



Digital Financial Literacy and Its Determinants: An Empirical Evidences from Rural India

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Authors' contributions

This work was carried out in collaboration between both authors. Author NPAA designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author SMJA managed the analyses of the study and managed the literature searches. Both authors read and approved the final manuscript.

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ABSTRACT

Banking and financial institutions are undergoing a dramatic transformation in this digital age. Despite the extended digital communications, a significant proportion of the people cannot transact financially especially in rural areas. Effective financial transactions could be made possible through skills, awareness, and attitudes to use digital tools and digital transactions tools. Therefore, digital financial literacy became more critical nowadays and is considered prerequisites and preliminary steps for people's inclusion in the financial system. The determinants of digital financial literacy focus on the socio-economic demographic factors and used ordinary least square, multiple regression model. This model determines how various independent variables, namely age, gender, income, religion, social groups, family size, marital status, educational level, occupation, etc., significantly influence the respondents' digital financial literacy. The analysis is based on the primary data with five hundred samples collected from the rural areas of Aligarh district.

Keywords: *Digital financial literacy; digital financial awareness; digital financial skill and knowledge; digital financial behavior and attitude.*

1. INTRODUCTION

The basic determinants of the modern economy have been confined to more attributing to digitalization which is a driving force for innovative, stable and competitive growth (Organisation for Economic Co-operation and Development (OECD), [1,2]. From the time immemorial, with the outstanding invasion of digital technology, there has been a significant and tremendous influence on the daily life activities of the masses with regard to exchange of information and interaction through social and commercial media [3,4,5,1,6]. The influence on the global economy and society as well; on account of digital technological advancement makes noticeable changes by addressing the pressing concerns [7,8]. The combined effect of digital innovations and technological advancement are collaboratively influencing the economy by making significant and diverse influence on the financial sector through novice financial products [7,2]. Higher level of financial inclusion could be achieved through allied strategies of digital economy for the progressive economic development of the country and reducing poverty [9,10]. There is a global trend in the changes and implementation of financial services which is a landmark of global movement. These changes include various happenings in the roles and responsibilities, services of finance and products to the distribution channel. These remarkable changes in the digital financial services will be continuing in a sustainable manner and acts as a catalyst for the future development and upliftment [5].

Measures have been taken up to develop the financial sector during the last five years to lead the country into digital financial inclusion through effective measures of convenient, secure and cost-effective means so as to drive the unbanked rural households in the mainstream of financial inclusion (Global Partnership for Financial Inclusion (GPII), [11] (IFC, 2017; Manyika et al., 2016). The urging need to overcome fraud and costly mistakes among the consumers could be enhanced through financial sophistication pertaining to effective use of technologies. An inclusion of digital financial education through inculcation of well-planned special programmes for the vulnerable groups is a raising need of the hour which should be pondered on by the G20 countries. Digitalization of the financial services and products has enhanced consistency of financial system through promoting competency and better capacity to make judgments for the

best financial well-being. Acquaintance of better skills, basic knowledge of awareness and a positive approach are the basic necessities for proper financial transactions [5,6,12,13]. In this technetronic world there is a rapid and tremendous expansion in digital sectors. Though digital financial literacy is boosting the communication with the modern world and better access to professional opportunities, major sections of our society are still deprived of these positive changes or the changes are at a much slower pace among these sections of the society. Digital financial literacy is a vital tool to access financial services for achieving economic mobility and no doubt, digital financial illiteracy of the people is a major hindrance in using digital technology. Considering the above factors, it is quite evident that digital financial literacy is a basic prerequisite for financial inclusion of the people in the financial system [14,14a].

Digital financial literacy is not having a specific definition. It could be considered as the proper awareness of digital financial risks, better utilization of the knowledge of digital financial products and risk control. Wide knowledge of consumer rights and redress procedures are also attributing to digital financial literacy [15,16,17,18]. To get acquainted the people with lower education level, with the knowledge and awareness of financial matters is one of the greatest challenges in front of different stake holders of financial institutions like policy makers, financial institutions, bankers and government.

Financial inclusion could be effectively achieved through the promotion of digital financial literacy and prosperity in a sustainable manner [1,2]. The reach of digital financial services is still questionable and unsatisfactory as many of the rural areas are not fully active in these services. It is high time to make it convenient for the rural masses to get included in the arena of financial sector with necessary digital financial literacy. The digital divide is still one of the major issues in rural-urban areas [19,20,21], which hinder the digital financial transactions [22,23]. The major benefits of digital financial literacy are the acquisition of information on financial management and getting self-motivated through heightened confidence level for managing and taking financial activities and financial decisions respectively. The higher expenses of construction, maintenance and other operating outlays have been a prominent hindrance for spreading the digital financial services and infrastructures to the poor sections of society or

rural-based areas where such amenities are difficult to provide [24,23,25,22]. It is much more expensive to develop and construct physical infrastructures for the smooth functioning of the digital transactions in the far-flung rural areas and on the other hand moving and getting settled in urban areas is a matter of least consideration and not feasible for them [26]. Thus digitalization and faster internet technologies created greater rural and urban digital divide [22,21] due to their digital incompetency and illiteracy [1,19,27,28,29] in most the developing countries including India [30,31].

1.1 Literature Review

A significant aspect related to digital financial literacy is the identification of its relationship with the socio-economic and demographic factors. The literature review on financial literacy brings into light some factors or determinants which have a significant impact on the financial literacy level of people. Several studies and evidence have sought to identify these relationships. Results shown by Lusardi & Mitchell (2011), OECD [32,33], and Brown & Graf [34] found that females have lower financial literacy levels than men. Thaler [35] revealed that financial literacy is highly correlated with other factors, and, among them, higher education might be the key. Atkinson & Messy [33] observed that financial literacy tends to be higher among the adult's members in the middle age, and it is lower among young and elderly individuals.

Financial illiteracy is widespread in the USA and other countries among women and old age people [36] Women are less financially capable than men between the ages group of 20-70 years [37] Men are more financially literate and well informed compared to women in Hungary. Working women in Pakistan are mostly financially illiterate, and only one-third of them possesses the knowledge of financial services and products Ibrahim, Harun, & Isa [38]; Lusardi & Mitchell [39] discovered that women are considerably less chance to answer the questions correctly and expected to say they do not know the exact answer to the questions. This fact is found surprisingly similar in the financial literacy of different countries [40]. The women also evaluate their financial literacy level more conventionally to avoid potential risks associated with finance.

It is expected that the more significant financial and digital literacy levels are found in persons

with a higher level of education and superior access to financial products and services. Corroborating such evidence, Lusardi & Mitchell [41] found that individuals with a low level of education are less chance to answer the questions correctly regarding financial literacy and also more likely to say they do not know the answer, especially women. The educational qualification and discipline of study are directly related to one's financial literacy level. Students from business/economics and finance honors were found more financially literate as compared to others [38]. As far as the schooling variable is concerned, College students with a high school diploma attained in a technical school find it easier to calculate cash inflows and outflows. The financial literacy level of the male is higher than that of the female; the level of financial literacy increases with the increase in educational qualification [42,42a]. There exists an association between the educational qualification and financial literacy, i.e., Respondents having higher educational qualification, tend to have higher financial literacy [43].

According to ANZ Banking Group [44] and [34], the single person has a significant propensity to lower the level of financial literacy when compared to married individuals. In general, when people have a low financial literacy level, they run the risk of making bad financial decisions that, in the long term, may result in debts, and the latter endanger the well-being of their relationships [45]. Ratifying such evidence, Dew [46] found that consumer debt is a major threat to marital satisfaction and, therefore, married individuals have higher financial literacy levels. Financial literacy scores are generally associated with personal income levels as higher financial literacy scores are likely to be shown by individuals with higher levels of personal income and lower scores by those with lower incomes [47]. Most of the studies reveal that age is one of the crucial determinants of financial literacy. Age is a significant factor in explaining the financial literacy of people. Financial capability varies significantly with age in a nonlinear way for both men and women, and it increases rapidly with age [37]. There is a positive relationship between the age and variables of financial wellbeing and financial literacy [48]. Chen & Volpe, [49] found that individuals with tremendous work experience have a more significant number of financial situations and interactions; therefore, they attain more financial knowledge for decision-making. According to ANZ Banking Group [44] unskilled

or unemployed workers inclined to show lower awareness due to less contact with financial issues and decisions. The financial illiteracy is related to lower job performance and workers' productivity [50]. Working arrangements may also affect financial attitudes and behaviors, considering that individuals with high incomes have better conditions to plan and organize their financial life [45].

2. METHODOLOGY AND DATA

Research which focuses digital financial literacy and its determining factors have been scarce in academic journals. The study makes a worthwhile attempt to identify factors determining digital financial literacy among rural households of the Aligarh district in the state of Uttar Pradesh. Digital financial awareness, digital financial skill and knowledge and digital financial behaviour and attitude are the focused dimensions of Digital Financial Literacy in the present study [7,8]. The overall digital financial literacy and dimension wise analysis have been done to identify the factors determining financial literacy. A sample of 500 was selected from the rural area of Aligarh district for getting the primary data for the study. The primary data were collected through survey schedules, telephone interviews of experts and other participatory approaches among various stakeholders. Before finalizing the interview schedule, a pre-testing was conducted. The tool was developed after several rounds of interaction with a few informants, banking officials and other experts. Before administering the interview schedule to the sample population, a pre-test

was done and checked the reliability. The targeted population of this study is rural people of Aligarh district of Uttar Pradesh, which included all men and women aged 15 years or above. The null hypothesis established that there is no association between digital financial literacy and the respondent's socio-economic and demographic factors.

2.1 Sampling Design

A multi-stage sampling technique has been used for choosing the respondents for the study. The district has been divided into 5 administrative tehsils; namely, Atrauli, Gabhana, Khair, Koil and Iglas and for the purpose of this study all the five tehsils were selected at first stage. The above five tehsils are further subdivided into 12 development blocks. For the purpose of the study, two blocks were selected from each tehsil based on general literacy rate as per Census 2011 (One highest literate block and one lowest literate block). Thus, total 10 blocks out of 12 was selected namely, Atrauli, Bijauli, Jawan Sikanderpur, Chandaus, Khair, Tappal, Dhanipur, Akrabad, Iglas and Gonda in the second stage. In the third stage two villages were selected from each selected development blocks of Aligarh district based on general literacy rate as per Census 2011 (One highest literate village and one lowest literate village). Thus, total 20 villages were selected accordingly. From each selected village, 25 respondents were chosen through a convenience sampling technique in the final stage. Thus, for this study a total of 500 samples were taken accordingly.

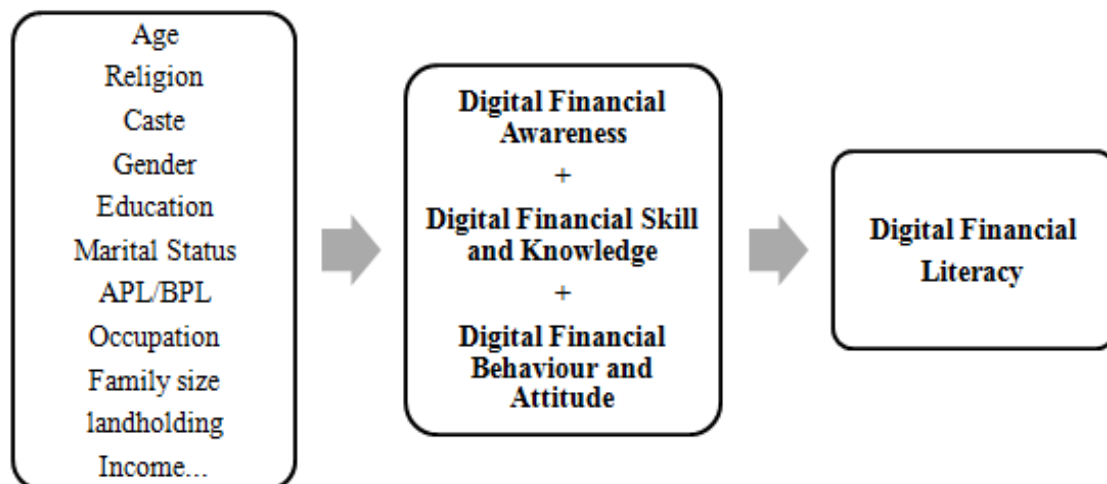


Fig. 1. Flow chart showing digital financial literacy

The determinants of digital financial literacy focus on the socio-economic demographic factors and used the ordinary least square (OLS), multiple regression model. This model determines how various independent variables, namely age, gender, income, religion, MGNREGS job card, social groups, size of landholding, family size, marital status, educational level, occupation, type of ration card, type of house, ownership status of the house, etc. significantly influence the digital financial literacy of the respondents [42,42a,51,52]. Factors influencing digital financial literacy were identified using the statistical technique of multiple regression analysis. Three response variables including digital financial awareness, digital financial skill and knowledge and digital financial behaviour and attitude were analysed separately along with overall digital financial literacy. For econometric model specification, the general multiple regression model is specified as follows:

$$Y = \beta_0 + \beta_1 Age + \beta_2 Gender + \beta_3 Family Size + \beta_4 Religion + \beta_5 Marital Status + \beta_6 Education + \beta_7 Occupation + \beta_8 Income + \beta_9 Ownership + \beta_{10} Ration card + \beta_{11} Social Groups + \beta_{12} Housing + \beta_{13} MGNREGS + \beta_{14} Landholding + u$$

Where, Y = is dependent variable –Digital Financial Literacy of the rural sample households

3. RESULTS AND DISCUSSION

3.1 Determinants of Digital Financial Awareness

The R- Square value (coefficient determination) is 0.609 (Table 1.A), which further explains that 60.9 per cent of changes in the digital financial awareness of respondents could be explained on the basis of independent variables. The income level of the respondents, their profession, the type of religion followed by them, their current age, the size of their family, the land property they hold, the status of their marriage, gender, the type of their ration card, their acquired level of education, the type of social groups in which they belong, type of house, MGNRES job card and ownership of the house are certain such identified independent factors. When the predictor variables are taken in to account, only

60 per cent of the variance in the criterion variables are considered as the adjusted R-Square is 0.598. The Durbin-Watson, d= 1.778, indicates the absence of first order autocorrelation as the value ranges between 1.5 and 2.5. The F- value, 54.060, shows a significant result based on ANOVA.

The variables like gender, level of income, level of education, type of house, and landholding have positive coefficients which represents that an increase in these variables further strengthen the prediction of increase digital financial awareness of the respondents. There is positive coefficient of variables, namely, the size of family, occupation, ownership of the house, and type of ration card, which indicates a statistically insignificant relationship found with the digital financial awareness of respondents. There exists a negative coefficient between the age of the respondents and their marital status. The variables- type of religion, the type of social groups (SC, ST, and OBC), and MGNREGS cardholders have a negative coefficient indicating significant relationship with digital financial awareness.

3.2 Determinants of Digital Financial Skill and Knowledge

In Table 2.A, the results of the determinants of digital financial skill and knowledge are also given due importance along with digital financial attitude, awareness and behaviour. Changes in the digital financial literacy are only 52.80 per cent as the value of R-Square is 0.528. Even after taking into account the number of predictor variables in the model, 51.5 per cent of the variance in the digital financial skill and knowledge indicator captured by the adjusted R-Square of 0.515. The absence of first-order linear autocorrelation is shown in the regression analysis data as the Durbin-Watson d = 1.848. F-value is 38.827 indicates statistically highly significant as revealed in the ANOVA Table 2.B. The overall regression model properly explains the difference in digital financial skills and knowledge.

Table 1A. Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.781 ^a	.609	.598	.11232	1.778

Predictors: (Constant), land holding, ration card, religion, ownership, social groups, age, gender, MGNREGS, marital status, housing, occupation, income, family size, education; Dependent Variable: Digital Financial Awareness Index; Source: Author's Calculation from Field Survey

Table 1B. ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9.548	14	.682	54.060	.000
	Residual	6.118	485	.013		
	Total	15.666	499			

Source: Author's Calculation from Field Survey

Table 1C. Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	.021	.065		.319	.750	-.106	.147
Age	-.001	.001	-.059	-1.502	.134	-.003	.000
Gender	.094	.025	.163	3.697	.001	.044	.143
Family Size	.007	.005	.051	1.418	.157	-.003	.016
Religion	-.059	.016	-.122	-3.795	.000	-.090	-.029
Marital Status	-.024	.021	-.035	-1.107	.269	-.065	.018
Education	.071	.006	.490	11.533	.000	.059	.083
Occupation	.007	.004	.058	1.616	.107	-.002	.016
Income	.068	.010	.249	6.777	.000	.048	.087
Ownership	.046	.025	.058	1.840	.066	-.003	.096
Ration Card	.002	.014	.005	.139	.889	-.025	.029
Social Groups	-.017	.004	-.132	-4.527	.000	-.025	-.010
Housing	.036	.017	.068	2.063	.040	.002	.070
MGNREGS	-.019	.010	-.062	-1.984	.048	-.038	.000
Land Holding	.003	.002	.079	2.084	.038	.000	.006

Source: Author's calculation from field survey

Table 2A. Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.727 ^a	.528	.515	.10625	1.848

a. Predictors: (Constant), Land Holding, Ration card, Religion, Ownership, Social groups, Age, Gender, MGNREGS, Marital Status, Housing, Occupation, Income, Family Size, Education; b. Dependent Variable: Digital Financial Skill and Knowledge Index
Source: Author's Calculation from Field Survey

Table 2B. ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.136	14	.438	38.827	.000
	Residual	5.475	485	.011		
	Total	11.611	499			

Source: Author's Calculation from Field Survey

There is a statistically highly significant relationship of the variables like landholding and its size, education level and gender with the digital financial skill and knowledge. A positive coefficient of the size of the family, nature of the occupation, ownership of the house, and the type of ration cardholder is found on the mean of the dependent variable. No significant relationship is found with digital financial skill and knowledge of respondents, which further indicates statistically insignificant results. Statistically significant result is found as variables like age, marital status, and social groups show negative coefficient. There is a negative coefficient between variables like religion and type of house, which further shows a statistically insignificant relationship with digital financial skill and knowledge. As against expected results, the level of income is negatively related to digital financial skill and knowledge and found statistically insignificant.

3.3 Determinants of Digital Financial Behaviour and Attitude

In Table 3.A, 44.8 per cent of changes in the digital financial behaviour and attitude changes are as of influence of independent factors, indicated by the R-Square value of 0.488. There exists only 43.2 per cent of the variance in the criterion variable, as the adjusted R-Square value is 0.432, after considering the predictor variables. Durbin-Watson, $d = 2.131$, indicates the absence of first-order linear autocorrelation in the regression analysis. F -value 28.130 indicates statistically highly significant in the statistical technique of ANOVA. The overall regression model explicitly explains the difference in digital financial behaviour and attitude.

A positive coefficient indicates statistically significant relationship with the digital financial

behaviour and attitude with the variables of the level of education, gender, type of ration card and occupation (Table 3.C1, C2). A positive correlation is found with the coefficient of age, size of family, religion, level of income, and marital status. The study results also revealed no significant relationship between respondents' attitude and digital financial behaviour. A negative coefficient is found in the variables of landholding, social groups, and ownership, which is statistically not significant.

3.4 Determinants of Digital Financial Literacy

The model summary Table 4.A shows a coefficient determination of 0.683 (R-Square) which further indicates that 68.3 per cent of changes are there in the digital financial literacy index. 67 per cent of the variance in the digital financial literacy with adjusted R-Square of 0.674 while considering the predictor variable. The lack of first order linear correlation is found in the regression analysis, Durbin-Watson $d = 1.967$, between 1.5 and 2.5. As per the table, the F value obtained is 74.701, which further reflects the regression model's overall significance based on the ANOVA Table 4.B.

Increase in age has a significant impact on developing awareness, knowledge, better attitudes and behaviours. From Table 4.C, it is revealed that there is a negative coefficient of $- .002$ for the variable age. Increase in age is withholding the individuals in achieving better digital financial literacy. Education is a catalyst in developing digital financial literacy among youth as compared to elder people who are deprived of education. They are even more accustomed to the latest technological devices like smartphones, laptops, etc.

Table 3A. Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.669 ^a	.448	.432	.08336	2.131

a. Predictors: (Constant), landholding, ration card, religion, ownership, social groups, age, gender, MGNREGS card, marital status, housing, occupation, income, family size, education b. Dependent Variable: Digital Financial Behaviour and Attitude Index; Source: Author's Calculation from Field Survey

Table 3B. ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.737	14	.195	28.130	.000
	Residual	3.370	485	.007		
	Total	6.107	499			

Source: Author's Calculation from Field Survey

Table 3C 1. Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	.266	.061		4.350	.000	.146	.386
Age	-.004	.001	-.199	-4.639	.000	-.005	-.002
Gender	.095	.022	.191	4.346	.000	.052	.137
Family Size	.001	.005	.008	.194	.846	-.008	.010
Religion	-.016	.015	-.039	-1.095	.274	-.045	.013
Marital Status	-.073	.020	-.126	-3.606	.000	-.112	-.033
Education	.066	.006	.530	11.353	.000	.055	.077
Occupation	.005	.004	.046	1.178	.240	-.003	.013
Income	-.003	.009	-.014	-.349	.727	-.022	.015
Ownership	.007	.024	.010	.284	.776	-.040	.054
Ration Card	.009	.013	.025	.705	.481	-.016	.035
Social Groups	-.014	.004	-.120	-3.728	.000	-.021	-.006
Housing	-.008	.016	-.018	-.486	.627	-.040	.024
MGNREGS	-.011	.009	-.043	-1.250	.212	-.029	.006
Land Holding	.005	.001	.136	3.251	.001	.002	.008

Source: Author's Calculation from Field Survey

Table 3C 2. Coefficients

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	.110	.048		2.297	.022	.016	.204
Age	.000	.001	.014	.291	.771	-.001	.001
Gender	.043	.016	.121	2.715	.007	.012	.075
Family Size	.002	.004	.021	.497	.620	-.005	.009
Religion	.009	.012	.029	.760	.448	-.014	.032
Marital Status	.027	.016	.064	1.691	.092	-.004	.058
Education	.050	.005	.550	10.887	.000	.041	.059
Occupation	.010	.003	.126	2.943	.003	.003	.016
Income	.002	.007	.011	.262	.793	-.013	.016
Ownership	-.008	.019	-.016	-.420	.674	-.045	.029
Ration Card	.063	.010	.241	6.187	.000	.043	.083
Social Groups	-.003	.003	-.036	-1.047	.296	-.009	.003
Housing	-.005	.013	-.014	-.351	.725	-.030	.021
MGNREGS	-.004	.007	-.021	-.571	.568	-.010	.018
Land Holding	-.001	.001	-.021	-.457	.648	-.003	.002

Source: Author's Calculation from Field Survey

Table 4A. Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.827 ^a	.683	.674	.0711763	1.967

a. Predictors: (Constant), landholding, ration card, religion, ownership, social groups, age, gender, MGNREGS, marital status, housing, occupation, income, family size, education; b. Dependent Variable: Digital Financial Literacy Index

Source: Author's Calculation from Field Survey

Table 4B. ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.298	14	.378	74.701	.000
	Residual	2.457	485	.005		
	Total	7.755	499			

Source: Author's Calculation from Field Survey

Table 4C. Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	.132	.041		3.229	.001	.052	.213
Age	-.002	.001	-.105	-2.985	.003	-.003	-.001
Gender	.077	.018	.191	4.336	.000	0.042	.112
Family Size	.003	.003	.034	1.037	.300	-.003	.009
Religion	-.022	.010	-.065	-2.245	.025	-.042	-.003
Marital Status	-.023	.013	-.049	-1.716	.087	-.050	.003
Education	.062	.004	.611	15.966	.000	.054	.070
Occupation	.007	.003	.084	2.585	.010	.002	.013
Income	.022	.006	.116	3.494	.001	.010	.034
Ownership	.015	.016	.027	.945	.345	-.016	.047
Ration Card	.025	.009	.084	2.839	.005	.008	.042
Social Groups	-.011	.002	-.122	-4.645	.000	-.016	-.007
Housing	.008	.011	.021	.706	.481	-.014	.029
MGNREGS	-.009	.006	-.040	-1.442	.150	-.021	.003
Land Holding	.003	.001	.087	2.536	.012	.001	.004

Source: Author's Calculation from Field Survey

From Table 4.C, it is disclosed that men have a higher propensity and are having a high level of digital financial literacy. A positive coefficient value of 0.077 is found for the variable gender. The result of the study went along with the hypothesis that women have comparatively lower financial literacy than men. Illiteracy is a bane among women in Aligarh District. It hinders them in getting involved in all sectors of life and making themselves informed and knowledgeable. Using digital technology and other digital financial services are far away from them as they are not getting acquainted with sophisticated technologies. Increase in the number of family members is positively correlated with the increase in digital financial literacy. The coefficient value 0.003 for the variable size of the family reveals that an increase in the size of the family shows an increase in financial literacy though the result is found to be statistically insignificant. The family size-wise results itself shows a mixed and fluctuating outcome showing insignificant differences.

The coefficient of religion is negative (-0.022) and the result is found to be statistically significant. Muslim respondents have lower digital financial literacy than Hindu respondents. The DFLI of Hindu respondents is 0.25 compared to Muslims whose DFLI is only 0.20. Differences between the digital financial literacy of Muslims and Hindus are found to be statistically significant. The income and Education of Hindus are found to be comparatively better than Muslims. The variable marital status has a negative coefficient (-.023), and the result is statistically insignificant against the expected results. It is found as per the expectation that respondents who have got married are having less digital financial literacy than those who are unmarried. The young generation is found to be comparatively better in handling financial matters than respondents who are aged and married. They have a more absorbing capacity to adjust and adapt to the latest technologies with their wide digital knowledge, positive digital financial behaviour, and attitude. The variable, level of education has a positive coefficient (.062), corroborating previous studies' results. The results show that an increase in education is positively attributed to increase in digital financial literacy. The result further extends to say that there is a great need to improve and develop the level of education so as to enhance digital financial literacy.

Occupational status is also a determinant of financial literacy. The result of the study revealed a positive coefficient value of 0.077 and the result is found to be statistically significant. Unemployed or the base group has low digital financial literacy compared to the self-employed, salaried workers, agricultural labour, and casual labours. The low or inadequate income of unemployed pulls them backward in equipping themselves with digital financial literacy. 0.022 is the statistically significant value of the coefficient found as per analysis for the income level. The level of income is having direct influence on digital financial literacy. The result is moving in aligned with this statement as it shows an increase in the level of income as the respondent from the higher level of income as they are having more awareness and knowledge on technological devices and also related to the financial transactions. The coefficient of variable social groups is negative (-0.004), which is statistically significant. Among the social groups, general category people have higher digital financial literacy as compared to other groups of SC, ST, and OBC. It can be because of the high education level of the people in general category and also their better job along with the higher level of income.

The MGNREGS job cardholders have a negative coefficient, which shows a statistically insignificant result. Those who have with MGNREGS job cards are more likely to be digitally financially literate than no cardholders. People in the rural area with the card are having less income, low level of education, and not having a better job. They are also disadvantaged, both socially and economically. Therefore, accepting and absorbing the digital financial devices and services by these respondents is low compared to other people and expected low digital financial literacy. The landholding is also a determinant of financial literacy with a positive coefficient (0.003). The result is found to be statistically significant. It also revealed that increasing landholding would lead to an increase in digital financial literacy. More awareness and knowledge about financial literacy are seen in higher landholding respondents on financial matters as they became wealthier and are able to use the digital financial products and service with their higher digital financial literacy.

4. CONCLUSION

The determinants like the level of education and income, occupation, gender, landholding and

type of ration card have a positive coefficient and found statistically highly significant with digital financial literacy of respondents in the rural areas of Aligarh district. Therefore, govt. and policymakers should frame policies to increase the income level of rural people and provide better employment opportunities. Besides socio-economic and demographic factors, appreciable and effective efforts from the Reserve Bank of India, the Central Government, and various other financial institutions are made through projects and programs for enhancing digital financial literacy. Digital financial education is intended to offer people such financial knowledge, which could help them maintain budgets, choose among various digital financial platforms, plans and services, and equip them for making financial decisions. Various attempts like demonetization, digital financial advancing system, and the development in mobile communication in a global perspective could not help poor people's inclusion financially.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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