Saud: The Journal of Commerce, Management and Economics, Vol.2 (2026), 25-34

Digital Financial Literacy and Financial Well-Being: A Study on Karbi Women of West Karbi Anglong District of Assam

Rimbiso Terangpi[1]
Assistant Professor, Department of Economics, Kaliabor College

ARTICLE INFO

Article History:
Received *20 February 2026*
Received in revised form
21 May 2026
Accepted *29 May 2026*

Keywords
Financial Inclusion
Financial Literacy
Financial Well-being
Digital Financial Services
Women

ABSTRACT

In the modern digital era, the concept of Financial Literacy has evolved from the conventional concept of money management to encompass digital financial literacy. Financial literacy in light of digital financial services has become increasingly important as the reliance on digital mode of transactions continues to increase. Digitization of financial services is often viewed as a major driver in the economic empowerment of women, as well as in achieving sustainable growth as it lowers the costs, provides more convenient and quicker transaction, provides greater access to large masses and removes physical infrastructure obstacles. Digital financial literacy enables individuals to adopt sound financial behaviors which ultimately lead to their financial well-being. This paper attempts to examine the impact of Digital Financial Literacy on the financial well-being of Karbi women in West Karbi Anglong district of Assam. The study was conducted using a descriptive research design. Convenience sampling method was employed for the study. Survey method was adopted and well-structured questionnaire was circulated among 81 respondents. The data was analyzed using descriptive statistics and regression model.

1. Introduction

In the modern digital era, the concept of Financial Literacy has evolved from the conventional concept of money management to encompass digital financial literacy. Financial literacy in light of digital financial services has become increasingly important as the reliance on digital mode of transactions continues to increase. Digital Financial Services (DFS) refers to the services provided through digital technologies such

[1] *E-mail Address:* rimbisoterangpi@gmail.com (R. Terangpi)
Published by CKB Commerce College, Jorhat.
This article is under the CC-BY-NC-ND licences (http://creativecommons.org/licenses/by-nc-nd/4.0/)

as mobile banking, e-money, branchless banking, online financial platforms and i-tellers, offered by both bank and non-bank institutions (OECD, 2017). The digitization of the financial services and products has made significant contribution in securing the financial system by improving the decision-making capabilities, ultimately leading to one's financial well-being (Azeez & Akhtar, 2021). DFS provides access to banking and financial services for the unbanked and the underserved population which increases the inclusion of individuals in the financial system by (OECD, 2017). DFS is often viewed as a major driver in the economic empowerment of women, farmers as well as in achieving sustainable growth as it lowers the costs, provides more convenient and quicker transaction, provides greater access to large masses and removes physical infrastructure obstacles (World Bank Development Research Group, 2014). Digital Financial Literacy (DFL) increases women's participation in the digital economy and promotes their inclusion in the financial system (Mishra *et al.*, 2024). DFL is often associated with positive financial behaviours, more adoption of and greater understanding of DFS and improved financial well-being. (Choung *et al.*, 2023). Individuals who are financially sound tend to adopt sound financial practices, utilize financial services, which eventually help in achieving higher levels of financial well-being. This very notion is the basis for establishing an association between financial literacy and financial well-being.

However, even though DFS are becoming widely available, many women still face challenges in accessing and effectively utilizing these instruments. Research have shown that women have less access to technology and are less informed bout financial matters compared to men. A study conducted by GSMA reported that approximately 1.7 billion of the population in underdeveloped and developing countries that lack access to mobile phones were women thereby indicating a gender gap in access to digital tools (GSMA, 2015). Studies also show that women encounter other social, economic, political and cultural barriers that restrict their access and use of DFS. Addressing these disparities is vital to increase the use of DFS among women.

This paper aims to explore the intersection between DFL and financial well-being of women giving focus on understanding the challenges faced by women in utilizing DFS.

2. Objectives

The objective of the study is as follows:

i. To determine the level of digital financial literacy among Karbi women.
ii. To examine the impact of digital financial literacy on their financial well-being.

3. Literature Review

Lyons & Kass-Hanna (2021) conducted a systematic literature review to define and measure DFL. They stated that properly defining DFL will help in exploring the link between DFL and financial inclusion as well as FWB. They reported that DFL comprises of 5 essential elements: fundamental understanding and abilities, awareness, practical know-how, decision making and ability to protect oneself. Golden & Cordie

(2022) provided a brief overview of DFL in their study and reported that DFL enables an individual to opt for better financial choices by helping them acquire the necessary understanding and skills. They also stressed upon the importance of financial training program for adults which will enable them to improve their financial status.

Kumar *et al.* (2023) conducted a study to explore the impact of how DFL, financial independence, financial skill and impulsivity affect FWB among people in Delhi using PLS structural equation modelling. They found that skills and independence have a positive influence on FWB while impulsivity has no significant influence on FWB. They also stated that financial awareness, budgeting skills and analytical abilities are essential for understanding digital products and services. Dimova *et al*. (2021) stated that an individual must have the know-how, mindset and competencies to be digitally and financially capable which enables them to effectively utilize digital financial services. Kim *et al.* (2003) tried to investigate the association between financial shocks, financial strain, financial behaviour and financial WB in their study. They found that an individual's financial well-being depends on their personal characteristics, financial behaviours and events causing financial stress.

CFPB (2015) defined financial well-being is the capacity to fulfil one's current as well as future liabilities, feel protected about their future and make informed choices that contributes to a fulfilling life. Bruggen *et al.* (2017) in their study aimed to define FWB, provide a comprehensive structure and suggest research strategy. They described it as the perceived ability to sustain desired quality of life and financial independence both in the present and future times. Suri & Jack (2016) reported that access to e-money has proven significant in improving the lives of impoverished women and members of female-headed households in Kenya, lifting around 194,000 households out of poverty. E-money has enabled women to become financially resilient by increasing their saving practices.

Gosal & Nainggolan (2023) conducted a study to analyse how DFL shapes the financial behaviour of SMEs owners in Indonesia using Partial Least Square Structural Equation Model. It was found that DFL enables individuals to effectively manage unforeseen economic conditions and future financial planning which leads to a favourable financial well-being. Rahayu *et al.* (2023) found that DFL positively influences control over income and spending as well as financial well-being which ultimately uplifts the economic status of women in West Sumatera, Indonesia. The study also found that DFL had a stronger effect on the economic empowerment of women compared to FL. Choung *et al.* (2023) attempted to study the link between DFL and financial behaviour among Korean adults aged between 25 to 59 years and reported that financial knowledge and the ability to prevent financial fraud are the major factors that associate DFL with financial well-being. A DF literate tends to save more and avoids engaging in risky financial ventures. Khare *et al.* (2024) stated that DFL increases the financial autonomy among women, improves their ability to make wise decisions and enhances their position in the society, which ultimately leads to their empowerment.

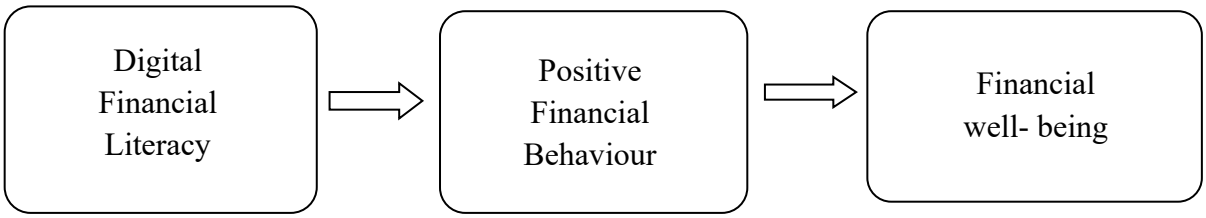


Figure 1: Conceptual framework of Digital Financial Literacy and Financial well-being.

Source: Compiled by the Author

4. Methodology

Sample for the study: The study adopted both qualitative and quantitative research design to assess the level of digital financial literacy among Karbi women in West Karbi Anglong district. The sampling technique employed was convenience sampling method. Primary data was collected through survey method from 81 respondents with the help of a structured questionnaire. The questionnaire was prepared based on the OECD/INFE survey toolkit. Secondary data was collected from various research articles, journals and reports.

Variables: The study uses Digital financial literacy as independent variable and financial well-being as a dependent variable in order to examine the impact of Digital Financial Literacy on Financial well-being. DFL has been measured using six indicators. To measure FWB, an index has been formulated by using four indicators. In order to calculate the index Principal Component Analysis (PCA) has been formulated

Table 1: Description of variables

Variable Type	Variable Name	Abbreviation
Dependent	Financial well-being	FWB
Independent	Frequency of internet usage	VAR 1
	Knowledge of financial concepts	VAR 2
	Use of online payment system	VAR 3
	Ability to solve digital errors	VAR 4
	Financial fraud victim	VAR 5
	Ability to protect from financial fraud	VAR 6

Source: Compiled by the Author

Regression analysis was employed to examine the impact of DFL on FWB. The following regression model was estimated-

$$FWBi = \beta_0 + \beta_1 VAR\ 1_i + \beta_2 VAR\ 2_i + \beta_3\ VAR\ 3_i + \beta_4\ VAR\ 4_i + \beta_5\ VAR\ 5_i + \beta_6\ VAR\ 6_i + \varepsilon$$

where,

$FWBi$ = Financial wellbeing of respondent i.

$VAR\ 1_i, \beta_2 VAR\ 2_i, \beta_3\ VAR\ 3_i, \beta_4\ VAR\ 4_i, \beta_5\ VAR\ 5_i, \beta_6\ VAR\ 6_i$=six dimensions of DFL

β_1 *to* β_6 = regression coefficient, β_0=constant intercept, ε= error term

5. Discussion and Analysis

Table 2: Demographic Profile

Demographic Variables	Category	Frequency	Percentage
Age	18-25 Years	29	35.8%
	26-35 Years	33	40.7%
	36-45 Years	10	12.3%
	46-55 Years	8	9.9%
	56 and above Years	1	1.2%
Marital status	Married	51	62.96%
	Unmarried	29	35.8%
	Separated	0	0
	Widowed	1	1.2%
Educational Qualification	Illiterate	5	6.17%
	Under Matriculation	9	11.11%
	HSLC	14	17.28%
	HS	18	22.22%
	Under Graduate	16	19.75%
	Post Graduate	19	23.45%
Occupation	Unemployed	8	9.87%
	Homemaker	26	32.09%
	Government-sector Employee	10	12.34%
	Private-sector Employee	8	9.87%
	Self-employed	19	23.45%
	Student	10	12.34%
Annual household income	Less than 50,000	46	56.79%
	50,000-1,00,000	11	13.58%
	1,00,000-2,00,000	9	11.11%
	More than 2,00,000	15	18.51%

Source: Computed from Author's field survey

The demographic profile of the respondents shows that majority of the respondents i.e. 40.7% fall in the age group of 26-35 years while only 1% falls in the category of 56 years and above. Regarding the marital status, 62.96% were married, 35.8% were unmarried and 1.2% was widowed. None of the respondents were separated. Regarding their educational qualification, 6.17% of the respondents were illiterate, 11.11% were under matriculate, 17.28% completed their HSLC, 22.2% were Higher Secondary passed, and 19.75% were graduate while 23.45% were post graduate. As far as the occupation was concerned, majority of the respondents were homemaker (32.09%), 23.45% were self-employed, 12.34% were students, 12.34% were employed in the Government sector, 9.87% were private sector employee and 9.87% of the respondents were unemployed. Regarding their annual household income, 56.79% have income less than 50,000, 13.58% have income between the ranges of 50,000-1,00,000, 11.1% have income between the ranges of 1,00,000-2,00,000 and 18.51% of the respondents have income above 2,00,000.

Table 3: Digital Financial Literacy

Variables	Category	Frequency	Percentage
How often do you use the internet?	Daily	65	80.24%
	Weekly	2	2.5%
	Rarely	2	2.5%
	Never	12	14.8%
Are you familiar with these concepts-	Interest rates	22	27.2%
	Insurance	43	53.1%
	Investment	33	40.7%
	Saving	55	67.9%
Do you use online payment system?	Yes	57	70.37%
	No	24	29.62%
Can you solve the errors that may happen while using online payment system?	Yes	24	29.62%
	No	57	70.3%
Have you ever been a victim of online fraud?	Yes	5	6.17%
	No	76	93.82%
Do you know whom to contact in case of digital fraud?	Yes	31	38.27%
	No	50	61.72%

Source: Computed from Author's field survey

From the study, it was found that 80.24% of the respondents use the internet daily and 14.8% of them do not use the internet at all. The study reported that majority of the respondents i.e. 67.9% are familiar with the concept of savings, 53.1% are aware of insurance, 40.7% of them are familiar with the concept of investment and only 27.2% of the respondents are familiar with interest rate. When asked about the use of online payment system, a majority i.e. 70.37% of the respondents revealed that they use it while, 29.62% of the respondents revealed that they do not use online payment system. 29.62% of the respondents revealed that they can solve the errors that can occur during online transactions, whereas 70.3% of them revealed that they cannot solve the errors themselves and need external help. It was found that 6.17% of the respondents have been a victim of online fraud. The study also revealed that 38.27% of the respondents know who to contact in case of digital fraud, while 61.72% of them do not.

Table 3.1: Descriptive statistics of DFL scores

	Mean	Std. dev.	Min.	Max
DFL	6.691	2.421	2	11
VAR 1	2.481	1.096	0	3
VAR 2	1.9	1.24	1	4
VAR 3	0.703	0.459	0	1
VAR 4	0.296	0.459	0	1
VAR 5	0.938	0.242	0	1
VAR 6	0.382	0.489	0	1

Source: Computed from Author's field survey

The findings reveal that average DFL Score stood at 6.691 out of a total of 11 points which constitutes of 60.82% of the total maximum score. This indicates that the level of DFL among women respondents is moderate. The standard deviation of 2.421 indicates that notable variation in DFL levels exists across respondents.

Table 3.2: Frequency analysis of DFL levels

DFL Level	Range of Score	No. of respondent	Percentage
Low	DFL≤ Mean – SD	11	13.58%
Medium	DFL=(Mean-SD) to (Mean + SD)	58	71.60%
High	DFL≥ (Mean + SD)	12	14.81%

Source: Computed from Author's field survey

The results show that majority of the respondents i.e. 71.60% have moderate level of DFL indicating that they possess basic knowledge regarding digital financial services but may lack advanced DFL skills such as the ability to protect oneself from online frauds and scams. Only 14.81% of the respondents have high DFL which indicates that a relatively small percentage of the respondents have knowledge and the skill to use DFS effectively. A notable portion of the population i.e. 13.58% were found to have low levels of DFL which indicates that people are still unaware of the basic concepts of DFL and hence emphasis should be to adopt necessary measures to improve the levels of DFL.

Table 4: Level of Financial Well-being

Variables	Category	Frequency	Percentage
Do you keep household budget?	Yes	56	69.13%
	No	25	30.86%
Do you save money for future emergencies?	Yes	65	80.2%
	No	16	19.8%
Do you manage your monthly finances without borrowing money?	Yes	41	50.6%
	No	40	49.4%
Do you borrow money to pay off your debts?	Yes	49	60.49%
	No	32	39.50%

Source: Computed from Author's field survey

The study shows that 69.13% of the respondents run their household on a monthly budget. A majority of the respondents (80.2%) save money for future emergencies while 19.8% do not save. In terms of borrowing money for managing monthly finances, it was found that 50.6% of the respondents borrowed money and 49.4% of them manage their monthly household expenditures without borrowing money. It is seen that 60.49% of the respondents borrow money to pay off their debts, while 39.50% do not.

6. Digital Financial Literacy and Financial Well-Being

Table 5: Correlation matrix

	FWB	VAR 1	VAR 2	VAR 3	VAR 4	VAR 5	VAR 6
FWB	1						
VAR 1	0.424	1					
VAR 2	0.2176	0.0671	1				
VAR 3	0.6886	0.6587	0.1602	1			
VAR 4	0.1354	0.1847	0.2112	0.3618	1		
VAR 5	0.1414	-0.122	-0.0645	-0.1664	-0.1706	1	
VAR 6	0.1146	0.2115	0.2965	0.3441	0.6016	-0.2202	1

Source: Compiled by the Author

Pair wise correlation degree is less than 0.8 in all the cases as shown in Table 5. Therefore, the data set is suitable for further regression analysis due to the absence of positive multicollinearity.

Table 6: Impact of DFL on FWB

DFL	Coefficient	Std. err.	t
VAR 1	-0.0535	0.116	-0.46
VAR 2	0.155***	0.080	1.92
VAR 3	2.187*	0.296	7.39
VAR 4	-0.215	0.267	-0.8
VAR 5	1.272*	0.407	3.12
VAR 6	-0.242	0.256	-0.95
_cons	-2.738	0.495	-5.53

Note: * and *** indicate statistical significance at 1 and 10 % respectively

Source: Compiled by the Author

Table 6 presents the regression results for DFL and FWB. It can be observed that out of the six variables of DFL, usage of online payment system has the strongest positive impact on FWB at 1% level of significance. A one unit increase in the use of online payment system leads to a 2.18 unit increase in FWB. With respect to the knowledge of financial concept, it is found that knowledge of basic financial concepts has a positive relationship with FWB and is significant at 10% level indicating that a one unit increase in the knowledge of financial knowledge increases FWB by 0.16 units. The relationship between other domains of DFL (internet usage, ability to solve errors and ability to protect oneself from online fraud) and FWB is insignificant and does not impact one another.

7. Conclusion

In today's technological age, DFL plays a crucial role in improving the overall financial well-being of an individual. Owing to its ability to reach wider audience, low transaction cost and faster transaction, DFL significantly contributes to advancing financial inclusion. Digital financial literacy can help in financially including the unbanked and the marginalized section of the society, particularly women. DFL enables

women to use DFS more effectively and efficiently. It ensures that they take active part in the financial system and adopt positive financial behaviours.

This study attempted to find the relationship between DFL and FWB among Karbi women. The results demonstrate that there is a positive relationship between DFL and FWB and this association is attributable to usage of online payment system and knowledge of financial concept. Other dimensions of DFL showed no significant impact on FWB.

The findings of the paper provide the following policy implications. Firstly, the study suggests that policymakers and educators should focus on improving DFL and more awareness and counselling programs should be undertaken to educate women to better understand the risk and return of various types of digital financial services. Financial institutions should provide basic DFL training programs and workshops that will help women to make informed financial decisions in the digital setup. Awareness campaign should be launched on cybersecurity and fraud prevention to help women adopt safe financial practices. Easy-to-use digital platforms along with proper learning resources can help women adopt technology efficiently which will lead to positive financial behaviours.

However, despite its practical implications, the study has certain limitations with the relatively small sample size being the significant one. Although the findings provide preliminary insights regarding DFL and its impact on FWB among the Karbi women in an under-explored area such as West Karbi Anglong, the generalizability of the results may be constrained by the small sample size. The sample was selected to fulfil the requirements of preliminary evidence generation with the aim of identifying key variables for further research.

References

Azeez, N.P.A., & Akhtar, S.M.J. (2021). Digital Financial Literacy and its determinants: An empirical evidence from rural India. *South Asian Journal of Social Studies and Economics*, 11(2), 8-22.

Bruggen, E.C., Hogreve, J., Holmlund, M., Kabadayi, S., & Lofgren, M. (2017). Financial well-being: a conceptualization and research agenda. *Journal of business research*, 79, 228-237.

Choung, Y., Chatterjee, S., & Pak, T.Y. (2023). Digital Financial Literacy and financial well-being. *Finance Research Letters*, 58(104438).

CPFB (2015). Financial well-being: The goal of financial education. *Consumer financial protection bureau*, 3, 2-48.

Dimova, M., Berfond, J., Kelly, S., & Mapes, W. (2021). Empowering women on a journey towards digital financial capability. Women's World Banking.

Golden, W., & Cordie, L. (2022). Digital Financial Literacy. *Adult Financial Literacy*, 4(3), 20-26.

Gosal, G.G., & Nainggolan, R. (2023). The influence of Digital Financial Literacy on Indonesian SMES' financial behavior and financial well-being. *International Journal of Professional Business Review*, 8(12), 1-13.

GSMA (2015). Bridging the gender gap: Mobile access and usage in low-and middle-income countries.

Khare, S., Bharti, V., & Jain, P. (2024). Impact of digital financial inclusion on women empowerment: A Study of Satna District. *Educational Administration: Theory and Practice*, 30(4), 5849-5859.

Kim, J., Garman, E.T., & Sorhaindo, B. (2003). Relationships among credit counseling clients' financial well-being, financial behaviours, financial stressors events, and health. *Financial Counselling and Planning*, 4(2), 75-87.

Kumar, P., Pillai, R., Kumar, N., & Tabash, M.I. (2023). The interplay of skills, digital financial literacy, capability and autonomy in financial decision making and well-being. *Borsa Istanbul Review*, 23(1), 169-183.

Lyons, A.C., & Kass-Hanna, J. (2021). A methodological overview to defining and measuring "Digital" Financial literacy. *Financial Planning Review*, 4(2), e1113.

Mishra, D., Agarwal, N., Sharahiley, S., & Kandpal, V. (2024). Digital Financial Literacy and its Impact on Financial Decision- Making of Women: Evidence from India. *Journal of Risk and Financial Management*, 17(8),1-23.

OECD (2017). G20/OECD INFE Report on ensuring financial education and consumer protection for all in the digital age.

Porter, N.M. (1990). Testing a model of Financial Well-being. *Financial Counselling and Planning*, 4, 135-164.

Rahayu, R., Juita, V., & Rahman, A. (2023). Financial literacy, Digital Financial Literacy and Women's Economic Empowerment. *Journal of Telecommunications and the digital Economy*, 11(2), 112-138.

Suri, T., & Jack, W. (2016). The long run poverty and gender impacts of mobile money. Development Economics, 354(6317), 1288-1292.

World Bank Development Research Group (2014). The opportunities of digitizing payments: How digitization of payments, transfers, and remittances contributes to the G20 goals of broad-based economic growth, financial inclusion, and women's economic empowerment. The World Bank.

Zemtsov, A.A., & Osipova, T.Y. (2016). Financial wellbeing as a type of human wellbeing: Theoretical Review. *The European Proceedings of Social & Behavioural Sciences*.

National Centre for Financial Education (2019). Financial Literacy and Inclusion in India.