

From Knowledge to Empowerment: How Financial Literacy and Digital Financial Services Drive Women's Economic Agency

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Abstract

The autonomy of women and strengthening their economic agency is essential towards inclusive economic growth. Women's economic Autonomy can be enhanced by a number of factors and dynamics. The current research seeks to assess how financial literacy (FL) and digital financial services (DFS) impact women's economic autonomy. The responses were collected from 250 women respondents through a structured questionnaire. According to the findings, women's economic agency is significantly influenced by in the FL and DFS positively. Access to DFS has emerged as a strong predictor of women's economic agency. It suggests that women's economic agency is enhanced by FL and DFS. As per study FL and DFS strengthen economic autonomy of women. By enhancing the participation of women in economic actions, it also improves financial independence.

Keywords: Financial Literacy, Digital Financial Services, Women's Economic Agency, Financial Inclusion, Women's Empowerment, Economic Decision-Making, Digital Finance.

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Introduction

In developing and emerging countries, the pursuit of sustainable growth and gender equality essentially requires economic inclusion as a policy goal. Over the years, with the advancement of the financial system and digital technologies, women still face structural limitations posed by institutions in accessing financial resources, participating in economic activities, and exercising control over the economic and financial decisions of the households. According to Kabeer (1999) Financial literacy (FL) and digital financial services (DFS) are two powerful tools enhancing economic agency.

It refers to the knowledge and behaviour that enables sound financial decision making regarding saving, borrowing, investing and the management of risk (Lusardi & Mitchell, 2014). A number of studies have shown that financially literate individuals engage in financial planning, accumulate wealth, and improve their financial wellness (Atkinson & Messy, 2012). The researchers explain that improvements are actual results achieved. These improve financial independence, confidence and entrepreneurship among women (Hasler & Lusardi, 2017).

The combination of FL and DFS has a huge potential for women autonomy. Women who are financially literate can make better use of DFS; at the same time, DFS offer real opportunities for women to make use of their FL (Morgan et al., 2019). Recent studies show that mobile money use by a woman facilitates the development of entrepreneurship, earnings, savings and women's decision making power in her household (Suri & Jack, 2016; Ghosh & Vinod, 2017).

Despite global progress, gender gaps in FI remain persistent. Women are falling behind men in holding any form of financial account, borrowing from any financial institution or using any DFS. Most of these gender gaps are found in the under developed countries as socio-cultural norms, lack of education and access to technology limits their inclusion in the formal financial system (Klapper et al., 2015).

Women being financially excluded in different part of the world, some changes are happening with the process of digitisation. With digital technologies gaining steam, new capabilities are being made possible. Women, especially rural women and marginalised ones, can get autonomy through mobile money (Suri & Jack, 2016), digital payment

ecosystem and fintech innovation. It will make financial services more accessible to them. Likewise, women have a better say in their own finances and less power asymmetry with the use of digital.

FL and digital finance are getting due attention of scholars in recent times. However, we do not have a clear understanding of how they simultaneously impact women's economic autonomy. FL and digital inclusion (DI) have been studied in isolation but a few research papers analyze how both affect women autonomy outcomes. Policymakers, financial institutions, development agencies, and other stakeholders require this understanding.

The study seeks to evaluate the FL and DFS to enhance women's economic agency. The study was grounded in financial capability theory, DI, and women autonomy. The research paper demonstrates the credit of women economic autonomy through the analysis of findings.

Literature Review

The economic agency has become a popular idea in the discourse of gender autonomy and inclusive development. Economic agency refers to taking economic decisions and utilising resources for well-laid strategies. Kabeer (1999) opines that women's economic agency refers to their capacity to utilize economic resources for their benefit. Scholars are increasingly recognizing that FL and DFI are important economic enablers that foster economic agency.

As per Lusardi and Mitchell (2014), one of the most important life skills (needed to function in society) today is FL. Through their studies, we note that people with a greater understanding of finance display better financial behaviour. For example, budgets are made, savings are made, and a plan is made for investment. It helps achieve economic self-sufficiency in addition to long-term financial security.

The study carried out by Hasler and Lusardi (2017) assessed the impact of FL on FI in the developing world. According to them, there is effect of FL on formal financial products use probability and participation in financial services. For example, with sufficient financial knowledge, women were more likely to save formally, opt for a loan and plan their finances.

According to the results of Klapper et al. (2015), there are large gender gaps in a global study of FL. In addition, they argued that poor FL prevents women from participating in the formal financial

sector, limiting them in making economic decisions.

Due to the pestering of DFS, FI is becoming a powerful driver. The study of Suri and Jack (2016) as a natural experiment investigates the role of mobile money providers in Kenya. Their findings reveal that availability to a digital currency platform significantly boosts household consumption, lifts citizens out of poverty, and increases ladies economic participation. Data suggests that women who access mobile financial services begin to shift towards business or self-platform livelihood strategies.

Ghosh and Vinod (2017) studied initiatives for FI in India. They noticed the use of digital banking technologies improved access for women to savings accounts, credits and financial information. According to the findings, DF can have a positive impact on women's autonomy.

According to Ozili (2018), a review of the new literature on DF which is emerging, holds that DFS are improving access to finance, efficiency as well as cost. The development of fintech can close the financial gap of women with various opportunities.

Morgan et al. (2019) digital FL-study states that financial knowledge is vital for using digital financial technologies. The meaning of this study was that in order to obtain maximum returns from using DFS, a person must already be financially literate.

A study of Bongomin et al. (2017) showed FL and FI of the vulnerable. The results suggest that financial knowledge positively impacts the FI of women entrepreneurs and low-income individuals.

Riley (2018) examined FL for women and provided convincing evidence that women's savings behaviour, confidence and managing of household finances has improved from the present situation.

Van et al. (2019) studied the adoption of mobile banking. ICT-based financial services can at least ensure the financial participation of excluded populations on a larger scale, research finds. The female users experienced greater levels of ease and safety.

According to a study by Kunt et al. (2022), DFI is emerging as a vital engine of global economic development. Furthermore, as per their findings the digital payment systems are playing an important role.

Grohmann et al, (2018) in their empirical study uncovered that people with FL are using more formal financial services. Those who frequently access formal financial services and effectively use them tend to be more financially literate.

According to the study by Lyons et al (2021), women and members of marginalized communities in developing economies gained new economic opportunities owing to DFI. This study also advocated for infrastructure along with financial education.

According to Nanziri and Leibbrandt (2018), a woman's financial capability helps improve her household bargaining power. Therefore, we state a third proposition that further strengthens the second proposition. It once again unites FL with access to financial services.

FL and DF delivery can enhance economic autonomy of women, a new study says. To put it another way, FL helps women make sound economic decisions. However, DFS give them inexpensive means to do so. However, we need more empirical evidence about the joint effect of these two on the economic agency of women in varying socio-economic situations.

Objectives:

1. To investigate the role of FL in women's economic autonomy.
2. The effects of DFS on women's economic autonomy will be examined.
3. To analyse the association among FL and women's economic agency in India.

Methodology:

To achieve the objectives of the study a more quantitative research design was used. The data were collected from women respondents to assess the impact of FL and DFS on the economic agency of women. Women respondents were selected through convenience sampling method in study. A sum of 250 women respondents were chosen using the convenience sampling. Additionally, the researcher drafted the inquiries in a manner reminiscent of the manner in which the women respondents evaluated usage of DFS and answered the questions regarding the economic agency of chosen women respondents. The queries connected to.

Result and Analysis

Using statistical data with correlation and multiple regression test, this research identifies how far the impact of FL and DFS towards women's economic agency. Altogether 250 valid responses

were there. Consequently, the findings show how the variables are related and the extent to which FL and DFS empower women economically.

Table 1: Descriptive Statistics of Study Variables

Variables	Mean	Standard Deviation
Financial Literacy	3.98	0.68
Digital Financial Services Usage	4.12	0.72
Women's Economic Agency	4.05	0.64

The overall average score assessment of FL was 3.98, which indicates that FL of faculties is high. The highest mean value of 4.12 has been recorded for the use of various DFS. It points out that the staff members frequently utilized various financial services and applications such as digital payment apps and mobile banking. The average score for female economic agency is 4.05. It indicates that faculties possess a significant capacity for involvement in economic decision-making and financial administration. The standard deviation is in the range, which shows some variability in the responses.

Table 2: Correlation Analysis

Variables	Financial Literacy	Digital Financial Services	Women's Economic Agency
Financial Literacy	1.000	0.612**	0.721**
Digital Financial Services	0.612**	1.000	0.684**
Women's Economic Agency	0.721**	0.684**	1.000

p < 0.01

The correlation analysis indicates a strong positive FL correlation to women economic agency (r=0.721, p<0.01). Women economic agency does show a significant positive relationship with DFS (r= 0.684, p<0.01). As well as that, FL and DFS has positive correlation (r= 0.612, p< 0.01).

Table 3: Multiple Regression Analysis

Dependent Variable: Women's Economic Agency

Variables	Beta Coefficient	t-value	Sig.
Financial Literacy	0.482	8.965	0.000
Digital Financial Services	0.391	7.214	0.000
Constant	0.856	3.128	0.002

Model Summary	Value
R	0.812
R ²	0.659
Adjusted R ²	0.653
F-value	238.614
Significance	0.000

The regression model explains 65.9% of the variation in women economic agency ($R^2 = 0.659$), showing a strong prediction power. The strongest predictor turned out to be FL ($\beta = 0.482$; $p < 0.001$) followed closely by DFS ($\beta = 0.391$; $p < 0.001$). Thus, the high significant F-value also confirms the overall fitness of the model. Services Impact on Women Economic Uses both Digital FL Service

Table 4: Hypothesis Testing

Hypothesis	Statement	p-value	Result
H01	Financial literacy has no significant impact on women's economic agency.	0.000	Rejected
H02	Digital financial services have no significant impact on women's economic agency.	0.000	Rejected
H03	There is no significant relationship between financial literacy, digital financial services, and women's economic agency.	0.000	Rejected

The first hypothesis is rejected since FL has a significant effect on the economic agency of women, $p < 0.001$. Women who possess greater financial knowledge have more confidence in their financial assessments, investment decisions, and participation in economic decisions. The second hypothesis was disproved with evidence suggesting that DFS positively influence the economic agency of women with a significance level of $p < 0.001$. Access to DF platforms enables easy access to financial services and increasing FI. It also enables women to manage their finances and make economic decisions independently. Hypothesis three was rejected as it was found that FL and DFS had a significantly positive relationship on the economic agency of women. The study's results prove that FL and DFI offer women power to make choices at an economical level.

Discussion

Study findings conclude that FL and DFS significantly enhance women's economic agency status for economic autonomy. The findings of the descriptive analysis indicate that the FL, use of DFS, and economic agency of the respondents

were at a relatively high level. It indicates a growing awareness and participation of women in financial activities.

The correlation analysis suggests there are strong positive relationships amongst the study variables. FL correlates with women's economic agency which suggests that women's economic agency is most related with financial knowledge. Women who are more financially knowledgeable about budgeting, saving, borrowing, and investment opportunities are in a better position to manage financial resources and have greater control over their life circumstances.

Women have the power to access DFS due to their widespread use. The study revealed that services offered by digital financial institutions empower women economically. Digital financial technologies enable women to make transactions independently at their convenience while providing more security, thus empowering them to engage more in the economy.

According to the regression analysis, FL is said to be the most significant predictor of women economic agency followed by DFS. To put it differently, though being able to access technology is important, the capacity to understand and make effective use of financial information will remain an important determinant of economic autonomy. Women who are knowledgeable about financial matters are likely to leverage digital financial tools to save, invest, become entrepreneurs and earn money.

According to the results, there is a complementary relationship between FL and DFS. The financial knowledge gained is best utilized in the digital world. On the other hand, financial skills can also be applied in everyday economic life through DFS. When women experience the support offered by their family members, they can achieve financial independence. It enables them to make individual economic decisions.

All in all, the paper adds to the increasing literature on women autonomy. It highlights that FL and DFI enhance economic agency. Economic agency is the most important component for economic autonomy. The results indicate that we need to design an integrated program that will improve financial addition along with its use. Integrated programs can help in the quest for inclusive growth with greater participation of females in the economy.

Conclusion

According to the study FL and DFS as Determinants of Women's Economic Agency, FL and DFS have been found to be important determinants of women's economic agency. Women who are more financially literate and have better access to DFS have higher economic agency and independence, according to a study. They also participate more economically. Whereas the significant enabler for promoting FI and enhancement is DFS, the strongest predictor of economic agency is found to be FL. Similarly, the study outlines how a combination of FL and access to DFS allows women to have higher agency over their financial decision-making and increased economic position in the household and society.

Recommendations

Developing a well-designed FL plan for women from different backgrounds will require government, financial institutions and development agencies. In addition, the government must make efforts to enhance the digital financial infrastructure and also enhance access to low-cost easy-to-use DFS. This is important especially for people living in rural areas and underprivileged households. In order to help women enter into the formal FS, FIs must work to create DFPs that will meet the needs of women. The economic autonomy of women ensures sustainable and inclusive economic growth. Women and other vulnerable groups must participate in the benefits of digitalisation. Awareness campaigns and digital skills development, along with policy interventions to create gender-inclusive financial ecosystems, can go a long way in helping women.

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