can't be rejected.

6.3 Testing of mediation effect

The study fulfills the guidelines given by Baron and Kenny (1986) for testing presence of mediation effect as shown below:

(a) Effect of FL on AC ($\beta=0.41$, $p=0.000$) is significant as shown in figure 2.

Figure 2 Impact of FL on AC

b) Effect of FL on FWB ($\beta=0.45$, $p=0.000$) is significant as shown in figure 3.

Figure 3 Impact of FL on FWB

c) It becomes clear from the figure 4 that when mediator i.e. AC is introduced into model then the relationship between FL and FWB remains significant but effect of FL on FWB got reduced i.e. ($\beta=0.31$, $p=.000$). This shows AC partially mediates the relation between FL and FWB. In view of these results hypothesis H_4 failed to be rejected.

Figure 4 Impact of FL on FWB through AC

Table 2 summarizes full SEM model and the fit indices for the proposed model. The results show that the proposed model fulfills the best fitting model criteria and is used as a final model. Fitness indices GFI = 0.954 which is more than the acceptable limit i.e. 0.90. AGFI = 0.918 is also more than threshold value > 0.80. CFI = 0.946 is also within the acceptable criteria. REMSEA value 0.052 is moderate and CMIN/df 3.778 is also acceptable. So, on the basis of indices, the model could be considered a fit and reliable model.

Table 2 Fitness of Structural Equation Model

Model	CMIN/DF	GFI	AGFI	CFI	RMSEA
Proposed	3.778	0.954	0.918	0.946	0.052

7. CONCLUSION

Most of the prior studies in the literature that has received less attention are the FL and FWB can be mediated by financial inclusion determinant i.e. AC. Present study is intended to provide empirical facts on the mediating effect of AC in the association between FL and FWB of the individuals dwelling in NCR of India. Findings show that FL significantly accounts for variation in AC. This supports H1 of the study i.e. significant effect of FL on AC of the select individuals. In addition, study shows that FL is favorably related to FWB of the select individuals, therefore, confirming H2 of the study. The results also demonstrate that AC and FWB are emphatically associated. This is in congruity with H3 of this study. Lastly, AC partially mediates the relation between FL and FWB is additional contribution to the study. This supports H4 of the study. Thus, the present study will help government and policymakers in framing national strategies and designing policies suitable for groups who lack financial

literacy and access to banking services. Awareness programs can be conducted to make individuals aware of finance oriented products and services. This will ultimately enhance the FWB of individuals.

8. LIMITATIONS OF THE STUDY

The current study ignores the longitudinal design. Further, this study was carried out in the NCR of India so that results can't be generalised to other areas and countries. More so, by exploring other aspects of financial inclusion like usage of banking services, availability of banking services, etc into the research model, future research may deliver an increasingly viable model that was produced in the current study.

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