

THE ROLE OF FINANCIAL LITERACY, FINANCIAL ATTITUDE AND FINANCIAL BEHAVIOUR ON FINANCIAL INCLUSION IN SOMALIA: AN EMPIRICAL STUDY

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ABSTRACT

This study examines the role of financial behaviour, financial attitude, and financial literacy on financial inclusion in Somalia. The study used a questionnaire to gather data from 200 participants. The data was analyzed using SMART-PLS. The results indicate that the financial attitude (FA) ($b= 0.436$; $t\text{-value}=6.112$, $p\text{-value}=0.000$), financial behaviour (FB) ($b= 0.224$; $t\text{-value}=2.801$, $p\text{-value}=0.005$), and financial literacy (FL) ($b= 0.197$; $t\text{-value}=2.440$, $p\text{-value}=0.015$) play a significant role in advancing financial inclusion in Somalia. An individual's use of financial services offered by Somali banks depends on their financial literacy, mindset, and saving habits. Financial inclusion aims to provide equitable and unrestricted access to banks' services, specifically emphasising creating equal chances for those who face economic hardships, women, and people with disabilities. This allows individuals to improve their socioeconomic status, substantially impacting the country's economic development. Hence, financial institutions and governments need to collaborate to formulate rules and regulations that efficiently address the issue of financial exclusion and guarantee inclusivity for all individuals. Furthermore, Somali banks should adopt measures to enhance citizens' financial literacy and promote their engagement in banking services. The paper proposes thoroughly evaluating the educational curriculum to include fundamental financial knowledge.

Keywords: Financial Inclusion, Financial Behaviour, Financial Literacy, Financial Attitude, Somalia

INTRODUCTION

Financial inclusion enables individuals to participate in financial markets. It has piqued the attention of policymakers in governmental and multinational entities. Financial inclusion ensures that banks' services are easily accessible for people and businesses, meeting their specific needs. This includes savings, transactions, payments, financing, and insurance coverage. The delivery of these services is carried out in a manner that is responsible and sustainable (World Bank, 2018). The main goal of financial inclusion is to enable economically isolated individuals, those with special needs, or women to access the services of banks. Enhancing financial inclusion positively impacts economic growth by allowing financially constrained businesses better access to financial services. This, in turn, improves their profitability and ultimately contributes to overall economic development (Vo et al., 2019).

Financial inclusion is crucial in achieving sustainable development Goals (SDGs). Financial inclusion positively impacts achieving goals such as poverty eradication, hunger elimination, good health and well-being promotion, and decent employment and economic development (Dikshit & Pandey, 2021). Digital payment has enabled an increase in the penetration rate of financial inclusion. According to Demirgüç-Kunt et al. (2021), In 2021, 55% of adults in Sub-Saharan Africa possessed a bank account, with 33% of adults having an account in the mobile money. This region had the highest proportion of mobile money account ownership compared to any other region worldwide, more than three times the global average of 10%. Mobile money accounts have generated fresh prospects to cater more effectively to women, impoverished individuals, and other historically marginalised groups from the banking system.

Studying the factors contributing to financial inclusion is crucial in attaining full financial access for those not currently part of the banking system. Financial attitude, behaviour, and literacy are key characteristics that significantly impact the achievement of financial inclusion. A study conducted by Asyik et al. (2022) has shown a favourable correlation between financial literacy, behaviour, and financial inclusion. A comprehensive understanding of the bank's services is essential for achieving financial inclusion (Hasan et al., 2021). Moreover, individuals' financial attitude benefits financial inclusion (Cuandra & Anjela, 2021).

Financial knowledge is an essential supplement for facilitating financial inclusion, advancement, and financial sustainability (Ramachandran, 2012). Therefore, the financial literacy policy could enhance financial inclusion and enable people to engage with financial institutions' services and products (Kasozzi & Makina, 2021). Furthermore, people's attitudes can also influence the financial market and the use of products and services that financial institutions provide. Meanwhile, saving behaviour helps individuals open bank accounts to save money and engage in the services that banks provide.

In Somalia, at the household level, the inclusion of financial services is crucial because of its beneficial effect on their overall welfare. It facilitates the stabilization of consumption, enables saving, widens investment prospects, and offers protection against hazards. The accumulation of savings facilitates allocating resources towards productive ventures, enabling the execution of successful initiatives and the emergence of entrepreneurs (Abdi, 2022). However, the penetration rate of people with bank accounts is too low. According to the Bina Report (2021), the penetration rate for Somali banks is 15.5%, meaning that more than 80% of Somalis do not have accounts in Somali banks. Therefore, the low penetration rate shows that the financial inclusion of Somali banks has not reached the expected target. Furthermore, the research gap in this area in Somalia is limited. Hence to fill the gap, this study has the following objectives:-

1. To determine the relationship between financial attitude and financial inclusion in Somalia
2. To examine the relationship between financial behaviour and financial inclusion in Somalia
3. To study the relationship between financial literacy and financial inclusion in Somalia

The purpose of the above objectives is to find out the relationship between three independent variables, namely financial attitude, financial behaviour and financial literacy and the dependent variable of financial inclusion.

This paper is organized as follows. It begins with an Introduction in section 1. A literature review follows this in section 2. The methodology is in section 3. This is followed by data analysis in section 4. Discussion is under section 5 and section 6 conclusion and recommendations.

LITERATURE REVIEW

Financial inclusion refers to how individuals can obtain and effectively use various appropriate financial services. Responsible and secure provision of these services to the consumer, coupled with sustainable practices by the provider, should occur within a well-regulated environment. Financial inclusion involves using mobile money or possessing a deposit or transaction account with a bank or another financial institution. These accounts allow individuals to securely store or save money, conduct remittances, and receive funds (Demirguc-Kunt et al., 2017).

Financial exclusion has resulted in social issues and economic challenges for the country. Therefore, financial inclusion is essential to economic development (Grohmann & Menkhoff, 2017). In 2017, more than 1.7 billion people, 31% of the global population, had no financial accounts in financial institutions. Most are women, and half are impoverished (World Bank Group, 2021). 31% of unbanked people worldwide show that inclusivity in the financial markets differs from the level that can achieve economic growth and community development.

Mohamed & Nor (2021) carried out research that evaluated financial inclusion and examined the influence of mobile money on financial inclusion in Somalia. The researchers used questionnaires. The results indicate that the quality of financial products plays a crucial role in promoting financial inclusion. The positive influence of quality of financial services, efficient use, and convenient access to banks' services improves financial inclusion. Furthermore, the authors stated that mobile money services in Somalia significantly fostered financial inclusion.

Ulwodi & Muriu, (2017) examined the obstacles to achieving financial inclusion in nations located in Sub-Saharan Africa. The study reveals that financial exclusion in sub-Saharan nations is mainly attributed to factors such as poor income levels, limited financial resources, high costs associated with financial services, limited accessibility to financial institutions due to great distances, and low literacy levels. Based on the authors' findings, it is suggested that financial institutions implement a strategy to reduce the expenses associated with using financial services to promote greater financial inclusion.

Gas (2017) investigated how mobile money services affected Somalia's and Kenya's financial inclusion. The results demonstrate how mobile money services, such as those offered in Kenya and Somalia, successfully address financial exclusion in developing nations. The author has also emphasized that mobile money companies have succeeded in Kenya and Somalia, allowing the unbanked to access banks' services and improve their quality of life.

Mohamud & Mohamed (2023) studied the determinants of financial access and involvement among female entrepreneurs in Somalia. The findings suggest that knowledge impacts financial inclusion among female entrepreneurs. Small business owners with higher levels of knowledge often have a greater understanding of financial matters, allowing them to navigate various financial systems more efficiently. Businesswomen use established banking institutions, investment channels, and other financial instruments to run and enhance their enterprises effectively.

The study conducted by Abdul et al. (2023) examined the factors that influence financial inclusion among colleges in Malaysia. 277 participants were gathered from the International Islamic University Malaysia (IIUM). Their findings indicate that one's financial attitude and financial literacy substantially influence financial inclusion. Nevertheless, their findings indicate that financial behaviour has an insignificant impact on financial inclusion.

Financial Literacy

Financial literacy is essential for the economic development of nations and towards the objective of comprehensive financial inclusion. Financial illiteracy adversely impacts both individuals' welfare and the whole financial system. For example, people with less financial literacy are unable to manage debt from banks and sometimes have a risk of facing scams from online platforms (Sudakova, 2018). Hence, it is essential to increase the degree of financial literacy to play a pivotal part in promoting financial inclusion and fostering the economic advancement of countries.

Choudhary & Jain, (2023) examined financial literacy training programs for marginalized women in developing and developed countries to address financial exclusion. The authors used a systematic literature review of 22 papers. The findings show that financial literacy programs positively impact women's financial inclusion and address financial exclusion.

Koomson et al. (2023) studied a comprehensive analysis of the impact of financial literacy on poverty alleviation in East African nations, with a particular focus on Uganda, Tanzania and Kenya. The results demonstrate the critical role of financial literacy in promoting financial inclusion, which contributes to poverty reduction. Furthermore, the author demonstrates that implementing policies focused on financial literacy and financial inclusion is crucial in mitigating poverty. Hence, the authors advised politicians and educational institutions to embrace financial literacy and financial inclusion programs to alleviate poverty. (Fanta & Mutsonziwa, 2021) have also found that financial knowledge is a vital factor that enhances financial inclusion.

Antony et al. (2021) examined the significance and impact of financial literacy on financial inclusion. The author discovered a positive correlation between higher levels of education and a more significant preference for receiving financial services. Moreover, it influences people's comprehension of financial concerns and promotes financial services use, resulting in substantial social effectiveness. Education also reduces obstacles to accessing financial services.

Asyik et al., (2022) studied the effect of financial literacy and behaviour in financial inclusion in Indonesia. The authors used questionnaires collected from 500 respondents and analysed SMART-PLS. The results indicate that financial literacy and behaviour positively impact financial inclusion. The more people have knowledge and good financial behaviour, the more they engage with financial services and products. The authors recommended that the central bank, scholars, and practitioners enhance financial behaviour to enhance financial inclusion. The authors recommended that financial institutions and banks develop their financial services to enable people to use them efficiently.

H₁ = There is a positive relationship between financial literacy and financial inclusion.

Financial Attitude

Financial attitudes refer to an individual's state of mind, perspective, and assessment of their financial situation (Wangi & Baskara, 2021). Financial attitude is about an individual's attitude towards financial concerns, including their ability to plan and maintain cash for future demands (Cuandra & Anjela, 2021b). Assume that financial inclusion is being evaluated without taking into account individual attitudes. Therefore, this situation provides a legitimate justification for highlighting financial attitudes' impact on financial services' use to promote financial inclusion (Cuandra & Anjela, 2021b).

Stella and Ramachandran (2022) examined the relationship between individuals' financial attitudes and financial literacy in India's financial inclusion context. The researchers used questionnaires. A total of 385 employed female participants were included in the study. The data indicate a favourable correlation between financial literacy and attitude. Moreover, the authors emphasized that the primary cause of extensive financial exclusion in India is a dearth of information and a deficient comprehension of financial concepts. They suggested that the government, financial institutions, and regulators should actively encourage vulnerable individuals' financial literacy and attitudes towards the financial institutions' services.

Cuandra & Anjela (2021) examined the role of skills. Financial knowledge, attitude, and behaviour on financial inclusion Batam City financial inclusion. Four hundred people were assessed with SMART-PLS. According to the findings, financial attitude favourably affects financial inclusion. Batam City residents' financial inclusion depends on their views, which affect their use of financial services and products. The study also found that financial knowledge, awareness, and wise financial behaviour promoted financial inclusion.

H₂ = There is a positive relationship between financial attitude and financial inclusion.

Financial Behaviour

The development of financial behaviour occurred in the 1990s in reaction to the changing demands of the business and academic communities. An investigation was conducted into the behavioural aspects of financial and investment decisions (Asyik et al., 2022). The impact of individuals' and households' financial behaviour extends to societies, nations, and the global community (Rahman et al., 2021). The administration of one's budget, savings, and costs constitute financial behaviour (Perry & Morris, 2005). According to Xiao (2008), financial behaviour encompasses all human activities involving money management, such as saving money, funding, and financial transactions.

Munyegera & Matsumoto (2018) studied the impact of mobile money on financial behaviour and financial inclusion in Uganda. The results indicate that mobile money enhances the probability of saving, borrowing, and receiving remittances. Moreover, mobile money enables individuals to access and use the banks' services. Hence, the authors recommended implementing financial education programs targeting individuals residing in rural regions, aiming to enhance their knowledge and understanding of prudent saving practices, borrowing strategies, and investment decision-making.

Sari et al., (2023) found that financial behaviour strongly correlates with the financial inclusion of MSMEs in Indonesia. They also found that paying the payments on time positively impacts the financial behaviour of MSMEs. The results show that MSMEs budget their expenditure, record capital expenditures, and save and manage unexpected expenses.

Wangi and Baskara's (2021) research examined the connections between investing decision-making behaviour and attitudes, behaviours, and financial literacy. The results show that behaviour, attitude, and financial knowledge positively influence how people make investing decisions. The authors have also shown that as financial behaviour improves, so does the behaviour of those making investment decisions. The authors' results highlight the beneficial impact that financial conduct may have on the use of investment services provided by banks and financial institutions. Therefore, the diversity of the financial pool is influenced by financial behaviours, attitude, and knowledge.

H₃ = There is a positive relationship between financial behaviour and financial inclusion.

METHODOLOGY

This study used a quantitative approach to investigate the impact of independent factors on the dependent variable. The research focused on the people of Mogadishu, the capital city of Somalia. The data was gathered using an online self-administered questionnaire utilising judgmental sampling. The data from 200 people was collected and analysed using the SMART-PLS software.

DATA ANALYSIS

Table 1.0 Demographics

DEMOGRAPHICS	Frequency	Percentage
Gender		
Male	146	73
Female	54	27
Age		
18-28	118	59
29-39	64	32
40 & above	18	9
Education		
Secondary level	11	5.5
Diploma	15	7.5
Bachelor	101	50.5
Master	62	31
PhD	11	5.5
Income		
\$100-300	76	38
\$301-600	58	29
\$601-900	29	14.5
\$901 & above	37	18.5

The table above presents the demographic characteristics of the respondents in the study. The study found that 73% of the respondents were male, while 27% were female, indicating that men constituted most of the respondents. Out of the total respondents, 59% fall between the age range of 18-28. Additionally, 32 respondents are between 29-39, while the remaining 9% are aged 40 and beyond. This shows that the majority of the age of respondents are in between 18-28. Regarding educational background, over 50% of the respondents have a bachelor's degree. The second highest degree is a master's degree, held by 31 respondents. The remaining respondents have secondary education, a diploma, or a PhD, accounting for 7.5%, 5.5%, and 5.5%, respectively. Consequently, the educational background findings indicate that most respondents possess a high level of education, which shows that the respondents have adequate level of knowledge. Meanwhile the monthly income, 38% of the participants reported earning between \$100 and \$300 per month, while 29% reported earning between \$301 and \$600 monthly. Additionally, 18.5% of the participants reported earning \$901 or more monthly. This represents that the monthly income of the majority respondents are in between \$100-600.

Assessment of Measurement Model

The main goal of the Partial Least Squares Structural Equation Model (PL-SEM) is to analyse and comprehend the relationship between the independent variable and the dependent variables in a given study. The reliability of the measurement model is assessed by analysing the composite reliability (CR) and the average variance extracted (AVE) (Hair et al., 2019). It also assesses the Cronbach alpha coefficient of variables. FA5 and FI5 were eliminated because of their poor performance indicators. Table 2 illustrates the variables' Cronbach alpha, CR, and AVE values. The Cronbach's alpha coefficients for financial attitude (FA), financial behaviour (FB), financial inclusion (FI), and financial literacy (FL) are 0.708, 0.780, 0.704, and 0.766, respectively. These coefficients indicate that these variables have a strong relationship, as the values are more than 0.7. The composite reliability (CR) values for FA, FB, FI, and FL are 0.723, 0.790, 0.728, and 0.792, respectively. These values are above the minimal requirement of 0.7. The average variance extracted (AVE) for Financial Attitude (FA) is 0.535, for Financial Behaviour (FB) is 0.532, for Financial Inclusion (FI) is 0.528, and for Financial Literacy (FL) is 0.520. These values above meet the minimum threshold of 0.5. Table 3 illustrates the discriminant validity of the variables using the heterotrait-monotrait ratio (HTM). The HTM values of the variables are below 0.9, indicating that the variable results meet the HTM criteria.

Table 2 Measurement Model: Cronbach's alpha, CR and AVE

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
FA	0.708	0.723	0.820	0.535
FB	0.780	0.790	0.850	0.532
FI	0.704	0.728	0.816	0.528
FL	0.766	0.792	0.842	0.520

Table 3 Discriminant validity using the HTM criterion.

	FA	FB	FI	FK
FA				
FB	0.287			
FI	0.731	0.587		
FL	0.280	0.899	0.568	

Assessment Structural Model

To find the correlation between financial attitude, behaviour and attitude on financial inclusion, examining the variable's path coefficient (b-values), T-values and P-values.

Table 4 exhibits the findings of the hypothesis tests. The results indicate that the financial attitude (FA) (b= 0.436; t=6.112, p=0.000), financial behaviour (FB) (b= 0.224; t=2.801, p=0.005), financial literacy (FL) (b= 0.197; t=2.440, p=0.015) have a significant role on financial inclusion. Therefore, since the p-values of all three variables are less than 5%, the decision of the three variables is supported, meaning that financial attitude (FA), financial behaviour (FB), and financial literacy (FL) significantly affect financial inclusion in Somalia.

Table 5 shows the structural model of the study. R-square shows how much the dependent variables are explained in the study's independent variable. Therefore, the R-square value is 0.418, which means that dependent variables explain 42% of the independent variables. The F-square value shows the level of effect of the dependent variable on independent variables. F2 has three categories: small effect (0.02), medium effect (0.15), and large effect (0.35). Table 5 also shows the Q-square, determining the model's predictive validity. The Q-square is 0.368, higher than the minimum criterion of 0.25. the VIF in the table indicates that the VIF of the three variables is less than 3, which means there is no significant collinearity of variables in the model.

Table 4: Findings of hypothesis tests

Hypothesis No	Relationship	Path coefficients	T statistics	P values	Decision
H1	FA -> FI	0.436	6.112	0.000	Supported
H2	FB -> FI	0.224	2.801	0.005	Supported
H3	FL-> FI	0.197	2.440	0.015	Supported

Table 5: Structural Model

Constructs	R-square	R-square adjusted	F-square	Q-square	VIF
FI	0.418	0.409		0.368	
FA			0.309		1.055
FB			0.043		2.018
FL			0.033		2.013

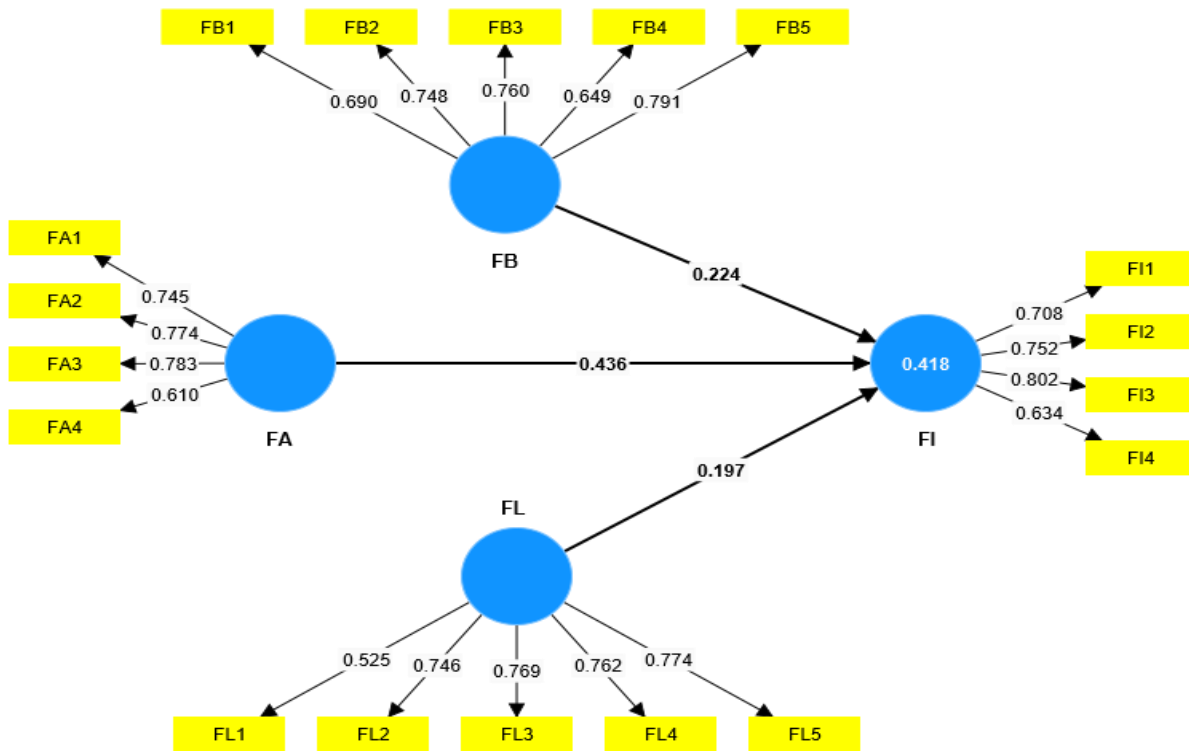


Figure 1: Measurement and structural models

DISCUSSION

The research aims to assess the influence of financial attitude, financial behaviour, and financial literacy on the extent of financial inclusion in Somalia. A total of 200 participants were collected and analyzed using SMAT-PLS software. The findings indicate that the first hypothesis establishes a significant connection between financial attitude and financial inclusion in Somalia. Hence, a rise in people possessing a favourable financial mindset is strongly linked to a parallel expansion in the variety and availability of financial services and products financial institutions provide. Abdul et al., (2023) have similarly found that financial mindset significantly impacted financial inclusion.

The second hypothesis suggests a strong correlation between significantly impacted financial behaviour and financial inclusion. An individual's good financial behaviour may lead them to use banking financial services. The same findings were also underscored by Sari et al. (2023). Their analysis shows that following timely saving and payment procedures has a substantial effect on improving financial inclusion.

Finally, the final hypothesis of the research establishes that financial literacy significantly impacts financial inclusion in Mogadishu, Somalia. Hence, a rise in people's knowledge of finances is closely linked to the increased involvement of financial institutions in the financial system. Therefore, financial knowledge is essential in improving financial inclusion in Somalia. Antony et al. (2021) found that having knowledge and comprehension of the financial sector substantially impacts the ability to access and engage in financial services. Individuals with more financial knowledge can use banks' services.

CONCLUSION AND RECOMMENDATIONS

Despite the security concerns faced by Somalia in the previous thirty years, the financial industry has made significant advances in the recent decade. The introduction of digital banking resulted in the country's currency not being issued since 1991. As a result, people rely on telephone banking and electronic banking platforms to carry out transactions and save money. Financial inclusion is crucial in attaining sustainable development objectives and facilitating individuals' access to financial institutions' services and products. To enhance the degree of financial inclusion among people, it is crucial to assess their financial literacy, behaviour, and attitude. The study's findings indicate a significant correlation between financial literacy, behaviour, attitudes, and financial inclusion in Somalia. This indicates that the individual has a comprehensive understanding of financial institutions and recognizes the significance of their services, as shown by their financial knowledge, attitude, and behaviour.

The study suggests that the Somali government should implement a comprehensive strategy to improve financial inclusion among the population. Financial institutions should play a pivotal role in encouraging individuals to use their goods through social awareness campaigns, advertisements, and seminars targeted at those with less knowledge about banking. Furthermore, it is crucial to evaluate the educational curriculum of schools and universities and include a fundamental section on financial literacy to

improve the knowledge of young individuals in utilizing the banks' financial services. The significance of this paper is that it provides the barriers to financial inclusion and the consideration of financial literacy, financial attitude and financial behaviour as helpful means to tackle the barriers to financial inclusion. Furthermore, the study helps Somali banks and policymakers understand the need to improve these factors. The study assists future researchers in using the study as a reference and developing the study in the future.

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