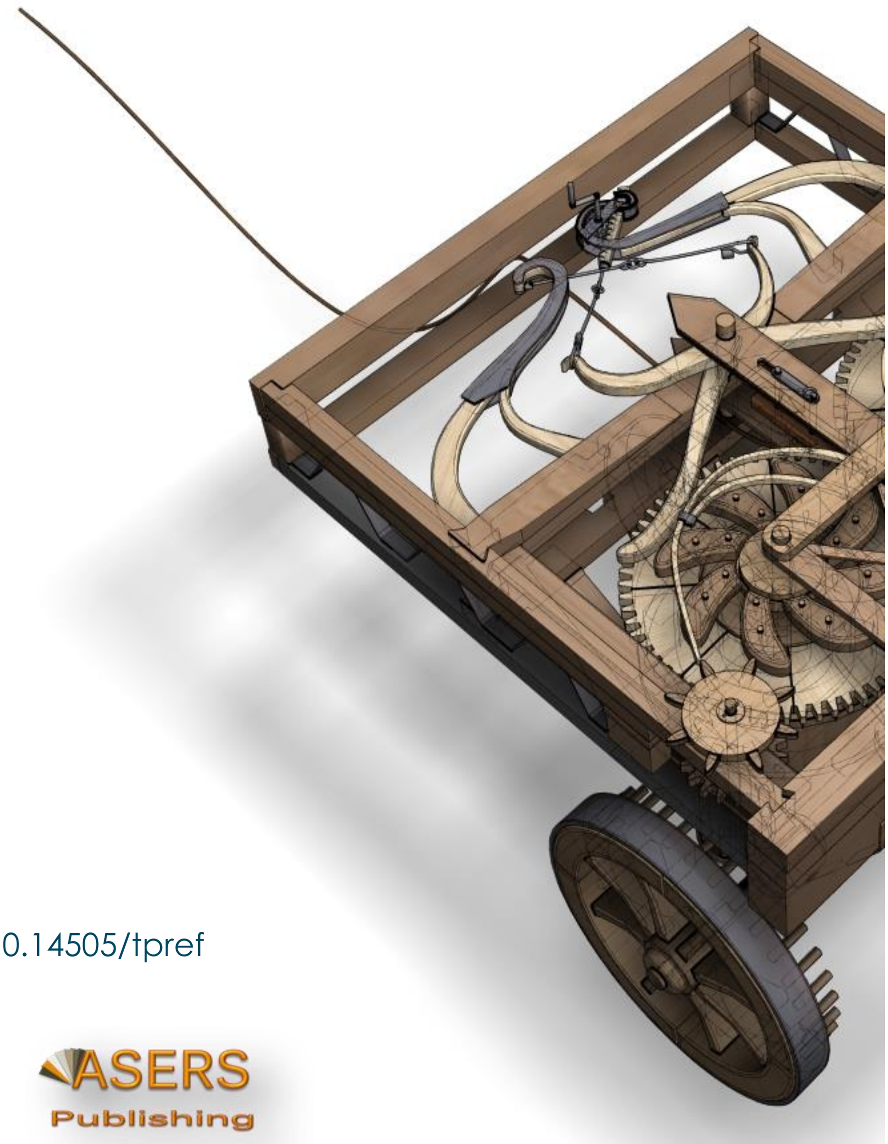
Theoretical and Practical Research in Economic Fields



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Call for Papers
Spring Issue
Theoretical and Practical Research in Economic Fields

Many economists today are concerned by the proliferation of journals and the concomitant labyrinth of research to be conquered in order to reach the specific information they require. To combat this tendency, **Theoretical and Practical Research in Economic Fields** has been conceived and designed outside the realm of the traditional economics journal. It consists of concise communications that provide a means of rapid and efficient dissemination of new results, models, and methods in all fields of economic research.

Theoretical and Practical Research in Economic Fields publishes original articles in all branches of economics – theoretical and practical, abstract, and applied, providing wide-ranging coverage across the subject area.

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A Study on Socio-Demographic Determinants of Digital Financial Literacy in India

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Abstract: Digital financial literacy has emerged as a key driver for fostering financial inclusion in India. As India has been witnessing rapid digitalization of financial services, digital financial literacy has become an imperative because of it's transformative potential to spread awareness, knowledge and influence user behaviors towards adoption of digital financial services.

The purpose of this study was to investigate relationships between various socio-economic and demographic factors and digital financial literacy variables in both rural and urban areas of India.

The study relied on a mix of quantitative surveys and qualitative interviews from the respondents belonging to urban and rural areas spread across eight districts of India. The primary data collected underwent several statistical analyses, including the Chi-Square Test, Cramer's V, correlation analysis, and multiple regression analysis to examine the relationships between socio-demographic factors and digital financial literacy.

The study revealed a strong positive correlation between education, age and income with digital financial literacy, underscoring their substantial impact. In contrast, other socio-demographic factors like occupation and social stratification were found to have lesser influence on the digital financial literacy in view of their weaker correlations. The study revealed that digital financial literacy is gender neutral considering negligible correlation between gender and variables of digital financial literacy. The existence of digital divide between urban and rural areas was evident in the study as the rural population lags in digital financial literacy to their urban counterparts. Regression analysis further validates the predictive significance of age, education, and annual family income on digital financial literacy.

The earlier research studies and available literature emphasize mainly supply side factors of digital financial literacy viz. measures taken by Governments, Regulators and Financial institutions. This study, focusing on demand side factors, put special emphasis on social and demographic variables and their degree of influence on digital financial literacy.

Key findings emerged from the study identify the socio-demographic factors influencing digital financial literacy and offer insights for policy makers to identify gaps in financial education and design targeted strategies based on socio-demographic parameters for broadening digital financial literacy.

Keywords: digital financial literacy; socio-demographic factors; digital financial services; gender neutral; digital divide.

JEL Classification: G20; G28; G41; G53.

Introduction

India has been witnessing digital revolution and the scale of digital transformation during last decade is massive and unprecedented. At the back of a robust digital public infrastructure, India is regarded as a leader in global digital revolution and have emerged as a frontrunner in digital landscape. The Global Findex Database published by World Bank in 2011 indicated then that only 35 percent of India's population with fifteen or more years of age were constituents of formal financial sector having accounts with a bank, other financial institutions or a mobile money service provider. This figure jumped to 53 percent in 2014 and further to 78 percent in 2021 and the trend continues. Many, thus, recommend that India's financial journey is worth studying and deriving learning therefrom.

One of the major public policy priority and national commitment of India has been universal financial inclusion (Chakrabarty 2011). The universal financial inclusion has been defined as "the process of ensuring access to financial services, timely and adequate credit for vulnerable groups such as weaker sections and low-income groups at an affordable cost" (RBI 2008). By this it intends to uplift life of millions still lying below poverty line and have been deprived of benefits of formal economy. Therefore, there have been array of initiatives, targeted towards financial inclusion of population hitherto remaining unbanked and underprivileged, by Government of India, State Governments, Regulators, Banks and other stakeholders.

The National Strategy for Financial Inclusion (2019-24) has listed out key factors of financial exclusion viz. lack of surplus income, not suitable to customer's requirements, lack of requisite documents, lack of trust in the system, lack of awareness about the product, high transaction costs, remoteness of service provider and poor quality of services rendered. One critical factor emerged while looking at the factors is financial literacy which drives other important factors like trust, transaction costs and documents etc. Therefore, there has been continuous emphasis by the Government(s) and the other stakeholders to increase level of financial literacy by way of substantial investment in awareness initiatives so that the necessary level of product awareness is spread to the consumers to take a considered call for voluntary adoption of digital financial services.

The unprecedented strides in technological developments and digitalisation of financial services around the world, have warranted a need for strengthening financial and digital literacy. Globally, financial education, financial consumer protection, and financial inclusion are considered as key ingredients of economic empowerment and financial stability (GPFI 2016). With digital financial services making rapid strides, digital financial literacy acts as the first bridge to bring in people to the fold of formal finance. Awareness about technology, product and safety and security of transactions enable customers willingly embrace digital financial services.

Considering in India, where still a major chunk of population is outside formal finance and deprived of basic financial products like saving, credit and investment, digital financial literacy assumes greater significance. In order to empower the consumers to adopt Digital Financial Services and enhance the usage levels, while assuring them about safety and security of their money, it is imperative to support, strengthen and increase consumers' financial literacy and financial competencies. In majority of economies across the world, Financial literacy is being considered as a key life skill for individuals (OECD/INFE 2012a), and financial education would facilitate them in enhancing their financial knowledge, skills and attitudes (OECD/INFE 2015).

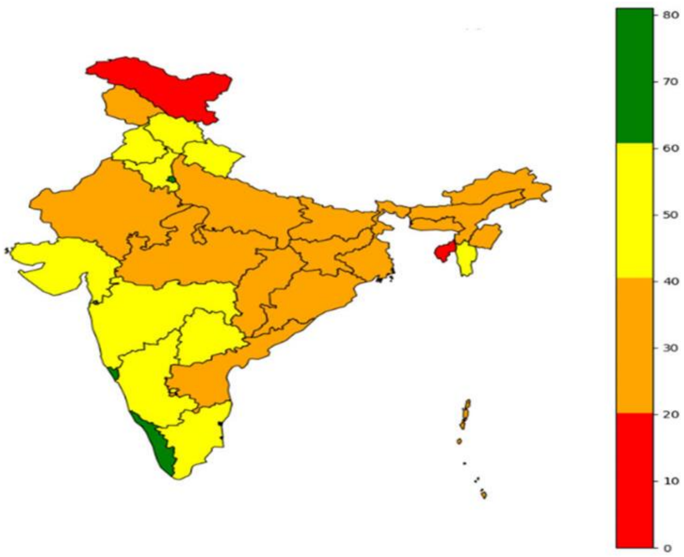
As India is witnessing significant strides in digitalisation and resultant impact on digital payment ecosystems, lack of digital financial literacy would prove to be a major deterrent. Without the consumers having adequate product knowledge and advantages it can accrue; consumers would not have enough motivation to embrace digital payments. This study is therefore attempted to collect first - hand information from the consumers about the drivers of digital financial literacy and deterrents. Amongst various factors being studied, the social, demographic and economic factors emerged as critical factors impacting digital financial literacy. India, being a geographically vast and diverse country, having many social and cultural practices, this study takes motivation to look into the socio-demographic factors which are associated with digital financial literacy in order to take the people to greater degree of financial awareness and thereby including them in mainstream financial ecosystem.

This study is based on the data collected through a primary survey carried out in eight districts of India. Empirical analysis is carried out to estimate the factors associated with digital financial literacy. The study is organised into seven sections. The next Section covers the discussion on digital financial literacy in India followed by literature review in Section 3. Objectives and Hypothesis of the study is outlined in Section 4, Methodology of the study in Section 5 and the empirical analysis is presented in Section 6. Policy implications of the findings of the study is given in Section 7, followed by final considerations of the study in the last Section.

2. Digital Financial Literacy in India

India has been progressing steadily on digital financial literacy front with various policy measures. A survey on digital literacy among various states indicates that only Kerala and Goa are the two states having digital literacy above sixty per cent. The majority of the states fall into the bracket of 20 to 40 percent indicating that huge efforts are needed for improving digital literacy (Figure 1).

Figure 1. Digital Financial literacy across States and Union Territories of India (%)



Source: Mothkoor and Mumtaz 2021

To achieve the desired objectives of digital financial inclusion, financial literacy (FL) is imperative. Some reasons for variation in level of adoption of digital financial inclusion across countries can be attributable to the barriers in Financial Inclusion (Sahay *et al.* 2020). National Centre for Financial Education (NCFE) conducted a survey on financial literacy in 2019 which reveals that only 27 per cent of the respondents possess minimum level of financial literacy. Furthermore, heterogeneity is observed regarding various components of financial literacy within the socio-economic groups with urban population and salaried individuals found to possess better financial awareness (Jangili *et al.* 2023).

On the pathway to digital financial inclusion, digital financial literacy acts as a critical enabler. Digital financial literacy initiatives served in sustainable manner would better attract hitherto underserved and unprivileged population to the fold of formal financial ecosystem. However, as of now, penetration of digital financial services is far from satisfactory and many of India's rural population are yet to activate themselves for digital financial services. The issue of digital divide is seen prominently between rural and urban areas and needs to be bridged expediently. In order to make the financially excluded people embrace digital financial services, measures are needed to step up digital financial education activities.

The major objectives of this study are to identify the socio-demographic determinants of digital financial literacy in India. Further, this study attempts to identify the relationship of select socio-demographic factors with digital financial literacy in rural and urban areas and also to identify the socio-demographic factors which significantly predict digital financial literacy levels.

3. Literature Review

Socio-demographic factors play a critical role in influencing digital financial literacy. The literature review on digital financial literacy brings out some important factors or determinants influencing financial literacy among people. Various studies in this area suggest that women found lagging behind men in financial literacy levels (Lusardi and Mitchell 2011; Brown and Graff 2013). Social and economic factors play a key role in influencing digital financial literacy and amongst all factors, education is the most important (Thaler 2013).

Financial literacy has been gaining global focus because it is increasingly being realized that to enable a customer to take an informed decision, the information of the product is imperative. Financial literacy equips customers with the essential knowledge and understanding of the available financial products, enables them to make informed choices, and makes them aware of grievance redressal mechanisms. Emphasis is now being given to spread financial awareness among various vulnerable groups in the society viz., women, youth, children, elderly, small entrepreneurs, etc. who require handholding (National Strategy Financial Inclusion 2019-24).

In India, digitalization has not picked up in expected pace in rural areas owing to several factors impeding growth of digitalization in rural areas. Possible reasons for the slow growth of digitalization may be inadequate infrastructure, less literate people, low internet connectivity, low economic status and low awareness. Financial literacy and awareness are the most critical factors for growth of digital financial inclusion (Mandal and Dua 2023).

Lack of digital financial literacy is the key parameter resulting in rural population being away from digital technology. Digital financial literacy makes a customer aware, imparts knowledge and skill to use financial information for better financial inclusion. For the rural people living in hinterland areas, there needs concerted efforts to increase awareness about financial services to achieve the desired outcome (Nedungadi *et al.* 2018).

Financial literacy has an impact on borrowing, debt management, and investment options. Among various socio-demographic factors, education remains the most prominent factor which drives the people to adopt a financial product or not and that is probably the reason the digital financial literacy scores higher in urban areas than rural areas (Dash and Ranjan 2023).

India has been witnessing steady progress with the digital revolution, and there has been upward trend witnessed in general awareness level of people on various digital payment products and access to smart phones. The use of digital payments has increased with increasing education and income levels, and the proportion of cash transactions has declined post-COVID-19 (Behera *et al.* 2023).

FinTechs by using IT software, applications and digital channels and platforms are delivering financial services to customers, households and business establishments through smartphones and promoting the cause of financial inclusion by providing access to households and small firms, hitherto excluded, to financial products and services. However, higher levels of digital financial literacy are needed to attain improved access to financial services through Fintech, their effective utilization and to prevent issues such as miss-selling, frauds, unauthorized use of data, discriminatory treatment, and behavioral issues like excessive indebtedness. Therefore, Digital financial literacy is likely to become an increasingly important aspect of education for the Digital Age (Morgan *et al.* 2019).

An individual possessing digital financial literacy carries requisite knowledge and skills for effectively dealing with digital means which would enable them to make better financial decisions. There are two specific challenges for developing financial competency i.e. overall lack of financial literacy among adults and fintechs requiring technological shrewdness. Within each of these areas, there are separate areas of focus which includes types of banking, internet access, adult learning environments, and technology utilization behaviors. If the adult population are not equipped with requisite skillset for new digital environment, they would not be in a position to take an appropriate financial decision and thereby creating larger gaps in financial inclusion between the literate and illiterate, financially (Golden and Cordie 2022).

Financial services are still beyond the reach of lower economic strata of society. A study conducted among the tribal population revealed that only miniscule range of population i.e. around 18 per cent people are using electronic means of financial services. A study suggested that digital financial inclusion has not reached the bottom level of society. Lack of awareness, illiteracy and fear of the use of it are the major factors behind digital financial exclusion (Praveenkumar 2019).

Population groups with low levels of digital and financial literacy have a higher risk of falling victim to online frauds or scams (OECD 2021).

As financial services are becoming increasingly online, there remains a risk of exclusion of the people who do not have access to digital technology or who lack familiarity about their usage. Therefore, in order to bridge the digital divide, it is imperative that everyone is brought into the modern financial ecosystem. Towards this objective, tailored digital literacy programs are required to cater to the specific needs and capabilities of different social and demographic groups. These tailored programs would provide hands-on training about using digital financial services, navigate online platforms, and protect against cyber risks, thereby empowering individuals to fully participate in the digital economy (Swaminathan 2024).

Digital financial literacy has emerged as an important life skill for people belonging to all social and economic strata notwithstanding which caste, religion, sex, education, wealth and other socio-economic variables they belong to. However, in India, it has still not caught much attention particularly in rural areas where the literacy level is very low or below the average level. A study conducted in this regard indicates that variables like gender, education level, profession, income, land ownership or having an independent house have positive and strong association with digital financial literacy (Abdul Azeez *et al.* 2022).

Digital Financial Literacy and demographic factors have a strong impact of Digital Financial Inclusion. A survey conducted in Indonesia finds that demographic factors like gender, age, occupation, marital status and income have strong association with digital financial literacy and digital financial inclusion. The study underscores importance of targeted financial literacy initiatives and inclusive policies for promoting broader access to digital financial services and pushing social and economic development of a country (Widyastuti *et al.* 2024).

The studies collectively reveal that digital financial literacy serves as a critical enabler of digital financial inclusion. It emerges that to bring the underprivileged and underserved population to the fold of formal financial ecosystem, financial literacy about the digital financial services and products is important. Amongst many factors of digital financial literacy, socio-demographic factors play an important role. However, challenges such as low economic status, low literacy, lack of awareness and level of education act as impediments. Regional studies, such as those in Odisha and Telangana, underscore the importance of socio-economic and demographic factors, including age, education, and income levels, in influencing digital financial literacy. Addressing these socio-demographic barriers is essential for spreading digital financial literacy across diverse population groups.

4. Research Methodology

This study employed a descriptive research design and is based on primary data collected through a purposive random survey from eight districts of India having a sample size of 660 out of which 350 respondents belong to rural areas and 310 belong to urban areas. The selection of the eight districts was carried out considering their geographical location in diverse regions of the country. A description of the data collected according to select socio-demographic factors is as below (Table 1).

Table 1. Descriptive Profile of Survey Respondents

Sl No.	Specifications	Rural		Urban	
		No. of Respondents	Percentage	No. of Respondents	Percentage
1	AGE				
	18-25	72	20.6	81	26.1
	26-35	91	26.0	116	37.4
	36-45	84	24.0	46	14.8
	46-60	59	16.9	42	13.5
	Above 60	44	12.6	25	8.1
	Total	350		310	
2	GENDER				
	Male	304	86.9	260	83.9
	Female	46	13.1	50	16.1
	Total	350		310	
3	EDUCATION				
	HSC or below	122	34.9	63	20.3
	Higher Secondary	139	39.7	144	46.5
	Graduation or Above	89	25.4	103	33.2
	Total	350		310	
4	OCCUPATION				
	Service	77	22.0	97	31.3
	Business	210	60.0	188	60.6
	Daily Worker	63	18.0	25	8.1
	Total	350		310	
5	INCOME (in INR)				
	Below 250,000	198	56.6	153	49.4
	250,000-500,000	68	19.4	66	21.3
	500,000- 1,000,000	41	11.7	60	19.4
	Above 1,000,000	43	12.3	31	10.0
	Total	350		310	

Sl No.	Specifications	Rural		Urban	
		No. of Respondents	Percentage	No. of Respondents	Percentage
6	SOCIAL STRATA				
	General	179	51.1	176	56.8
	OBC	79	22.6	62	20.0
	SC	59	16.9	62	20.0
	ST	33	9.4	10	3.2
		350		310	

Source: Survey by the Author

The collected data is analysed in view of association of six socio-demographic parameters *i.e.* age, education, gender, social stratification, annual family income and occupation with digital financial literacy and it's variables.

The primary data collected from eight districts of India underwent statistical analysis using Chi-Square Test, Cramer's V, correlation and multiple regression to examine the relationships between socio-demographic parameters with digital financial literacy.

Chi-Square Test and Cramer's V

The Chi-square Test was carried out to explore whether a statistically significant association is there between categorical variables *i.e.* socio-demographic factors and digital financial literacy. This helped in exploring the relationship between these variables. Cramer's V values complemented the Chi-Square Tests to measure the strength of these associations. By using both these methods, a comprehensive understanding of degrees of association between the socio-demographic factors and the digital financial literacy could be achieved.

Correlation Analysis

Given that the primary data highlighting the influence of various socio-demographic factors on digital financial literacy, correlation analysis was performed to investigate the relationship between independent variables *i.e.* socio-demographic factors and dependent variables *i.e.* digital financial literacy. The analysis helped in assessing the strength of the relationships and identifying patterns between socio-demographic factors (such as education, income and age) and digital financial literacy.

Multiple Regression Analysis

To measure and analyze the influence of various socio-demographic factors such as education, age, and annual financial income on digital financial literacy, multiple regression analysis was conducted. This method allowed in predicting effect of multiple independent variables on the dependent variables, offering a more detailed and comprehensive view about how these factors influence digital financial literacy.

The following multiple regression equation was used in the study:

$$Y=\beta0+\beta1X1+\beta2X2+\beta3X3+\epsilon \qquad \text{Eq. 1}$$

where Y = Dependent Variable (Digital Financial Literacy)

$\beta0$ = Intercept(When the impact of all socio-demographic factors are assumed as '0')

$\beta1$,$\beta2$, and $\beta3$ are the coefficients of the independent variables [X1(Age), X2(Education) and X3(Annual Income)]

and ϵ as error term

5. Research Results

A break-up of the data collected in primary survey shows that customers possess maximum awareness about credit/debit cards and mobile wallets. Respondents are also reasonably aware about UPI(Unified Payment Interface) and Internet banking in both urban as well as rural areas. The financial literacy levels of Pre-paid cards were found to be less among respondents and indicates their less popularity. Chi-square values are found to be statistically significant for most of the modes except for credit/debit cards and pre-paid cards. The same was further substantiated by significant Cramer's V values (Table 2).

Table 2. Profile of Customers on Financial Literacy about Digital Payment Platforms

			Yes	No	Total	χ2	Cramer's V
Credit Card / Debit Card	Rural	N	326	24	350	1.660 NS	0.050 NS
		%	93.1%	6.9%	100.0%		
	Urban	N	296	14	310		
		%	95.5%	4.5%	100.0%		
	Total	N	622	38	660		
		%	94.2%	5.8%	100.0%		
Pre-paid Card	Rural	N	89	261	350	2.746 NS	0.064 NS
		%	25.4%	74.6%	100.0%		
	Urban	N	62	248	310		
		%	20.0%	80.0%	100.0%		
	Total	N	151	509	660		
		%	22.9%	77.1%	100.0%		
Internet Banking	Rural	N	226	124	350	7.127*	0.104*
		%	64.6%	35.4%	100.0%		
	Urban	N	230	80	310		
		%	74.2%	25.8%	100.0%		
	Total	N	456	204	660		
		%	69.1%	30.9%	100.0%		
UPI	Rural	N	241	109	350	8.767*	0.115*
		%	68.9%	31.1%	100.0%		
	Urban	N	245	65	310		
		%	79.0%	21.0%	100.0%		
	Total	N	486	174	660		
		%	73.6%	26.4%	100.0%		
Mobile Wallets	Rural	N	293	57	350	22.164*	0.183*
		%	83.7%	16.3%	100.0%		
	Urban	N	295	15	310		
		%	95.2%	4.8%	100.0%		
	Total	N	588	72	660		
		%	89.1%	10.9%	100.0%		
Mobile Banking	Rural	N	225	125	350	18.267*	0.166*
		%	64.3%	35.7%	100.0%		
	Urban	N	246	64	310		
		%	79.4%	20.6%	100.0%		
	Total	N	471	189	660		
		%	71.4%	28.6%	100.0%		

N.B:- * - *Significant at 5% Level ($P<0.05$), NS – Not Significant at 5% Level ($P>0.05$) for DF=1.*
Source: Survey by the Author

Socio-Demographic Factors and Digital Financial Literacy

Strong positive correlation coefficients for Age, Education and Annual Family income were evident in rural areas with education emerging as the most influential factor (Table 3). This suggests that people with higher educational levels, greater incomes and higher age groups are more likely to possess greater degree of financial literacy about digital financial services in rural areas. Conversely, Occupation and Social Stratification exhibited very weak correlations, while Gender demonstrated negligible correlation.

Table 3. Correlation of Socio-Demographic Factors with Digital Financial Literacy in Case of Rural Customers

Socio-Demographic Factors	Digital Financial Literacy
Age	0.687*
Gender	-0.003
Education	0.718*
Social Stratification	0.075
Occupation	0.032
Annual Family Income	0.704*

N.B:- * - *Significant at 5% Level (P<0.05) for DF=349.*
Source: Survey by the Author

In a pattern, similar to rural customers, strong positive correlation was observed for Age, Education and Annual Family income in urban areas too with education as the most important factor(Table 4). This indicates that higher educational levels drive digital financial literacy. Furthermore, the data suggests that people with higher family incomes and higher age groups would carry better awareness about digital financial products. In contrast, Occupation and Social Stratification were found to have lesser influence owing to very weak correlations, while Gender exhibited insignificant influence.

Table 4. Correlation of Socio-Demographic Factors with Digital Financial Literacy in Case of Urban Customers

Socio-Demographic Factors	Digital Financial Literacy
Age	0.687*
Gender	-0.003
Education	0.718*
Social Stratification	0.075
Occupation	0.032
Annual Family Income	0.704*

N.B:- * - *Significant at 5% Level (P<0.05) for DF=309.*
Source: Survey by the Author

The results of a regression analysis reemphasize that age, education, and annual family income are key determinants of digital financial literacy among rural customers. All three factors were found to be statistically significant, with annual family income displaying strongest influence, followed by age and education. These finding indicate that socio-demographic status, represented by income and age plays a critical role in influencing a customer's financial literacy levels about digital payment services in rural areas (Table 5).

Table 5. Multiple Regression of Socio-Demographic Factors with Digital Financial Literacy in case of Rural Customers

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.051	0.009		-5.578	0.000
Age	0.072	0.007	0.377	10.171	0.000
Education	1.702	0.035	0.216	49.005	0.000
Annual Family Income	0.147	0.013	0.457	11.508	0.000

N.B:- *r = 0.741, R^2 = 0.549*
Source: Survey by the Author

The regression analysis carried out for the data of urban respondents reveal that age, education, and annual family income are key determinants of digital financial literacy, similar to findings for rural customers. All these three socio-demographic factors emerged statistically significant, with age of the customer exhibiting strongest influence, followed by education and income. These finding reveal that socio-demographic status, represented by age, education and annual family income are significant predictors of digital financial literacy among urban customers (Table 6).

Table 6. Multiple Regression of Socio-Demographic Factors with Digital Financial Literacy in case of Urban Customers

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.032	0.008		4.142	0.000
Age	0.109	0.014	0.401	7.824	0.000
Education	1.697	0.037	0.201	45.463	0.000
Annual Family Income	0.033	0.011	0.172	3.384	0.001

N.B:- $r = 0.754$, $R^2 = 0.569$

Source: Survey by the Author

6. Discussions

The study revealed that age, education, and annual family income are the key socio-demographic determinants of digital financial literacy in both urban and rural areas. Education emerged as the most critical factor exhibiting strongest correlation with digital financial literacy indicating that people with higher education levels would have greater likelihood of aware about digital financial services. Age also found to be an important factor, suggesting that customers of certain higher age groups are more likely to be financially literate on digital payment products and services. Income too emerged as an important parameter, exhibiting more stronger association in rural areas than urban areas with higher correlation coefficients. In contrast, gender, social stratification, and occupation had minimal impact on digital financial literacy. The gender, particularly, does not seem to be associated with literacy levels of digital transaction platforms in both rural and urban areas indicating digital financial literacy a gender-neutral phenomenon. Urban respondents displayed higher literacy levels for most of the digital financial products except for pre-paid cards. A very narrow gap was observed for credit/debit cards between urban and rural respondents indicating similar literacy patterns in both areas. Multiple regression analysis further highlighted combined effects of age, education, and annual family income on the digital financial literacy, underscoring their strong predictive power.

Conclusions and Further Research

Digital financial literacy is a critical enabler of digital financial inclusion and aids in economic empowerment of individuals and households to effectively engage with the evolving digital economy. This study investigated the influence of socio-demographic factors such as gender, age, education, annual family income, social stratification and occupation on digital financial literacy. The study provided valuable insights into the socio-demographic determinants associated with digital financial literacy.

Key findings emerged from the study suggest that education, age and annual income significantly influence digital financial literacy, while gender, occupation, and social stratification exhibited weaker associations. Education, as a factor, has specifically exhibited robust association with digital financial literacy which indicates that education is a significantly contributing factor in increasing financial literacy levels. The digital divide between urban-rural population was evident in the study. However, the study indicated that rural population is not far behind their urban counterparts and almost at par for some digital financial products and fast catching up for others. These insights can help policymakers and financial institutions to develop targeted approaches and tailor their financial education and literacy strategies to spread awareness about digital financial services across all regions, ultimately bringing the underserved and underprivileged people to the fold of digital financial inclusion and thereby aiding in their economic empowerment.

In the present study, the data was collected only from eight districts of India. Considering India being a geographically vast country, the findings of this study may not be generalized for the entire nation or other equivalent countries. A study covering all the districts of the country is recommended to further substantiate the findings. Further, out of various socio-demographic factors, only six factors have been taken up for this study leaving the scope for further studies considering the remaining factors and devise governmental, regulatory and institutional strategies accordingly.

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Credit Authorship Contribution Statement

Nirmala Chandra Pattnayak: Conceptualized the study, research design and preparation of the survey questionnaire jointly with the co-author. He carried out the survey, conducted the data analysis and wrote the original draft.

Rashmita Sahoo: Conceptualized the study, research design and preparation of the survey questionnaire jointly with the first author. She supervised data analysis, validated the results. She reviewed and edited the draft article and it's findings and conclusion.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Declaration of Use of Generative AI and AI-Assisted Technologies

The authors declare that they have not used generative AI and AI-assisted technologies in the writing process before submission.

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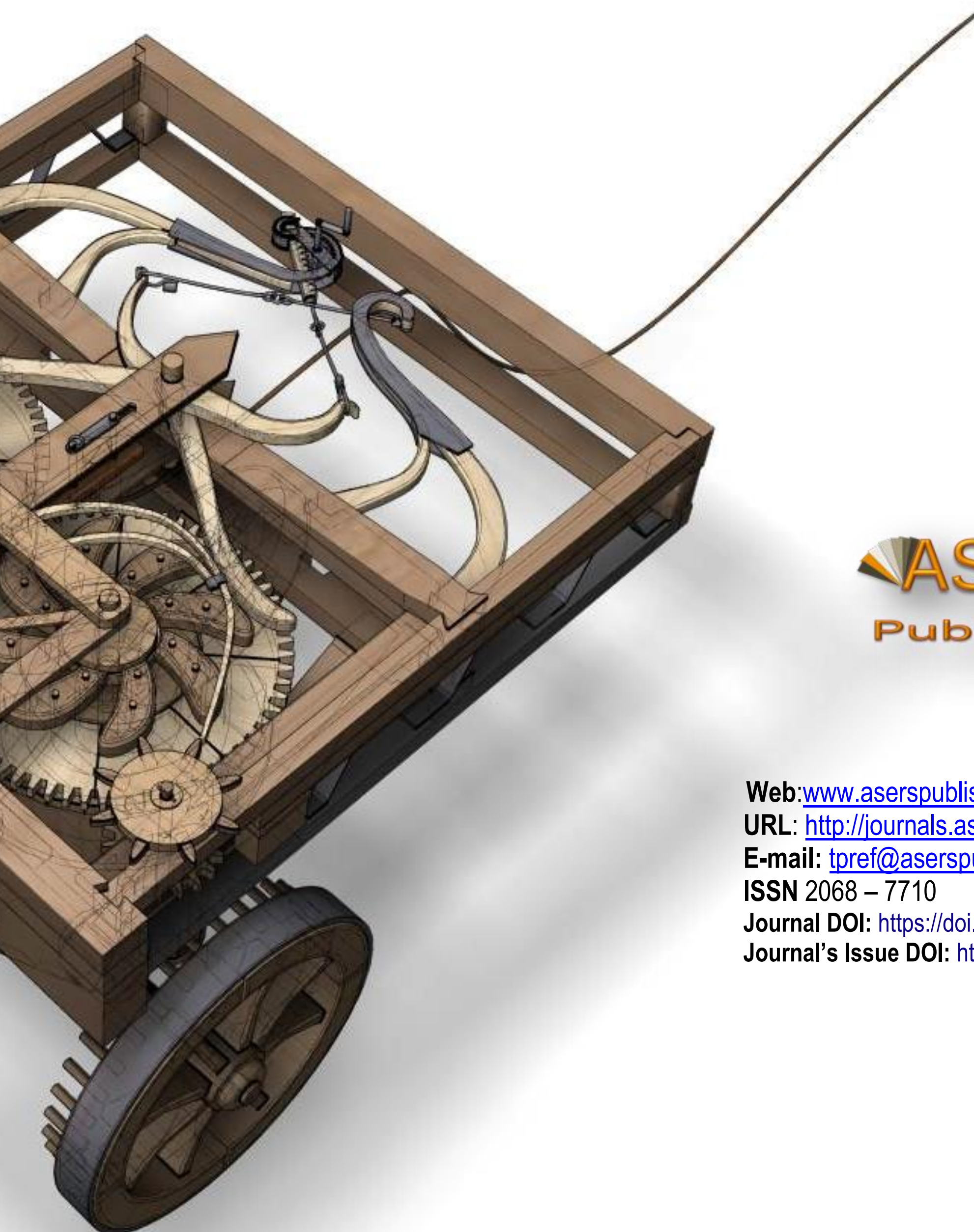

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