ISSN 2320-4907 IIS Univ.J.Com.Mgt.. Vol.11 (1), 123-139 (2022)

Digital Finance and Digital Financial Literacy - A Conceptual Framework

Ms. Ira Saxena, Dr. Meenakshi Sharma

Abstract

As digitalization continues to evolve, financial services are changing as well, necessitating the need for digital financial literacy in order to engage in these financial services. People are now more responsible for personal money, notably personal "digital finance," as a result of the expansion of financial services in digital form. It is critical to comprehend the concepts of digital financial literacy and digital finance in this regard. The purpose of this study is to conduct a literature review to establish a conceptual framework on the relationship between digital financial literacy and digital finance, as well as to identify the elements influencing the same.

Keywords: Digital Financial Literacy, Digital Finance, Digital Financial Services and Financial Literacy.

Introduction

Digital financial literacy is a developing idea, since every area of human existence is increasingly surrounded by technology. It is a person's capacity to use digital financial goods more effectively and efficiently. In this regard, digital finance is opening the way for a huge number of clients to access a variety of financial goods and services with a single click. The financial industry is always innovating and growing at a quick pace. However, the ultimate source of income production for financial service providers is the financial consumers that use the financial sector's products and services. In today digitally driven economy, not only is financial knowledge essential, but users of financial services must also be technologically literate in order to acquire financial services in digital forms. Traditional players are being challenged to deliver innovative, customised, and diverse financial services to their clients as a result of digital financial services. The current study is conceptual in nature, providing a framework for Digital financial literacy and digital finance.

Literacy

"Literacy in the broadest sense consists of understanding (i.e., knowledge of words, symbols and arithmetic operations) and use (ability to read, write and calculate) of materials related to prose, document and quantitative information." Huston, S. J. (2010)

Financial literacy

Financial literacy refers to a person's capacity to make financial decisions based on his knowledge, skills, and education. It is critical for a nation's growth to have a healthy financial system, which necessitates that every individual have a basic education and understanding of how to handle his or her financial resources effectively and efficiently. Financial literacy enables consumers to make sound savings, consumption, and investment decisions.

Digital finance

Digital finance is means providing financial products and services in digital form. Digital finance is one of the major developments in the financial sector. Digital finance encompasses a wide range of financial products and services in digital form, through digital technologies on Digital platforms. In words of Gomber et al (2017), "Digital Finance encompasses a magnitude of new financial products, financial businesses, finance related software, and novel forms of customer communication and interaction—delivered by FinTech companies and innovative financial service providers."

Digital financial literacy

Digital financial literacy is the skill, knowledge, attitude, behaviour, and desire to use digital financial products more effectively and efficiently. It is the ability of an individual how to use digital finance products, services, and tools. As the world is moving towards digitalization it is vital to know about online financial products available in the market to make financial decisions more accurately.

Consumer usage

The customer is the ultimate person who will consume the products and the services provided by the financial sector. It is of vital importance to acquire and retain the customer as competition is very high, individual uses multiple services of different service providers. The financial sector is constantly coming up with innovative Digital techniques and services to fulfill the demand of the customers. The consumer must know about the Digital services being supplied by the providers. They should be financially literate to understand Digital finance.

Objective of the Study

1. To find out the factors influencing the digital finance.
2. To find identify the factors affecting the digital financial literacy.

Research Methodology

The current research is conceptually based primarily on a survey of the literature and an analysis of past findings. To examine the work done in financial literacy, digital finance, and digital financial literacy, data was collected by searching literature on multiple resources such as Google scholar, Willey, ProQuest, Ebsco, research gate, Springer, Elsiver and Emerald. The search terms financial literacy, financial education, digital finance, digital financial literacy, digitalisation of financial services and financial literacy in digital era were used. The duration of the research paper included the time period from 1994 to 2020.

Review of Literature

The review of literature is a systematic and critical examination of other people's work with the goal of identifying research gaps in these studies so that they might be pursued further. The present review of the literature is related with the financial literacy, digital finance and digital financial literacy and majority of the topic covered in review of literature includes financial literacy, digital Finance, financial inclusion, digital financial literacy, fintech, customer preferences.

Source: Authors Compilation

Figure 1: Year wise division of reviewed research paper shows that maximum paper reviewed are of 2017

Source: Authors Compilation

Figure 2: Status of the research paper shows that out of 50 papers national papers are 20 and international papers are 30

Morgan, P. J., & Long, T. Q. (2020), "found that a higher level of financial literacy has strong and positive effects on an individual's awareness and use of fintech products. But financial literacy does not have a correlation with awareness of digital financial advisors." Yoshino et al (2020), "concluded that higher financial literacy is positively associated with a higher likelihood of using fintech services but it is negatively correlated with holdings of crypto assets." Baker et al (2019), "focuses on the relationship between financial literacy and demographic characteristics (gender, age, income level, education, employment, marital status, and investing experience) and behavioural biases such as overconfidence and self-attribution, Disposition effect, Anchoring, Representativeness, and Mental accounting (the desire to evaluate each stock or asset individually), Familiarity, Availability Hindsight bias (overreaction to new knowledge), Emotional bias (people perceive twice as much pain for what they lose as joy for equal gains), and herding are all examples of cognitive biases and discovered that investors do not always act rationally; there are behavioural biases; demographic variables such as age, occupation, and investment experience are the most important that relate to the behavioural biases of individual investors; males are more overconfident than females about their stock market knowledge. Financial literacy is favourably associated to mental accounting, adversely related to disposition effect and herding bias, and there is no relationship between financial literacy and overconfidence or emotional biases." Wagner, J. (2019), "focusses how financial education is related to financial literacy for people with lower education and income. And estimate how financial education offered in high school, college, through an employer, or any combination of the three, has an impact on a person's financial literacy score, found that financial education tends to be positively connected to better levels of financial literacy, particularly among individuals with lower levels of education and income. Furthermore, people who got financial education had statistically higher financial literacy ratings than those who did not get any financial education." Sabri, M. F., & Aw, E. C. X. (2019), " found that financial literacy of consumer's are affected by the financial information source preferred by them. Financial literacy is positively related to the amount of income allocated to investment and is negatively related to the likelihood of hiring a financial planner." Adetunji, O. M., & David-West, O. (2019), "focuses on the impact and role of income and financial literacy on their demand for financial services and examines the impact of financial literacy and income on the frequencies of formal, informal and other forms of savings. There are two principal drivers of financial access (income and financial literacy) and savings. It was found that Nigerian adults save most frequently at home, with family and friends and with informal institutions. There exist a strong association between formal savings and level of income." Li, J., & Meyer-Cirkel, A. (2019), "intends to assess the effects of digitally based financial inclusion via an internet platform, as well as to investigate the direct impact of using a digital platform on users' portfolio construction, rebalancing, and associated portfolio performance. It is reasonable to assume that the average user will select nine distinct assets from five geographical areas. Furthermore, it was shown that there are considerable peer impacts on students' financial portfolio creation over time." Son, J., & Park, J. (2019) "analyses whether financial literacy acts as a mediator between financial education and sound personal finance as well as the disparities in how financial literacy influences sound personal finance across socioeconomic groups. It was discovered that there is a link between financial education and income class. Disparities in financial knowledge and abilities were discovered when comparing the low-income group to the middle and upper-income classes." Jie Li et al (2019) "discovered that digital finance is favourably associated to food, clothes, housing upkeep, medical care, education, and entertainment spending. Digital payment, online buying, obtaining online credit, purchasing financing goods on the internet, and business insurance were the mediating variables via which digital finance influenced family consumption. Shofawati, A. (2019) "described the role of Digital Finance to strengthen financial Inclusion and the growth of SME in Indonesia. It can be concluded that Digital finance has potential to create financial inclusion to access the finance easily for SME." Ozili, P.

K. (2018), "stated that "Digital finance" is defined as "financial services offered via mobile phones, personal computers, the internet, or cards linked to a dependable digital payment system." 'Fintech' is an abbreviation for 'financial technology,' and it is described as the supply of financial and banking services using modern technical innovation spearheaded by computer programmes and algorithms. "A fintech provider is an individual or corporation that uses an online or offline technology platform to provide new financial services or to improve the delivery of existing financial services."". Digital finance positive effects for financial inclusion includes the benefit to low income & poor people to basic access to finance service by providing relief to them in standing in long queue of the banks, lack of transportation, lack of bank branches in rural area etc. Negative effects of digital finance for financial inclusion are that the providers of digital use digital finance to maximise their profitability by giving financial services discriminately to rural and urban people based on education bias, geographical bias. When middle income users are persuaded by their friends and family, they are more likely to increase their use for digital finance services which thus leads to greater financial inclusion. Thus, it can be concluded that there are both positive and negative impact of digital finance for financial inclusion." Hussain, et al (2018), "revealed that there is a positive association between financial literacy, business development, and financial access. Furthermore, there is a positive relationship between financial literacy and company success." Arora, S., & Sandhu, S. (2018), "discovered that information, performance, self-interest, service quality, satisfaction, and experience are strongly and positively related to e-banking usage." Nejad, M. G., & Javid, K. (2018), "investigates the link between customers' subjective and objective financial literacy, as well as opinion leadership, in order to determine how consumers' usage of personal banking services is affected by objective financial literacy (OFL). Consumers with intermediate levels of OFL were shown to have lower subjective financial literacy (SFL) than those with low or high levels of OFL. Furthermore, while SFL and opinion leadership are positively connected, consumers with moderate levels of OFL reported lower levels of opinion leadership than those with high or low levels of OFL." Shen et al (2018), "focuses to analyse effect of financial literacy, digital financial product usage, Internet usage on financial inclusion in mainland China. The study is a formative construct including constructs such as Financial Literacy, Internet Usage, Digital financial Product Usage and Financial Inclusion. Results showed that there is a positive relation of financial literacy with internet usage along with digital financial product usage and Internet usage is positively associated with digital financial product usage. But there is no a relation between Internet usage and financial inclusion.". Wibella et al

(2018), "It was discovered that perceived usefulness has no significant influence on intention to use digital financial services, while perceived ease of use and credibility had a large and favourable effect on customer interest in utilising DFI services." Amari, M., & Jarboui, A. (2018), – "aims to examine the overall level of financial literacy among the Tunisian organizations using a sample size of 698. The results releveled that investor's knowledge about investments is inadequate and indicates a low financial literacy level among the participants." Firdous, S., & Farooqi, R. (2017), "found that internet banking service quality dimensions such as efficiency, system availability, fulfilment, privacy, contact, responsiveness and contact individually have a significant impact on the customer satisfaction of internet banking customers." Singh et al (2017), "discovered a positive association between consumer perception and satisfaction with M-wallets Gender has a substantial influence on mobile wallet usage, while age does not." Singh, S., & Rana, R. (2017), "It was shown that customer perception of digital payment has a large and favourable influence on digital payment uptake. Although education has been proven to have a major effect on digital adoption, there is no substantial difference in consumer perception based on demographic criteria such as gender, age, occupation, and yearly income." Gomber et al (2017), "reviews the current state of research in Digital Finance by using meta-analysis of 83 relevant articles that deals with innovative business functions and gives potential future research directions. In this conceptual study authors developed a Digital Finance Cube which includes (i) Digital Finance business functions, (ii) relevant technologies and technological concepts, and (iii) institutions providing Digital Finance solutions. Digital financing is the emerging concept." Isomidinova, G., & Singh, J. S. K. (2017), "examined the link between Financial Education, Financial Socialization Agents, and Money Attitude Toward Financial Literacy among 110 people. It was discovered that there is a link between financial education and literacy. Financial Socialization Agents have a significant positive association with Financial Literacy. Money Attitude and Financial Literacy have a somewhat less favourable association." Bayar et al (2017), "investigates the impact of financial literacy and demographic factors on personal savings using logistic regression analysis,. The findings revealed that financial literacy has an impact on personal savings. Personal savings were positively impacted by financial literacy, age, gender, income level, and education level, whereas persons with higher risk tolerance saved less." Königsheim et al (2017), "analyses connection between financial literacy, risk preferences, and the demand for digital financial services and investigate the role of self-assessed financial knowledge and self-assessed financial risk tolerance for the adoption of digital financial services It had been found that men, younger individuals, and clients with a high level of education are significantly more likely to use digital financial services. And financial knowledge is significantly and positively correlated with the likelihood to use digital financial services. Prasad, H., & Meghwal, D. (2017), "measures digital financial literacy, instruments were used: Digital Financial Frequency Index (DFFI) and Composite score of Awareness was named as Digital Financial Awareness Index (DFAI). It was concluded that Males are more aware and familiar with digital financial platforms and as compared to females. Level of Education is an important factor for awareness about the digital platform." Mathew et al (2017), "examines the quality of 103 websites built by BFIs in India in terms of information distribution, accessibility, design, and interactive and participatory aspects for people with disabilities (PWD). It was discovered that the majority of BFI websites (69.9%) in India had website link issues, that there is a dearth of vernacular/local language versions of BFI websites, and that only a few websites feature interactive or social media linkages. However, some websites contain user-friendly features." Gupta, J. (2016), "finds the correlation between the three variables (Financial Behaviour, Financial Attitude and Financial Knowledge) with the financial literacy score. There was positive correlation found between the Financial Behaviour and the level of financial literacy. And significant correlation between financial knowledge and financial literacy score as well as significant correlation between Financial Attitude and Financial Literacy." Arora, A. (2016), found that financial knowledge is more highly educated and urban women as compared to rural women." Behl, A., & Pal, A. (2016), "intends to build a link between user perception and level of mobile banking usage by utilising the Technology Acceptance Model (TAM), which claims that an individual's adoption of a new technology or innovation is driven by his intention, which is dictated by his faith in the system. Individual perceptions of mobile banking in rural areas are often divided into "Ease of Use" and "Usefulness." Societal Influence (SI), Facilitating Conditions (FC), Perceived Credibility of Risk (PC) i.e. level of belief or trust an individual has about a particular system, Behavioral Intention (BI) were the constructs used in the study. Structured Equation Modelling (SEM) was used for data analysis. The findings demonstrated that the higher the level of risk, the lower the behavioural intention to use mobile banking. The impression of users and potential users influences mobile banking use." Nalini et al (2016), "investigates the literacy level in investment decisions with 200 investors and claims that five factors such as personal investment decisions, investment revision, investment portfolio maintenance, influence on personal investment, and facing investment problems influence financial literacy." Jariwala et al (2016), "in an experimental study aims to assess the behavioural outcomes of financial education workshops on the financial behaviour of participants (homemakers) in the state of Gujarat. A pre- and post-survey design (An informal experimental research design) was conducted with the sample of 300 homemakers. And a positive effect of financial education workshops on the financial behaviour of participants." Samson Yusuf Dauda & Jongsu Lee (2015), "It was shown that customers consider service fees and real-time interaction services to be the most significant future banking services, while biometric services are the least important. Banks should emphasise the need of promoting smart and practical branded services, particularly self-services." Arif, K. (2015), "investigated the association between financial literacy and the effect of factors influencing investing decisions 154 investors from the Karachi Stock Exchange were polled to evaluate the variables influencing their investment decisions and their degree of financial awareness. ANOVA test was conducted to find out the significant difference in financial literacy among respondents regarding age, gender, employment status, education level and work activity. According to the findings, there is a substantial variation in financial literacy among respondents based on age, gender, marital status, and job activity, but no difference in financial literacy based on education level or employment position. A simple regression was done to test for a positive significant association between financial literacy and investment decisions of Pakistani innovators, and the findings revealed that there is a negative relationship between financial literacy and investment decisions. Sekar, M., & Gowri, M. (2015), "focuses on the financial literacy level among 189 Generation Y employees which were selected conveniently. Results showed that male employees are more financial literate as compared to female employees Thus it can be concluded that financial literacy level depends on the education level, income level. Marital status also influences financial literacy level and financial literacy is high with the respondents who have 3 dependents. But financial literacy level does not depend on age." Aggarwal, M., & Gupta, M. (2014), "investigates the impact of several demographic characteristics on financial literacy, such as gender, discipline, and degree of qualification with the data of 180 college students and The ANOVA test was used to determine whether or not there is a significant difference between college students depending on their education level (basic, average, and advanced) and distinct streams (commerce and non -commerce). Postgraduate and business students were shown to be more financially concerned than undergraduates and non-business students. The data also show that men outperform women in terms of various degrees of financial expertise." Garg, S., & Agarwal, P. (2014), "describes financial inclusion and its significance for the overall development of society and the economy of the nation and focuses on techniques used by various Indian banks to reach the ultimate objective of financial inclusion for inclusive growth in India, as well as analysis of previous years' progress and successes based on data gathered from numerous publications and papers published by the RBI and NABARD. It was decided that, despite the fact that sufficient efforts are being made by all stakeholders, including the regulator, the government, financial institutions, and others, the efforts are not generating the desired results." Mihalčová et al (2014), "describes in their paper "Financial literacy – the urgent need today" the literacy, financial literacy, chosen surveys in this field, as well as identifying financial education indicators The Slovak Banking Association 2007 survey of financial literacy was used for the study because it revealed a rather tight association between the respondents' true level of financial literacy and their self-assessment. A financial literacy study done by Partners Group (2012) in collaboration with the Focus agency revealed a weak literacy level. Management of money, planning of financial income and spending, Selection of acceptable banking products, and Database of product suppliers are the four levels of financial literacy." Bhushan, P., & Medury, Y. (2014), "research 516 salaried adults to investigate the relationships between financial attitudes, financial behaviour, and financial knowledge in order to construct a complete financial literacy model." It was established that there is a link between financial attitudes and financial behaviour, and it was also discovered that risk takers are not active savers, but those who are content with their financial condition demonstrate good financial behaviour." Mahdzan, N.S., & Tabiani, S. (2013), "People with a high degree of financial literacy are more likely to save than those with a low level of financial literacy. Males and the elderly are more inclined to save money. Income and educational level also affect savings. Bhushan, P., & Medury, Y. (2013), "focuses on evaluating the degree of financial literacy among salaried individuals and the link between financial literacy and other demographic and socioeconomic aspects, study has been conducted through the survey of 516 salaried individuals of Himachal Pradesh with Multistage sampling. ANOVA test has been conducted and found that the males are more financially literate than females. Financial literacy is affected by the level of education, income and employment (urban employees) but it does not get affected by age and geographical region. It can be concluded that the financial literacy is low." A.J. Joshua & M. P. Koshy. (2011), "noted that the users of the internet banking, tele banking and mobile banking, enabled services are using more computer and internet as compared to non-users," Khare et al (2010), "emphasised the importance of personality in analysing and appraising the numerous online banking qualities When creating their websites, banks should consider the consumer's individuality. The ease of use, security, privacy, usefulness, volume of information, and perceived enjoyment all influence online banking activity." Huston, S. J. (2010), "reviews past research to identify barriers and offer a method for developing a more standardised assessment of financial literacy Seventy-one individual studies were chosen from fifty-two distinct data sets, and it was discovered that the majority of the studies did not provide a definition of financial literacy, with the main material focusing on four areas: money basis, borrowing, investing, and protecting. The study's data was gathered using interview techniques and a self-administered survey. Students make up the majority of the target audience. Previous research found three major challenges to measuring financial literacy: "a lack of conceptualization and definition of the construct financial literacy, instrument content, and instrument interpretation." Wagland, S. P., & Taylor, S. (2009), "focuses on financial literacy level of the Australian undergraduate business students and investigate whether any gender difference can be found by applying ANOVA and found that gender was not a significant factor among Australian students. both males and females are familiar in managing and exchanging money. The one exception is Internet banking. And females are slightly more financial literate than males.". Khan et al (2009), "found that Customers are happy with the dependability of the services supplied, but not with the dimensions of 'User-friendliness,' 'Privacy/Security,' and 'Fulfilment." Kamakodi, N. & Khan, B.A. (2008), "Consumers feel comfortable utilising electronic banking, but they also believe that "human contact" is important; banks must focus more on personal touch to keep customers." Lichtenstein, S., & Williamson, K. (2006), "It was discovered that convenience is the primary reason for customers to bank over the internet, and that other characteristics such as consumer attention, internet accessibility, self-efficacy, and usability are also crucial in online banking adoption." Sohail, M. S., & Shanmugham, B. (2003), "analyzed the impact of e-banking adoption in Malaysia were discovered to be accessibility, security concerns, and consumer resistance, knowledge, attitude toward change, computer and Internet access fees, confidence in one's bank, security concerns, simplicity of use, and convenience. "However, awareness of e-banking goods and services, the cost of computers and Internet access, and e-banking security problems have no significant influence on e-banking acceptance. There were no differences in demographics between Internet bank users and non-users." Volpe et al (2002), "examines the 530 online investor's investment literacy by reviewing the 35 online financial websites to find the relationship between the literacy and online investor characteristics by conducting ANOVA. Age, income, gender, education and online trading activities as the independent variables. Dependent variable is overall knowledge. It was found that people with high income and high education have knowledge for investing along with those who traded online." Boyd et al (1994), "Customers ranked reputation as the most significant factor when choosing a financial institution, followed by interest on savings accounts, interest charged on loans, rapid service, and location in the city, with employee friendliness, contemporary facilities, and drive-in service coming in second."

The Concept of Digital Financial Literacy and Digital Finance

After reviewing literature, variables are found for Digital financial literacy and Digital finance:

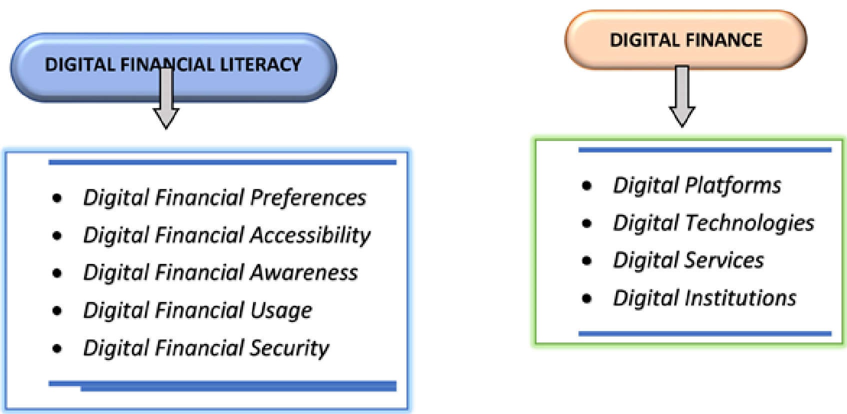

Figure 3: Identified variables of digital financial literacy and digital finance

Findings and Conclusion

There has been a continuous evolution in the financial industry due to digitalization. The adoption of digital financial services is making an individual demand those services which are easy to use and can be used from anywhere. Digital finance does not only include the services of financial nature but also includes the whole mechanism of digital platforms, digital technologies and digital institutions to make the financial services available at just one click.

Digital Financial literacy is vital to understand these changes taking place in an economy. There are many factors affecting the digital financial literacy such as digital financial preferences, accessibility, knowledge of digital finance, digital usage along with the security concerns, it is important for an individual who avails the digital finance services must get himself acquired to be digitally financial literate. Digital financial literacy can greatly benefit customers to avail the digital financial services with proper and adequate knowledge.

References

Adetunji, O. M., & David-West, O. (2019). The relative impact of income and financial literacy on financial inclusion in Nigeria. *Journal of International Development*, *31*(4), 312-335.

Aggarwal, M., & Gupta, M. (2014). Awareness of financial literacy among college students. *Journal of Management Sciences and Technology*, *2*(1), 1-13.

Amari, M., & Jarboui, A. (2018). Financial Literacy and Information Perception: An Empirical Analysis from The Tunisian Context. *International Journal of Information, Business and Management*, *10*(4), 276-288.

Arif, K. (2015). Financial Literacy and other Factors Influencing Individuals' Investment Decision: Evidence from a Developing Economy (Pakistan). *Journal of Poverty, Investment and Development*, *12*, 74-84.

Arora, A. (2016). Assessment of financial literacy among working Indian women. *Business Analyst*, *36*(2), 219-237.

Arora, S., & Sandhu, S. (2018). Usage based upon reasons: the case of electronic banking services in India. *International Journal of Bank Marketing*.

Baker, H. K., Kumar, S., Goyal, N., & Gaur, V. (2019). How financial literacy and demographic variables relate to behavioral biases. *Managerial Finance*.

Bayar, Y., Sezgin, H. F., Öztürk, Ö. F., & Şaşmaz, M. (2017). Impact of financial literacy on personal saving: A research on Usak university staff. *Journal of Knowledge Management Economics and Information Technology, 7*(6),1-19.

Behl, A., & Pal, A. (2016). Analysing the barriers towards sustainable financial inclusion using mobile banking in rural India. *Indian Journal of Science and Technology*, *9*(15), 1-7.

Bhushan, P., & Medury, Y. (2013). Financial literacy and its determinants. *International Journal of Engineering, Business and Enterprise Applica-*

tions,*4*(2),155-160.

Bhushan, P., & Medury, Y. (2014). An Empirical Analysis of Inter Linkages between Financial Attitudes, Financial Behaviour and Financial Knowledge of Salaried Individuals. *Indian Journal of Commerce & Management Studies*, 5(3),58-64.

Boyd, W. L., Leonard, M., & White, C. (1994). Customer preferences for financial services: an analysis. *International Journal of Bank Marketing*,*12*(1),9-15.

Dauda, S. Y., & Lee, J. (2015). Technology adoption: A conjoint analysis of consumers-0 preference on future online banking services. *Information Systems*, *53*, 1-15.

Firdous, S., & Farooqi, R. (2017). Impact of internet banking service quality on customer satisfaction. *The Journal of Internet Banking and Commerce*, *22*(1), 1-17.

Garg, S., & Agarwal, P. (2014). Financial inclusion in India–a Review of initiatives and achievements. *IOSR journal of business and Management*, *16*(6), 52-61.

Gomber, P., Koch, J. A., & Siering, M. (2017). Digital Finance and FinTech: current research and future research directions. *Journal of Business Economics*, *87*(5), 537-580.

Gupta, J. (2016). An Empirical Study on Financial Literacy Level of Salaried Females in Delhi. *Pacific Business Review International,9*(4), 19-25.

Hussain, J., Salia, S., & Karim, A. (2018). Is knowledge that powerful? Financial literacy and access to finance. *Journal of Small Business and Enterprise Development*.

Huston, S. J. (2010). Measuring financial literacy. *Journal of consumer affairs*, *44*(2), 296-316.

Isomidinova, G., Singh, J. S. K., & Singh, K. (2017). Determinants of financial literacy: a quantitative study among young students in Tashkent, Uzbekistan. *Electronic Journal of Business & Management*, *2*(1), 61-75.

Jariwala, H. V., & Sharma, M. S. (2016). Assessment of behavioural outcomes of financial education workshops on financial behaviour of the participants: An experimental study. *Journal of Financial Ser-*

vices Maketing, *18*(3), 302-324.

Joshua, A. J., & Koshy, M. P. (2009). Usage patterns of electronic banking services by urban educated customers: Glimpses from India. *The Journal of Internet Banking and Commerce*, *16*(1), 1-12.

Kamakodi, N., & Khan, B. A. (2008). Looking beyond technology: a study of e-banking channel acceptance by Indian customers. *International journal of electronic Banking*, *1*(1), 73-94.

Khan, M. S., & Mahapatra, S. S. (2009). Service quality evaluation in internet banking: an empirical study in India. *International Journal of Indian Culture and Business Management*, *2*(1), 30-46.

Khare, A., Khare, A., & Singh, S. (2010). Role of consumer personality in determining preference for online banking in India. *Journal of Database Marketing & Customer Strategy Management*, *17*(3-4), 174-187.

Königsheim, C., Lukas, M., & Nöth, M. (2017). Financial knowledge, risk preferences, and the demand for digital financial services. *Schmalenbach Business Review*, *18*(4), 343-375.

Li, J., & Meyer□Cirkel, A. (2019). Promoting financial literacy through a digital platform: A pilot study in Luxembourg. *International Journal of Finance & Economics*,1-15.

Li, J., Wu, Y., & Xiao, J. J. (2020). The impact of digital finance on household consumption: Evidence from China. *Economic Modelling*, *86*, 317-326.

Lichtenstein, S., & Williamson, K. (2006). Understanding consumer adoption of internet banking: an interpretive study in the Australian banking context. *Journal of electronic commerce research*, *7*(2), 50-66.

Mahdzan, N.S., Tabiani, S. (2013), The Impact of Financial Literacy on Individual Saving: An Exploratory Study in the Malaysian Context, *Transformations in Business & Economics*, *12*,1 (28),41- 55.

Mathew Martin, P. J., & Rabindranath, M. (2017). Digital Inclusion for Access to Information: A Study on Banking and Financial Institutions in India. *SAGE Open, 7*(3),1-8.

Mihalčová, B., Csikósová, A., & Antošová, M. (2014). Financial literacy–the urgent need today. *Procedia-Social and Behavioral Sciences*, *109*, 317-

321.

Morgan, P. J., Huang, B., & Trinh, L. Q. (2019). The need to promote digital financial literacy for the digital age. *In the Digital Age*,1-9.

Morgan, P. J., & Long, T. Q. (2020). Fintech and Financial Literacy in Viet Nam. *ADBI Working Paper Series, 1095*, 1-31.

Nalini, R., Alamelu, R., Amudha, R., & Motha, L. C. S. (2016). Financial literacy and its contributing factors in investment decisions among urban populace. *Indian Journal of Science and Technology*, *9*(27), 1-9.

Nejad, M. G., & Javid, K. (2018). Subjective and objective financial literacy, opinion leadership, and the use of retail banking services. *International Journal of Bank Marketing*.

Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, *18*(4), 329-340.

Prasad, H., Meghwal, D., & Dayama, V. (2018). Digital Financial Literacy: A Study of Households of Udaipur. *Journal of Business and Management*, *5*, 23-32.

Reserve Bank of India (2017). *Report of the working group on Fintech and Digital Banking*. Mumbai: Reserve Bank of India Central Office.

Sabri, M. F., & Aw, E. C. X. (2019). Financial literacy and related outcomes: the role of financial information sources. *International journal of business and society*, *20*(1), 286-298.

Sekar, M., & Gowri, M. (2015). A study on financial literacy and its determinants among generation Y employees in Coimbatore city. *Great Lakes Herald*, *9*(1), 35-45.

Shen, Y., Hu, W., & Hueng, C. J. (2018). The effects of financial literacy, digital financial product usage and internet usage on financial inclusion in China. In *MATEC Web of Conferences*, 228,1-6.

Shofawati, A. (2019). The Role of Digital Finance to Strengthen Financial Inclusion and the Growth of SME in Indonesia. *KnE Social Sciences*, 389-407.

Singh, N., Srivastava, S., & Sinha, N. (2017). Consumer preference and satisfaction of M-wallets: a study on North Indian consumers. *International Journal of Bank Marketing*.

Singh, S., & Rana, R. (2017). Study of consumer perception of digital payment mode. *Journal of Internet Banking and Commerce*, *22*(3), 1-14.

Sohail, M. S., & Shanmugham, B. (2003). E-banking and customer preferences in Malaysia: An empirical investigation. *Information sciences*, *150*(3-4), 207-217.

Son, J., & Park, J. (2019). Effects of financial education on sound personal finance in Korea: Conceptualization of mediation effects of financial literacy across income classes. *International Journal of Consumer Studies*, *43*(1), 77-86.

Volpe, R. P., Kotel, J. E., & Chen, H. (2002). A survey of investment literacy among online investors. *Journal of Financial Counseling and Planning*, *13*(1), 1-16.

Wagland, S. P., & Taylor, S. (2009). When it comes to financial literacy, is gender really an issue? *Australasian Accounting, Business and Finance Journal*, *3*(1), 13-25.

Wagner, J. (2019). Financial education and financial literacy by income and education groups. *Journal of Financial Counseling and Planning*, *30*(1), 132-141.

Wibella, N., Fahmi, I., & Saptono, I. T. (2018). Factors Affecting Consumer Acceptance of Digital Financial Inclusion; An Anecdotal Evidence from Bogor City. *Independent Journal of Management & Production*, *9*(4), 1338-1353.

Yoshino, N., Morgan, P. J., & Long, T. Q. (2020). Financial Literacy and Fintech Adoption in Japan. *ADBI Working Paper Series,1154*, 1-19.