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Rural Households' Digital Finance Behaviour and their Demographic Profile Variables-A Study

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Abstract

Digital finance is a platform that enables governments and financial institutions to deliver better financial services to society's most disadvantaged and underserved communities. The Indian financial sector has seen a massive transformation in recent years. Internet penetration in rural India is expected to grow 56 percent by 2025, and smartphone penetration is expected to cross 1 billion by 2026. Digital India innovations like Aadhar, the Unified Payment Interface (UPI), and Digi Locker enabled consumers to access different digital platforms for their needs and desires. Though the prevalence of digital finance in rural India is encouraging, the access and adoption rates are lower in rural areas. Approximately 70 percent of the rural population has shown less access to digital finance, and 20 percent of poor people are only accessing digital finance platforms. It shows that factors influencing rural households' digital finance access and adoptions need to be studied. The main objective of this research is to identify the rural households' digital finance behaviour and its interactions with their different demographic profile variables. A multi-stage stratified random sampling method was adopted to collect the targeted sample. The collected data was analysed using SPSS tool. The study's findings revealed that rural households' digital finance behaviour can be classified as Technophilia, Techno progressivism, and Technophobic. Further findings of the chi-square test reveals that rural households' age, education, household size, occupation, monthly income, and investments have shown significant associations with their digital finance behaviour factors.

Key Words: Digital Finance, Demographic Variables, Digital Access, Digital Adoptions, Digital Finance Behaviour

INTRODUCTION

Rural households' financial behaviour plays an important role in determining poverty alleviation and economic development. Better banking and financial activities are made possible for rural families through financial literacy. Information and communication technology advancements also encouraged consumers to use more digital platforms for their everyday banking transactions. The widespread use of mobile phones and the internet in remote communities enables financial institutions and the government to offer the finest services to the intended population. Consumers may now easily access a wide range of financial services thanks to digital banking systems. People who lack digital literacy may behave irrationally when it comes to their finances (Gigerenzer & Gaissmaier, 2011). Capuano and Ramsay (2011) discovered that a person's society emotional, and intellectual traits influence poor and unreasonable consumer behavior. According to Beck and Brown's (2011) survey, metropolitan families who utilize digital platforms had higher income and wealth. Despite the fact that their financial transactions incur substantial costs, they ignore them. Rural households are discouraged from using internet platforms due to high prices. Farmers who have benefited from using digital finance for their needs will see a positive impact on their income in the long term. It directly influences their consumption and labour market movements (Beck, Lu, & Yang, 2015). Security is of the highest importance, and upgrading financial services results in either a positive or negative attitude about the usage of digital banking.

India has the world's biggest domestic migrant group. Internal transfers significantly affect the economic and social condition of the households who receive them. According to the Reserve Bank of India's (2017) report, remittances to India account for 11.4% of total worldwide remittance inflows. According to the survey, 59.2 percent of remittances received in India were utilized for household support and usage, 20 percent for bank deposits, and 8.3 percent were invested in shares of stock, real estate, and so on. Private financial institutions provide 74.2 percent of transactions, banks from the government sector 17.3 percent, and foreign banks 8.5 percent. According to a World Bank research (2019), India receives the most remittances in the world, at 82.2 billion dollars. Year on year, remittances in India increased by more than 14 percent. Financial services accessibility influences rural households' consumptions, savings, investments, insurance, and poverty reductions. (Dupas & Robinson, 2013). Digital literacy is the primary determinant of consumer attitudes regarding digital adaption (Bhatt, Shaikh, & Patel, 2023). Digital finance behaviour explains the overall accessibility and adoption behaviour of rural households. Financial literacy improves the family income in many ways, (Qin et al., 2022). A home that can access at least one digital tool is taken as digitally connected. In India, just 38% of households have accessed digital technology for their regular use. Only 25% of people in rural regions are digitally literate, whereas 61% of those in metropolitan areas. Around 53 % of rural households are receiving regular income or salary from non-agricultural employment through digital mode. On the other hand, just 13% of casual workers in the agriculture industry are digitally literate.

More and more people are seeking help with financial literacy in the digital age, which enhances their understanding of conventional financial literacy. Although digitalization has reached rural areas, its influence is

restricted due to low digital financial literacy. The digital financial practices of rural families and how they relate to several demographic profile factors have been the main subject of this study. Lawmakers, banking institutions, and regulators will use the study's findings to regulate the laws to ensure public safety and in creating specific products and services that satisfy the needs of consumers.

REVIEW OF LITERATURE

The financial practices of rural families have a significant impact on economic growth and poverty alleviation. Rural residents are more prepared for banking and spending when they have financial literacy. The need for individuals to utilize and use more online services for their everyday banking needs. The widespread use of mobile phones and the World Wide Web in remote communities enables institutions of finance and government entities to offer the finest services to the intended population. Access promotes cashless payments, minimizes costs, increases transparency, and eases small businesses. Mas (2012) classified the financial inclusion process into three clouds. There are physical cash clouds-traditional banking systems, digital clouds-money in a wallet, and psychological clouds people's interpretations of finance and lives. Access facilitates the connection between the real and virtual world, whilst the use of technological tools allows for exploration of emotional storms. Digital banking systems enable laypeople to conveniently access a wide range of financial services. But a lack of digital literacy might cause people to behave irrationally when it comes to money (Gigerenzer and Gaissmaier, 2011). Financial inclusion helps people and companies access formal education (Demirguc-Kunt A., Klapper L., Singer D., and Ansar S., 2018). Further, it has been noted that financial inclusion helps vulnerable communities, low-income groups, and financially excluded people Obtain established banking services. It includes savings, credit, insurance, equities, etc. (Rajan, 2009). Incorporating digital finance can assist to speed move forward in the direction of the goals of Sustainable Development.It possesses the capacity to eliminate poverty in both developed and emerging countries. Young people access online banking in developed countries by almost 90 percent and above (OECD, 2020). According to Beck and Brown (2011), digital platforms should be affordable. Hence, people will use it. More incentives should be provided to encourage rural households to use digital platforms. Digital payment accessibility increases risk-taking and reduces transaction costs, (Jack & Suri, 2011). Digital finance helps farmers improve their income and consumption patterns (Beck, Lu, & Yang, 2015). Digital payment services ensure quality and cost-effective access to poor and disadvantaged sections of society from their places (Ketterer, 2017). Affordability and access to smartphone usage increase digital finance transactions very rapidly (GSMA 2018). According to According to Sagayarani (2018), an electronic payment is a payment mechanism in which both the payee and the payer use sophisticated technologies to acquire and transmit money. Digital finance reduces many direct and indirect costs associated with availing various financial services (Pierre.etal, 2018). Financial services provided to unreached people at low or negligible cost through online mode are a part of digital inclusions (CGAP, 2015).

The security of using digital finance platforms determines individual positive and negative behaviours, (Solomon, Shamsuddin, & Wahab, 2013). (Roy., et al,2018) suggest that electronic payments in rural India are only achievable if privacy issues are addressed. Lyra (2021) reported that 52 percent of Indians lack knowledge about protection against cyber fraud and cybercrime. India placed second after the US in terms of facing major

cyber-attacks. Fear of unauthorized payments, fraudulent transactions, and potential cyber-attacks threatens people's digital finance adoptions (Mistry, 2022). The Cision PR Newswire Report (2023) found that 69 percent of digital payment users are facing security issues when using digital payments. Types of security threats are fraudulent activities, data breaches, malware attacks, and phishing scams. Digital finance provides a convenient way of transacting funds between family and friends groups where the regular banking service is inaccessible (Mbiti & Weil, 2011). Taheam, Sharma, and Goswami (2016) discovered that impediments to electronic payment adoption include higher costs, intricacy, an absence of necessary mass, and potential hazards. Rathore HS (2016) explored that convenience is the outcome of digital finance access and adoptions. "A Digital Wallet" is a form of electronic account that acts like a normal wallet in which one can access and pay for various digital financial services, Doan (2014). Wamuyu (2014) found that a digital wallet provides many benefits, like fund transfers, convenience, affordability, and secure transactions.

Perceived ease of use, flexibility, and credibility all have an impact on electronic wallet usage, which in turn influences people's willingness to use technology (Padashetty and Kishore, 2013). Rory Macmillan et al. (2016) proposed that mobile banking services promote financial inclusion by employing mobile cash transactions and payments to stimulate numerous sectors of the formal economic system. Evolution of internet and smartphone penetrations helpful for financial industry to provide various numerous services to its users to tackle competition in the market, (Vivek Joshi, 2022). In future, small finance companies, payments banks and fintech companies can dominate the digital payments industry in many perspectives. Findings of Jayachandran C. (2004) suggested that certain demographic variables influence rural households' investments and financial activities in many ways. Some of them income, family size, and the household life cycle. He found that most of the households in rural areas prefer conventional banking activities. Poor literacy affects their banking practices. These findings were supported by Sethupathi, M. (2011), that rural households have preferred only the conventional form of banking practices. Education increases rural households' financial literacy and inclusion in India, Goel (2020). According to Allen et al. (2016), digital payments save money by lowering transaction costs, improving ease, and motivating current account users to use their accounts more often. Digital finance opens doors to people and businesses for easy credit needs. It fosters credit availability for needy people and businesses (IMF Financial Access Survey, 2021). Digital finance eases credit accessibility and availability. Collateral-free loans are offered through many schemes with the help of digital finance platforms. One such scheme is 'Pradhan Mantri MUDRA Yojana," which was launched in 2015 and helps MSME businesses by providing collateral-free loans. Digital finance helps public, private, and non-bank financial institutions deliver factual credits to people and businesses. Digital lending is contributed by public banks at 2 percent, by private banks at 55 percent, and by non-bank institutions at 10 percent (RBI, 2021). The digital finance payment mechanism reduces leakages and increases the transparency of individual and government payments. It has been designed to cater to the needs of different people at their convenience, be affordable, and be transparent (Ministry of Electronics and IT, 2023). Digital financial adoptions in India are critical for fostering financial inclusion, ease, transparency, and economic growth. Many simple and convenient digital payment methods, such as Bharat Interface for Money-Unified Payments Interface (BHIM-UPI), Immediate Payment Service (IMPS), and National Electronic Toll Collection (NETC), have grown significantly over the last five years,

transforming the digital payment ecosystem by increasing both person-to-person (P2P) and person-to-merchant (P2M) payments. In January 2023, BHIM UPI received 803.6 million digital payment transactions totalling ₹12.98 lakh crore, making it the most popular payment method among Indians (Ministry of Electronics & IT, 2023).

Most of the young populations have increasingly accessed the digital platforms for their financial activities. Seniors have stayed away for these types of transactions. They find it difficult to understand the digital systems and its usages (T. Ravikumar, B. Suresha, N. Prakash, Kiran Vazirani and T.A. Krishna,2023). As stated by Ravikumar et al. (2024), efficient utilization of DFS requires DFL. People, companies, and families now use electronic banking services to make payments, obtain money, resolve transactions, purchase financial goods, initiate savings, and send remittance. Digital financial services increase financial inclusion for those who are financially excluded by overcoming the barriers to serving the excluded (Alliance for Financial Inclusion, DFSWG, and CEMCWG, Citation2021). Digital financial services are becoming increasingly popular. In 2020, there were about 70.3 billion real-time payment transactions reported globally, representing a 41% increase over the previous year. People's degrees of financial literacy are also linked to their income. People with greater disposable income levels are more likely to demonstrate higher financial literacy, while those with a smaller income are less likely to do so (Anz, 2008; Potrich et al., 2016; Shusha, 2017). Several studies show that age is one of the most important elements influencing digital financial literacy. Financial competence changes dramatically with age for both men and women, and it increases rapidly (Cherono & Ntinyari, 2019; Gutti, 2020; Taylor, 2011). Taft et al. (2013) found a significant positive correlation between age, financial well-being, and financial literacy. Several research studies found a strong and favorable correlation between financial literacy and higher education (Agarwalla et al., 2017; Bhushan & Medury, 2013; Gutti, 2020; Ibrahim et al., 2009; Thaler, 2013). According to ANZ Banking Group (2003) and Brown & Graf (2013), single people tend to have lower levels of financial literacy than married people. Individuals with a lack of financial literacy may make poor judgments that might lead to debt and harm relationships (Calamato, 2011; Potrich et al., 2016). Digitalization and faster internet technologies might increase the digital gap between rural and urban areas owing to digital incompetency and illiteracy (Malady & Buckley, 2014; OECD, 2018; Singh & Rana, 2017) in developing nations like India (ITU, 2016; Thomas & Krishnamurthi, 2017). It is significantly more costly to develop and build physical infrastructures for the seamless operation of digital transactions in remote rural locations (Prasad et al., 2018). Atkinson & Messy (2012); Lusardi & Mitchell (2011); Lusardi & Wallace (2013); Hung et al. (2012); Ibrahim et al. (2009); Calamato (2011); Cheronoh (2019).

According to Taylor (2011), men are more financially savvy than women. People with more education are likely to have better access to financial goods and services and greater levels of digital financial literacy. In support of this, Lusardi & Mitchell (2011) discovered that those with lower levels of education, particularly women, are more likely to indicate they do not know the answer and are less likely to provide accurate answers to questions on financial literacy. Financial literacy of people relates to their income levels. Individuals with higher personal income levels are likely to exhibit more financial literacy, whereas those with lower incomes are likely to exhibit poorer financial literacy (Anz, 2008; Potrich et al., 2016; Shusha, 2017). Age is one of the

most important characteristics influencing digital financial literacy, according to several studies. For both men and women, financial competence increases quickly with age and varies greatly (Cherono & Ntinyari, 2019; Gutti, 2020; Taylor, 2011). Age, financial well-being factors, and financial literacy are highly and favorably correlated (Taft et al., 2013). Rural areas of India include those with lower economic status, greater levels of lack of education, awareness, and, most importantly, fewer internet networks (Nedungadi et al., 2018). People in rural areas are less knowledgeable about and use digital financial literacy less frequently.

According to Li, J., and Ghildiyal, A.K. (2023), 'Socioeconomic factors, mobile phone ownership, and banking activity of individuals influence digital financial inclusion in India'. Findings of this study revealed that individuals' socioeconomic characteristics like age, gender, education, occupation and income have significantly influenced their digital adoption behaviour. Further, it has been revealed that digital tools like smartphone accessibility, and individuals' behaviour toward savings, investments and borrowing had a substantial impact on digital financial inclusion. Findings of Kandari, P., Bahuguna, U. and Salgotra, A.K.(2021) revealed that there exists a relationship between the socio-economic factors of people and their financial inclusion. Hana, S., and Roy, D. (2023) found that individuals' use of digital financial services was significantly influenced by age, education, employment, and income. However, gender and marital status had no significant impact.

OBJECTIVE OF THE STUDY

1. The study aims to investigate the impact of rural households' demographic profile characteristics on their digital financial behaviors.

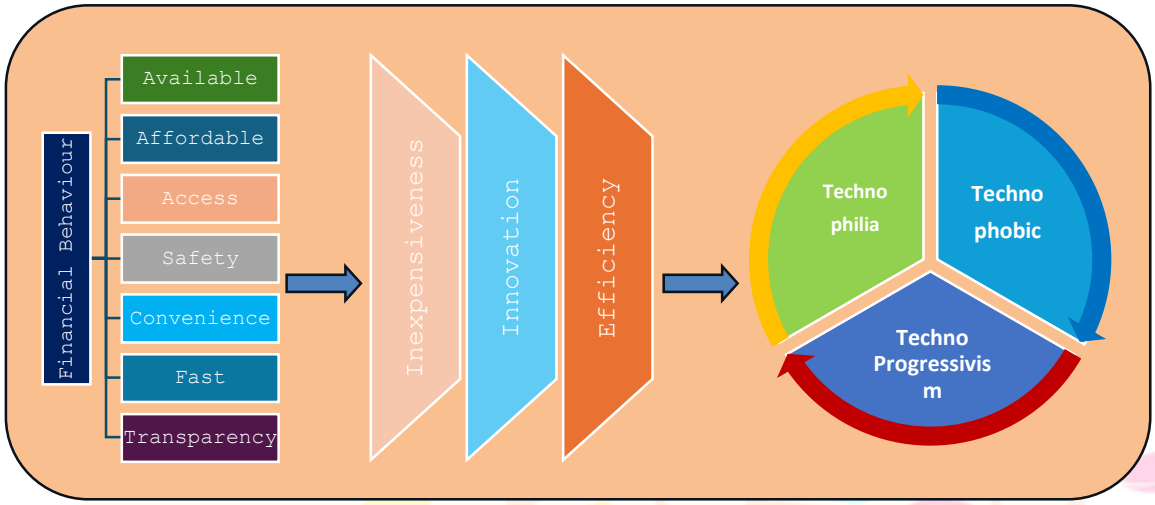
RESEARCH METHODOLOGY

The key goal of this study is to discover the rural families' digital financial behavior in the Villupuram district of Tamil Nadu, India. Descriptive research is employed to study the characteristics of a particular population or group. This study uses both primary and secondary data from various sources. Primary data is collected using a structured questionnaire, which contains the rural household's demographic profile variables and digital finance behaviour factors. The data are collected from rural households in the Villupuram district of Tamil Nadu. The survey questionnaire comprises questions tailored to meet the objectives of the study. Digital finance behaviour questions were framed using the 5-point Likert scale. The pilot study found that the factors employed in the study had high internal consistency, with a Cronbach alpha level of more than 0.80 and significant correlation coefficients of p less than 0.05. The present study used a questionnaire to collect data from rural households in a selected district of Tamil Nadu, India. Data was collected during the period from 2020 to 2021.Using the multistage stratified random sampling method, the samples were targeted to collect 700 samples. Out of the 710 respondents targeted, 660 samples were taken as usable data, and the remaining 40 samples had incomplete information. Usable data accounts for 94 per cent of the targeted data. Prior to the research, a pilot study was conducted to test the research instruments with 50 respondents (Wilson 2011). The pilot study indicated that the factors used showed internal consistency with the Cronbach alpha level of over 0.7 and the significant correlation coefficients ($p < 0.05$).

DIGITAL FINANCE BEHAVIOUR MODEL

Rural households' financial behaviour traits are taken as available, affordable, access, safety, convenience, fast/speed, and transparency, respectively. With the help of these factors, factor analysis is carried out to reduce the factors into three factors. They are Inexpensiveness, Innovation, and Efficiency.

Figure 1: Digital Finance Behaviour Model



Efficiency: It explains the safety, transparency, and accessibility of the individuals. These characteristics explain why individuals demand efficient digital banking services.

Inexpensiveness: It combines the characteristics of ease and affordability. These are the secondary characteristics that individuals expect while utilizing digital banking services.

Innovation: It explains the digital finance availability and fast/speed traits of digital finance services.

Identifications of Digital Finance Behaviours Using cluster analysis, extracted factors are segmented into three homogenous groups Technophilia, Techno progressivism, and Technophobic. These three homogeneous groupings will account for the diverse characteristics of rural families' digital financial activity.

Technophilia: Technophilia people are positively influenced by innovations, efficiency, and inexpensiveness factors. They are strongly attracted to digital finance technology and use it in their regular financial activities.

Techno progressivism: Techno-progressivism people are moderately influenced by innovations, efficiency, and inexpensiveness factors. They are neither digitally savvy nor technology adopters.

Technophobic: Technophobic people are less influenced by innovations, efficiency, and inexpensiveness factors. They are less adopters of technology or non-adopters.

ASSOCIATION BETWEEN DIGITAL FINANCE BEHAVIOUR CLUSTERS AND DEMOGRAPHIC/FINANCIAL AWARENESS PROFILE VARIABLES

The Chi-square test is used to find the association between digital finance behaviour clusters and their different demographic and financial awareness variables. The Chi-square and significance values are shown in Table 2.

Table 2: Relationship between Demographic Profile and Financial Awareness Variables and Digital Finance Behaviour

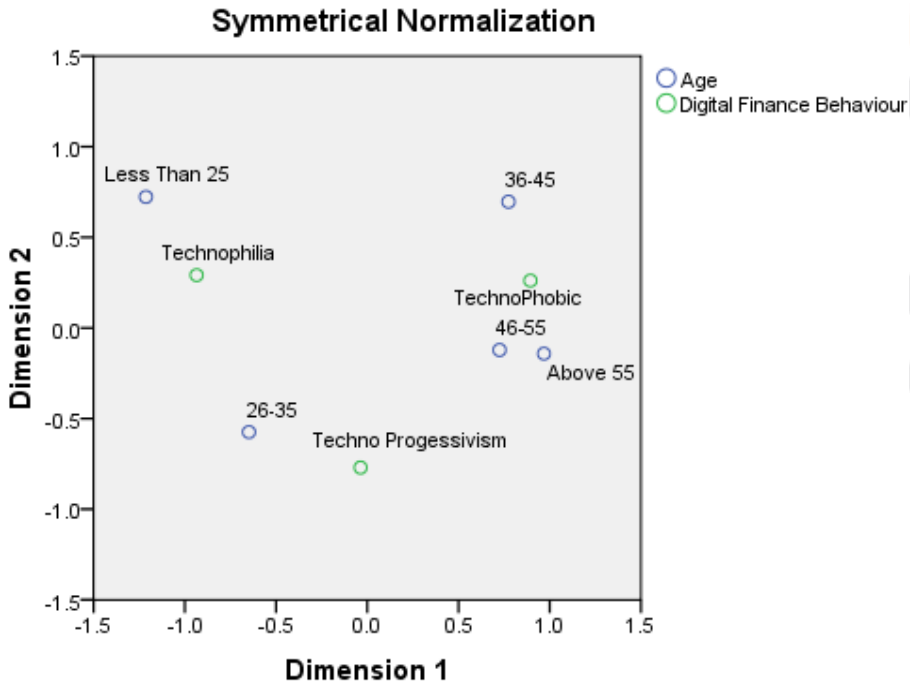
S. No	Demographic profile and financial awareness		Chi-square value	Sig
1	Demographic Profile	Age	80.14	0.000*
2		Gender	25.824	0.064
3		Marital status	7.312	0.118
4		Education	39.38	0.000*
5		Household size	62.22	0.000*
6		Occupation	51.584	0.000*
7		Religion	11.702	0.790
8		Caste	18.232	0.081
9		Holdings of land	10.83	0.698
1	Financial Awareness	Monthly income	86.51	0.000*
2		Expenditure	18.67	0.093
3		Investments	40.86	0.000*
4		Savings	12.47	0.632
6		Device platforms	12.241	0.141
7		Network availability	11.810	0.160
8		Distance of reaching financial institutions	3.971	0.860

From **Table 2**, it is inferred that rural households' age, education, household size, occupation, monthly income, and investments have shown significant associations with their digital finance behaviour.

Age and Digital Finance Behaviour

The chi-square and significance values of the associations between age and financial behaviour clusters are 80.14 and 0.000, respectively.

Figure 2: Age and Digital Finance Behaviour



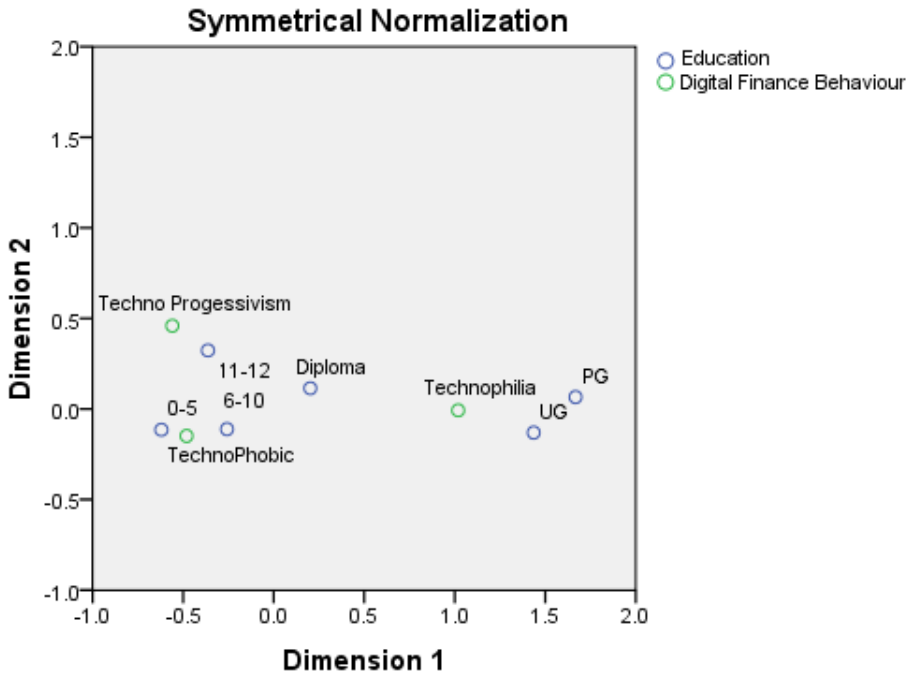
The correspondence analysis figure 2 demonstrates that rural households of less than 25 years of age are technophilic, those between 26 and 35 are techno progressivism, and those above 36 years are technophobic. It illustrates that young people are strongly influenced by digital finance technology. Since they are digitally savvy,

they can easily use it in their financial activities. According to Brosnan (1998), younger people are anticipated to be more knowledgeable and technologically savvy, which may have contributed to a decreased fear. Similarly, anxiety makes the older generation is projected to be less proficient at using technology (Brosnan, 1998). Households between 26 and 35 are techno-progressives. Techno-progressives are at the initial stage of acquiring knowledge of various digital finance tools and platforms. They need time to become Technophilia. Households above 36 are technophobic. They are mature in terms of age and making financial decisions. They explore conservative behaviour to accept and use digital finance tools. Lack of knowledge, inexperience with using technology, and digital illiteracy are the factors that can make them technophobic. Technophobia is common among older people because the elderly population is less inclined to accept technology owing to fear, aversions, and other causes. In addition, older people became privy to technology later in life because they frequently had little confidence and found it challenging (Samuel T. Faloye, Sanjay Ranjeeth, and Sonny Ako-Nai, 2022). Technophobic people are averse to using technological innovations. They prefer traditional methods to accomplish tasks (M.E. Osiceanu, 2015).

Education and Digital Finance Behaviour

Education is a key factor in defining financial literacy (M. Jayanthi, 2019). The chi-square and significance values of the associations between rural households' digital finance behaviour and their education are 39.38 and 0.000.

Figure 3: Education and Digital Finance Behaviour



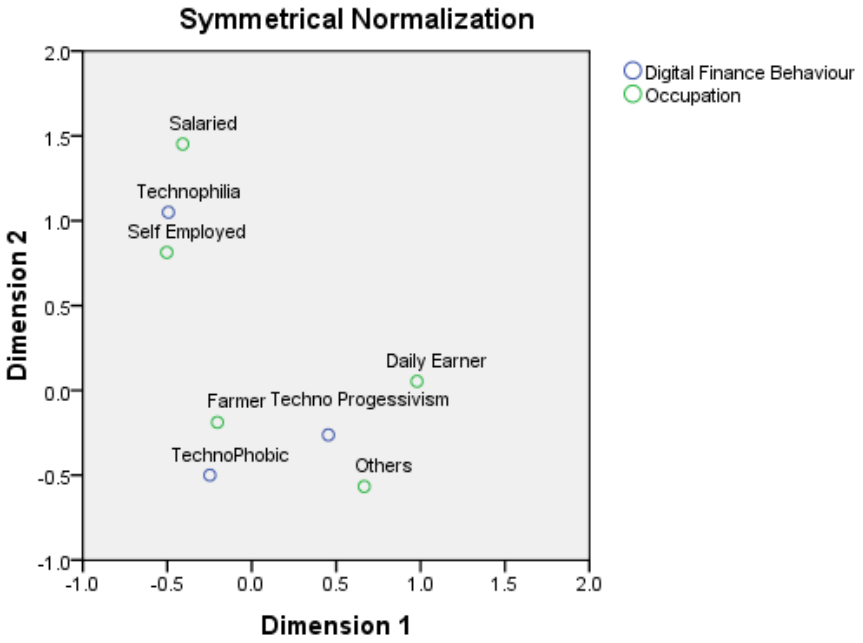
Rural households who hold UG and PG degrees have explored technophilia behaviour and studied between 0 - 12 and diploma, are techno progressivism, and technophobic. It explores that the less educated have shown more aversive behaviour toward technology adoptions, while the more educated have shown more adaptive behaviour toward technology. Education influences financial literacy, which can help people explore more positive attitudes toward technology adoption. Agarwalla et al. (2013) found that people who hold higher education have higher financial literacy (Agarwalla SK, Barua MSK, Jacob J., and Varma JR. 2013). Many

factors are required to establish the rural penetration of digitization. Education and skills are one such factor that influences rural households' digital adoptions (OECD, 2019).

Occupation and Digital Finance Behaviour

Lee's (1970) study found that education, money, and employment influence individuals' technology adoption attitudes. The chi-square and significance values of occupation and digital finance behaviour are 51.584 and 0.000, respectively.

Figure 4: Occupation and Digital Finance Behaviour

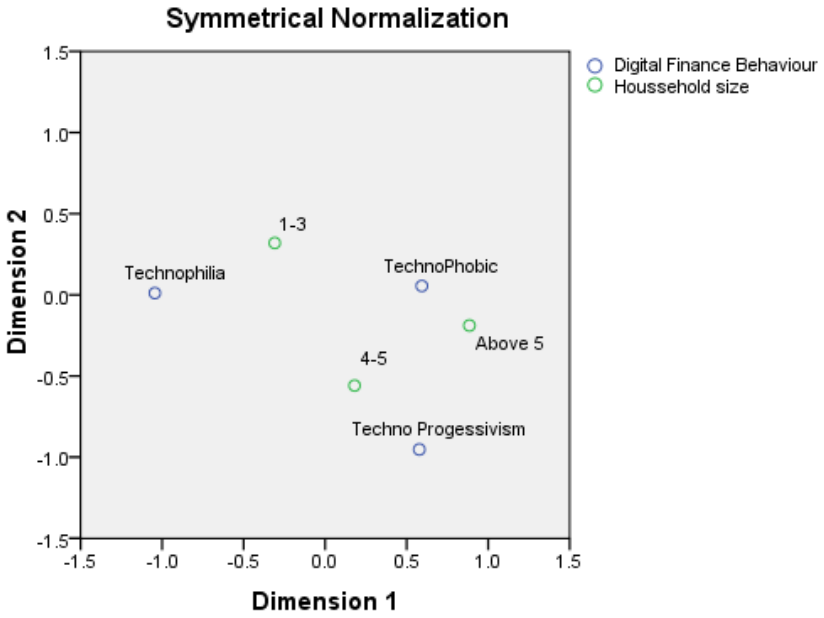


Technophilia is associated with salaried and self-employed; farmers, daily earners, and other categories associated with technophobic; and techno-progressivism. It indicates that occupations directly influence individuals' incomes, which further induces their technological adoption. Steady and stable income provides jobs, allowing people to largely access digital finance platforms compared to those in the unstable income category, like farmers. It shows that farmers are averse to technological innovations and adaptations. Lack of knowledge, unstable income, affordability, and digital illiteracy may influence their technophobic behaviour. According to Cambre and Cook (1985), the introduction of new technological developments may induce emotional and cognitive feelings, which induce anxiety and fear and will affect their technological adoption.

Household Size and Digital Finance Behaviour

Household size influences the financial behaviour of rural households, as do demographic characteristics of income, education, and wealth (Brown et al., 2016). The chi-square and significance values of this association are 62.22 and 0.000.

Figure 5: Household Size and Digital Finance Behaviour

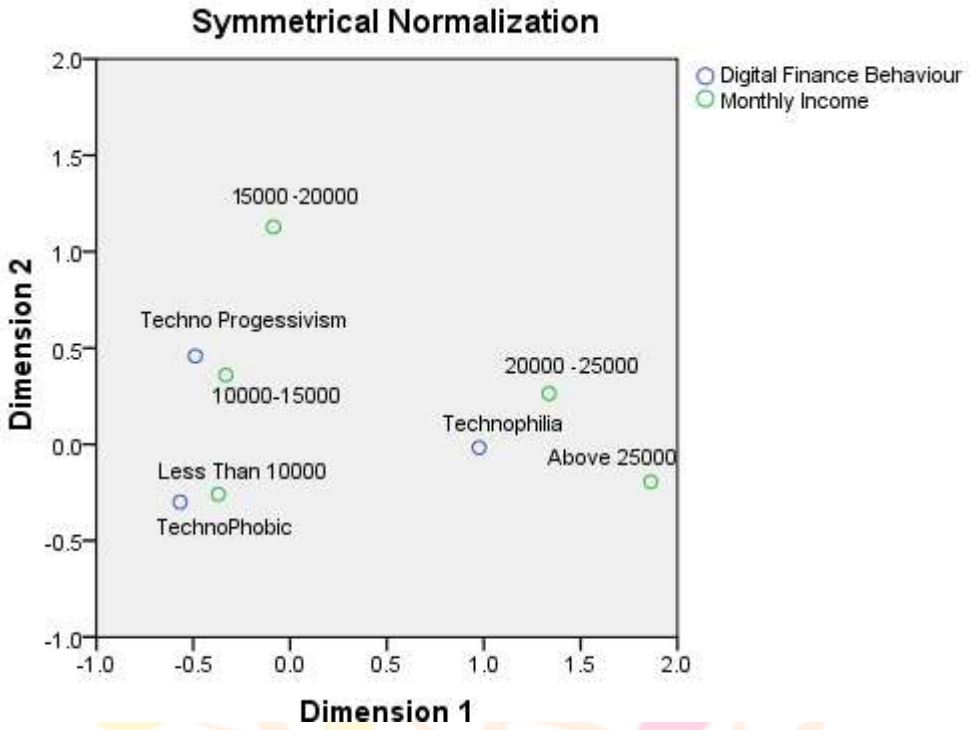


Technophilia is associated with household sizes of between 1 and 3 and household sizes of above 3 are associated with techno progressivism and technophobic. It shows that rural families' digital financial actions is favorably connected to their household size. Increased household size brings more financial commitments, which makes households very cautious about approaching digital finance platforms and vice versa.

Income and Digital Finance Behaviour

The emergence of digital finance correlates positively with household income, and the positive effects are more pronounced for rural families than for urban ones, implying that digital finance could contribute to narrowing the urban-rural income divide (Zhang et al., 2020). Income is the key factor that motivates people to positively approach digital finance platforms for their monetary necessities. The chi-square value of the association between income and digital finance behaviour is 86.51.

Figure 6: Income and Digital Finance Behaviour

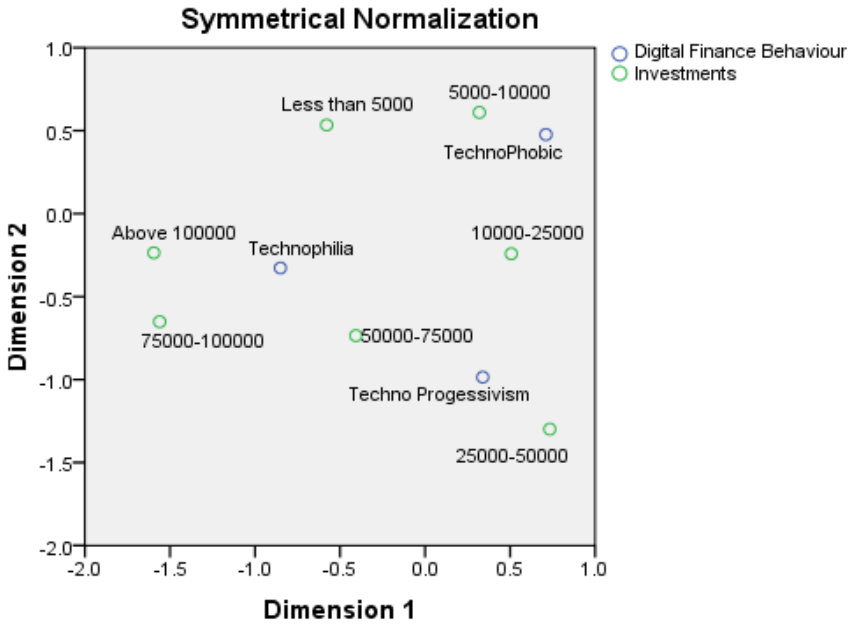


Technophobic people are associated with less than 10,000 per month; techno-progressivist people are associated with between 10,000 and 20,000; and finally, technophilic people are associated with more than 20,000 per month. It explores how household income influences their technology adoption behaviour. Low income tends to act as an aversive behaviour when approaching technology. This leads them to be technophobic (Sahil Koul and Ali Eydgahi, 2018).

Investments and Digital Finance Behaviour

Digital finance increases individuals' financial activities more than the conventional form of banking activities (Huang Yiping and Huang Zhuo, 2018). Rural households who have made investments of above 75,000 per year are technophilic; investments made between 25000 and 75,000 are techno progressivism; and households who are technophobic have made investments of less than 25000 per year. From these associations, it has been found that households who are well-equipped with technology have made higher investments than moderate (techno progressivism) and low-equipped (technophobic) households.

Figure 7: Investments and Digital Finance Behaviour



According to Fan et al. (2015), digital finance reduces the total time spent by households on financial investment, which can boost their financial investment enthusiasm and income to some extent.

FINDINGS OF THE STUDY

Rural households' digital finance behaviour variables like Access (A), Affordable (AFD), Available (AV), Safety (S), Convenience (C), Fast/Speed (F), and Transparency (T) were taken for factor analysis. In this study, seven digital finance behaviour variables were reduced into three components with the help of principal component analysis and the varimax rotation method. The extracted components were named Efficiency, Inexpensiveness, and Innovation. Frequency analysis of efficiency factor explored that 31 percent were efficient, 38 were neutral and 31 percent were inefficient. Around 37 percent were influenced by the inexpensiveness factor, 31 as neutral and 32 percent as not influenced. Finally, the innovation factor was influenced by 30 percent, 46 percent as neutral and 24 percent as not influenced. A homogenous group of clusters formed with the help of three extracted factors (Efficiency, Inexpensiveness, and Innovation) using the K-means clustering technique. The mean values of factors concerning the clusters were ranked. Based on the rankings and characteristics of the group, the clusters were named Technophilia, Techno Progressivism, and Technophobic. Findings of the ANOVA table suggested that the F statistics of the innovation factor were high. It showed that the innovation factor contributed highly to segmenting the cluster classifications. Frequency analysis of cluster classifications revealed that 23 percent belonged to Technophilia, 35 percent were Techno Progressivism, and 42 percent as Technophobic. Findings of the chi-square test explored that rural households' age, education, household size, occupation, monthly income, and investments have shown significant associations with their digital finance behaviour clusters.

CONCLUSION

Digital finance is an emerging concept in India, supported by advanced information and communication technology and smartphone penetration. India's smartphone user base will reach 1 billion by 2026. By 2025, around 56 percent of total new internet users will be from rural India. Currently, 36 percent of digital payment

users are from rural areas. In India, around 52 percent of the people who have adopted and used digital platforms for their financial transactions are less than 40 years of age, which constitutes 52 percent of the country's population, which is somewhat greater than the global average of 46 percent (Trans Union CIBIL report, 2023). Only 38 percent of households in the country are digitally literate. Besides, just 31 percent of the rural population has access to the Internet, which is compared to 67 percent of the urban population (India Inequality Report, 2022). Though the potential growth for digital finance is promising, rural households' digital access and adoptions are low compared to urban populations. Hence, this study has taken major digital finance behaviour factors to identify the influence of demographic profile variables on rural households' digital finance behaviour. Findings of the chi-square test explored that rural households' age, education, household size, occupation, monthly income, and investments have shown significant associations with their digital finance behaviour factors.

DIRECTIONS FOR FUTURE RESEARCH

The current study highlights a number of potential research issues. First, the current study focused exclusively on digital financial behaviour characteristics of rural households' access and adoption behaviour. There are several elements that might impact how rural families adopt digital finance. It has to be examined. Second, the impact of socioeconomic and financial knowledge characteristics is limited to just a few variables in order to carry out this research. Future study may potentially incorporate more factors to widen the existing research focus. Finally, our study focused solely on rural families' digital financial adoption behaviour. The digital gap between rural and urban regions should be investigated, since it is a viable subject of future study on this issue.

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