

Original Article

Examining the Impact of Digital Financial Literacy on Financial Inclusion and Financial Empowerment in India

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Abstract

Increasing digitalization of financial services in India has created new opportunities for access and convenience, yet many individuals are unable to fully benefit due to limited skills and awareness in navigating digital financial platforms. This gap highlights the need for deeper research on how digital financial literacy (DFL) shapes meaningful financial participation and personal financial agency. The purpose of the present study is to examine the influence of digital financial literacy on both financial inclusion and financial empowerment. The data was analyzed using Structural Equation Modeling (SEM) through Smart PLS. The findings reveal that higher levels of DFL significantly enhance influences financial inclusion and financial empowerment. The study suggests expanding targeted literacy initiatives and, for future research, examining demographic and regional differences to design more inclusive digital financial strategies.

Keywords: Digital Financial Literacy, Financial Inclusion, Structural Equation Modeling

Introduction

The rapidly increasing rate of digitalization has dramatically changed the financial systems across the globe and India has come out as one of the most vibrant testing grounds of the same. The spread of smart phones, growth in internet connectivity and the policy impetus in the form of Digital India and Jan Dhan Yojana has provided a ready-ground to digital financial inclusion (DFI). Nonetheless, the proliferation of digital financial services (DFS) by itself does not denote a substantial involvement. DFL, defined as the capacity of people to navigate, assess, and safely use the digital platforms, has become an essential factor in whether the inclusion brought about by technology will cause fair financial access (Ravikumar, Suresha, Prakash, Vazirani, and Krishna, 2022). With a big part of the population still exposed to the misinformation and cyber-fraud risks, and with the overall awareness of financial products being still limited in the Indian environment, the promotion of DFL is gradually becoming a key to the attainment of the greater aims of inclusive growth and sustainable development (Malladi, Soni, and Srinivasan, 2021).

1 Financial Inclusion and Digital Financial Literacy.

“Financial inclusion (FI) has been defined as the process of making financial products and services that are useful and affordable to all individuals and specially to underserved people.” Although digital solutions like “Unified Payments Interface (UPI), mobile banking, and microcredit platforms” based on fintech have increased access, the capacity to effectively use this service is mostly determined by the digital competency of users. The Indian empirical evidence shows that people with higher DFL have more fintech platforms adoption and are more regular in using formal financial intermediaries, including savings, insurance, and credit (Kumar, Murty, Ratna, and Ranjan, 2024). On the other hand, the shortage of DFL suppresses active participation, fixed traditional inequalities in gender, income, and education (Ravikumar et al., 2022). Therefore, building digital capacity by using focused educational and awareness campaigns has become a critical measure to turn financial access into sustainable inclusion.



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2 Digital Literacy is the Key to Economic Empowerment.

Besides increasing access, DFL empowers individuals with the power to make choices, risk and gain control over their financial circumstances. Empirical studies have found that an improved DFL has the effect of raising the financial confidence and decision making, particularly among women that translate to greater autonomy and financial security of the household (Mishra, Agarwal, Sharahiley, and Kandpal, 2024). More so, DFL enables the user to detect fraud and product comparisons, and also long-term financial planning - the outcomes of which are closely linked with empowerment and resilience (Malladi et al., 2021). Therefore, not just a technical capability, but a socio-economic change agent, a move in the gap between access and actual empowerment, is DFL is. Policy guidelines, education systems, and even in community-based efforts can thus take the center stage in ensuring inclusive and sustainable financial ecosystems in India by inclusion of DFL in these policy guidelines.

Review of Literature

1. **Showkat, M., Nagina, R., et al. (2025)** investigated in their research study the effect of financial literacy (FL) over the financial empowerment (FE) of women, especially with the use of DFS. The research examines the manner in which improvement in FL enhances the engagement of women through digital financial platforms, and facilitates their financial participation. The findings derived from the research indicates amplification of FL significantly to promote the financial empowerment of women.
2. **Paul, S., Majumder, S., et al. (2025)** highlighted in their research about investigating the important role of digital financial skills and FL to empower women and to promote FI in India. The findings derived from the research indicates significant positive correlation among digital financial skills, financial literacy, and FE of women. Women having higher digital financial skills and FL are likely to use more of the DFS, that increases their decision-making autonomy as well as economic opportunities.
3. **Al-Shami, S., Damayanti, R., et al. (2024)** described in their research study about investigating the relation among DFL, FL, and FI within batik SMEs as well as examining moderating impact of online social networks. The findings derived from the research indicates role of DFL and FL to be significant to assess FI for batik SMEs.
4. **Salman, M., Rauf, N., et al. (2024)** examined in their research about investigating the relation among using digital wallets and FI and FE in rural areas of Pakistan. The findings derived from the research indicates development of financial infrastructure moderate the impact with goes with using digital wallets in favourable manner in terms of financial inclusion, and negatively with respect to FE.
5. **Shen, Y., Hu, W., et al. (2018)** analysed in their research study about the impact of FL on FI. The study applies the technique of Partial Least Square (PLS) for estimating formative model that helps in analyzing the impact of FL, usage of digital financial products, usage of internet on FI in China. The findings derived from the research indicates usage of DFP and FL both have a favourable relation with FI. On the other hand, usage of DFP acts as a mediator between FI and FL.
6. **Grohmann, A., Klühs, T., et al. (2018)** conveyed in their research study about the impact of FL on FI at cross-country level, that allow the researchers for considering institutional variance. The findings derived from the research indicates impact of higher FL strengthen the impact of a deeper FI.

Objectives of the Study:

1. To examine the impact of Digital Financial Literacy on Financial Inclusion.
2. To evaluate the impact of Digital Financial Literacy on Financial Empowerment.

Hypothesis

H₁: Digital Financial Literacy has a significant positive impact on Financial Inclusion.

H₂: Digital Financial Literacy has a significant positive impact on Financial Empowerment.

Research Methodology

A Structural Equation Modeling (SEM) was used in the current research and Smart PLS (Partial Least Squares) software was used to analyze the data. The use of an online Google Form survey was used to collect the data by a structured questionnaire from 175 respondents. The participants were chosen using a non-random purposive sampling approach. The suggested model included 11 measured variables and 3 latent constructs. "The study was performed at the significance level of 5 percent, and the expected effect size of 0.3 and a statistical power of 0.9, which means that the minimum required sample size was 153 respondents. Both primary and secondary sources of data were used." The next section provides the test results of the measurement model that evaluates the impact of the DFL on the levels of financial inclusion and financial empowerment.

Data Analysis and Interpretation

Table No: 1 Reliability and validity

Construct	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Digital financial literacy	0.793	0.795	0.565
Financial inclusion	0.861	0.860	0.607
Financial empowerment	0.875	0.875	0.637

The findings indicate a high level of “reliability and validity” of all constructs. The values of “Cronbach Alpha and Composite Reliability” are more than 0.70 and they support good internal consistencies. The value of AVE is above 0.50 indicating that there is sufficient convergent validity. All in all, the measurement model is reliable and valid.

Table No: 2 Discriminant validity

Construct	DFL	FI	FE
Digital financial literacy (DFL)	0.752		
Financial Inclusion (FI)	0.743	0.779	
Financial Empowerment (FE)	0.722	0.756	0.798

“Discriminant validity results reveal that all the constructs are different.” The AVE values (horizontal) have a square root which is greater than their respective inter-construct correlations, which is a validation that “Digital Financial Literacy, Financial Inclusion, and Financial Empowerment” are distinctly measured and depict a high level of discriminant validity.

Figure No: 1 SEM model

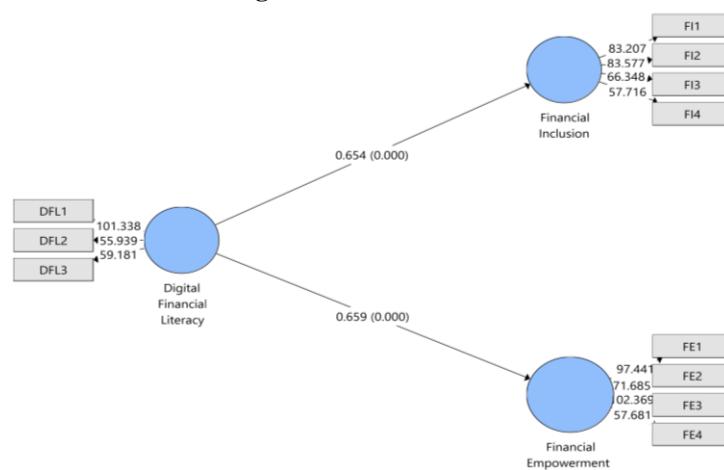


Table No: 3 Hypothesis testing

Path	Beta Coefficient	T-statistics	P-Value
Digital financial literacy → Financial inclusion	0.654	30.922	0.000
Digital financial literacy → Financial empowerment	0.659	30.096	0.000

The hypothesis testing results show that DFL has a positive and statistically significant impact on both FI ($\beta = 0.654$, $p = 0.000$) and FE ($\beta = 0.659$, $p = 0.000$). The high T-statistics confirm strong support for both hypotheses, indicating that higher DFL leads to improved FI and FE.

Conclusion

The study found that Digital financial literacy is a strong factor contributing to the process of financial inclusion and financial empowerment of the Indian population. Individuals with stronger digital financial resources will have an enhanced opportunity to access, utilize, and benefit the formal financial services, which subsequently enhance their financial health and autonomy. The fact that the positive associations were substantial indicates a lack of support and positive influence of literacy in digital finance on the inclusive economic engagement. Digital financial literacy will seal socio-economic disparities, endorse accountable monetary behavior and contribute worth to the overall aim of sustainable and equitable financial expansion.

Suggestions

The government agencies and financial institutions may develop and undertake local training initiatives that aim at increasing Digital financial literacy to the under-served population of women, rural dwellers, and low-income earners. These efforts will be able to improve the knowledge of the users in digital platforms, which will result in increased inclusion and empowerment. Policymakers can take into consideration the introduction of incentive-based programs to digitally literate individuals and institutions that are active in the promotion of Digital financial literacy programs. These are only some of the measures that can be taken to encourage more people to participate and make sure that digital transformation does not go to waste, but serves every population group. Since Digital financial literacy gains a high empowering advantage particularly among women, special initiatives like, digital finance mentorship, SHG based training and micro-credit awareness campaigns could be promoted. Digitally empowering women is not only a way of increasing individual financial independence, but also a way to achieve an inclusive economic growth.

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