

## The Analysis of Enhancing Financial Literacy and Digital Payment Behaviour Among Gen Y in Pakistan

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### Abstract:

This study examines the impact of financial literacy (FL) and digital financial literacy (DFL) on the digital payment behaviour of Generation Y in Pakistan. With the increasing reliance on online financial transactions, understanding how financial literacy shapes consumer behaviour is critical for fostering financial stability and inclusion. A quantitative research approach was employed, using a structured survey to collect data from 200–250 Millennials. Regression analysis was conducted to assess the relationship between financial literacy, digital payment systems, and consumer behaviour. The results indicate that digital financial literacy has a stronger influence on the adoption of digital payment systems than traditional financial literacy. Millennials with higher digital financial literacy demonstrate greater trust in digital financial services, leading to more effective financial management. However, concerns regarding security risks and financial illiteracy continue to hinder widespread adoption of digital payment systems. The study underscores the need for integrating digital financial education into financial literacy programs. Policymakers, financial institutions, and fintech companies should focus on enhancing security measures and expanding financial literacy initiatives to encourage greater adoption of digital payment systems. This research provides insights into the role of digital financial literacy in shaping consumer behaviour within the Pakistani context. By addressing security concerns and enhancing financial education, financial institutions can foster more informed financial decision-making and improve financial inclusion.

**Keywords:** Financial Literacy, Digital Financial Literacy, Digital Payment Systems, Consumer Behaviour, Millennials, Financial Inclusion.

### 1. Introduction:

Financial literacy (FL) is defined as the skills to make guided choices about Individual finances. This topic encompasses a variety of subjects: spending, savings, investing, debt management, and an understanding of the financial products available to consumers like insurance, loans, & retirement planning tools. Financial literacy is important for individuals to effectively navigate the continuously changing financial systems, and its importance has been recognised globally (Lusardi & Mitchell, 2014). The gap created a generation of people without basic skills necessary to manage their money — financial literacy has long been overlooked by many education programs. This lack of financial understanding has been linked to poor financial decisions that create individuals with debts, low savings, and recurrent financial distress. For the last 20 years, the growing importance of FL to enhance both peoples & economy financial well-being has been recognized. In fact, the 2014 Global Financial Literacy Survey found that just 33% of adults globally are financially literate. Literacy levels vary greatly from one country and region to another. Developed countries such as U.S, the United Kingdom & Germany will have high financial literacy rates whereas developing countries will have low financial literacy

rates. Income, education, occupation, age, and gender as demographic factors have significant impact on FL (Global Financial Literacy Survey, 2014).

The demand for digital products & services are increasing and more financial services are offered via online platforms, mobile applications and other digital channels (World bank, 2020). Consumers now have to be not only financially literate, but also tech savvy when it comes to managing their money. Cashless payment systems, digital wallets and mobile banking are a necessity today. But it is equally useful if people learn how to use these tools appropriately because misuse can open up risks of fraud and identity theft. Fintech (financial technology) is driving a tremendous digital evolution in the financial ecosystem. Such developments have also necessitated Digital Financial Literacy (DFL) even more. The level of financial literacy is still low globally, as only roughly 30% of people based on the OECD (2018) report possess adequate knowledge of basic financial concepts.

Research carried out by (Lusardi and Mitchell, 2014) depicts that those who engaged in financial education had more plans of pensions joining, regular savings, and avoided loans with high-interest rates. With some education, things like debt management and investment decisions improve. A well-developed body of research shows that money education in schools as well as workplaces and community programs improves financial outcomes and reduces the likelihood of poor money decisions. The economic uncertainty and high cost of living have been driving home the need for sound financial literacy skills. For example, studies of financial crisis, such as fiscal crisis of 2008 & the present COVID-19 pandemic, indicate that the people with this kind of FL are far more prepared to cope with a financial crisis. Individuals with stronger FL tend to weather job loss better, stay on top of their debts and manage their savings. Mottola (2014) finds that the people with low levels of financial literacy are much more likely to struggle with high levels of financial distress, which can have adverse effects on mental and physical health. Culturally induced perceptions of popularity as performance or placement rather than character can lead to poor financial decisions resulting in a spiralling cycle of debt as people become stuck in high-interest loans that prevent them from saving or being financially stable for the future (Lusardi, Tufano 2015).

Insufficiency of financial education creates a lot of economic issues in the communities where the conscious is prone to rely on several social services (O'Neill, Holub, & Kasky, 2016). Financial literacy has been emphasized more in the last few years. The demand for financial education programs is becoming increasingly important to institutions such as government agencies, educational institutions & non-profit organizations. As Willis (2008) points out a lot of research have shown that whatever financial education may lead to, it isn't a silver bullet — it may be a force for the good but only if it leads to significant and lasting changes in the financial behaviour of the population such as young people or lower income earners. By integrating such programs, students gain relevant skillsets. Game-based learning methods and interactive learning tools have been shown to increase both FL and retention. Furthermore, financial education is increasingly being provided through digital platforms and apps, which are becoming vital tools for providing such education to the masses. Sullivan et al. (2019) a recommendation to explore shows how technology-inspired financial education can reach a wide range of audiences, including those often left behind.

The phenomenon of errors in organisation, saving and point expenditure on the part of Gen Y stems from a lack of knowledge, compounded by a limited understanding of the effective use of digital financial services simply not being enough for such a generation. The challenges Generation Y in Pakistan face with regard to financial management and the emerging digital payment systems including low education level, limited financial literacy prevail and under-developed digital infrastructure Arif et al. (2022). The effect is financial exclusion, heightened risk of debt and bad financial decisions.

### **Financial Literacy & Digital payments**

The Financial literacy refers to the ability to read, analyse, manage & communicate about financial conditions that affect personal and societal well-being. It includes the qualifications

to perform the following tasks: Managing private finances, Budgeting and investment decisions, and making effective and informed financial decisions. It is also related to understanding and putting into practice a range of financial management skills and techniques. For the what is often needed to make important financial decisions for general population. For instance, we deciding where to open a bank account, which car to take on finance or in which business to invest etc. Financial literacy also describes understanding a broad range of key financial skills & concepts. Digital payment, or e-payment is the transfer of money between payment accounts, which is such as, done through electronic means. Recent studies highlight the importance of financial literacy in improving individuals' financial management, investment decisions, and digital payment adoption. Yadav and Banerji (2024) found that higher financial literacy levels correlate with better financial behaviours, including budgeting and investment planning, ultimately enhancing financial well-being. Similarly, Dheepiga (2024) emphasized that digital financial literacy significantly impacts the adoption of digital payment systems, with individuals possessing higher digital financial skills engaging in more secure and efficient transactions.

### **Study on Gen Y**

According to Strauss and Howe (1991), Generation Y, commonly referred to as Millennials, includes those born in the late 1980s and into the 1990s. This group arose at a time marked by tremendous technological advancement, with the internet gaining prominence, cell phones becoming ubiquitous, and an increasing number of digital devices. This generation in Pakistan has significance owing to its distinct culture and digital impacts. The rapid rise in digital platforms and online commerce makes the attitudes and financial knowledge of this generation significant to the future financial prosperity of the nation. There is a growing concern about the differences between acceptance of digital payments and overall financial literacy. Even the 10-year-old payment technologies can risk Millennials without sufficient financial literacy. In some studies, it is shown that financial literacy may affect a person's perspective about digital payments. Those that recognize how important it is to optimize financial management are more likely to make good use of digital payment systems (Ahmed & Khan, 2021). This trend is reflected in research exploring initiatives to enhance financial inclusion within Pakistan, which identifies financial literacy as a critical component for the sustainable uptake of digital payment behaviours (Ahmed & Jafri, 2024). Need to increase Financial Literacy is highlighted in India's National Financial Inclusion Strategy (NFIS).

Economic awareness among millennials in Pakistan has a significant correlation with Digital Payment Systems preference. Improved financial literacy helps people make optimal use of digital payment channels and safeguards them against risks, such as online fraud, overspending and bad debt management. And it might bring us all as a nation a step towards financially fitness by way of attacking those digital payment habits of Millennial with precision strikes.

The purpose of this study is to examine the role of financial literacy in the adoption of digital payment among Generation Y, in the context of Pakistan. This study is an attempt to comprehend how financial literacy, awareness towards digital payments and technological self-efficacy affects millennials readiness to switch over from cash driven economy to digitized financial ecosystem. Pakistan's move toward a more digital economy (Ali et al., 2022): These guys are of importance as well. Moreover, this study aspires to find out what are the most significant issues—such as trust in financial institutions, security issues, ease of use, and regulatory policies—that would promote or hinder Millennials' adoption of digital payments (Ahmed & Rehman, 2023). "Although previous research has predominantly examined Generation Z's financial behaviour, there is a striking lack of insight into Millennials, despite their notable exertion in deciding Pakistan's financial landscape (Khan & Raza, 2021). Filling in these gaps will provide critical knowledge that can be used by policymakers, financial institutions, and digital service providers to generate strategies for improving financial literacy,

as well as promoting safe and efficient digital payment utilization amongst Millennials in Pakistan.

Given the fast-growing economy, financial literacy is the key skill everyone needs to have at their disposal, and it clearly serves the purpose of giving people the tools they need to manage their finances properly. Also, Digital Financial tools are gaining popularity amongst the younger generations as they are tech-savvy. Lack of financial education could lead to negative financial behaviour such as imprudent spending, susceptibility to internet fraud, and, impairment in repayment of loans (Akhtar, 2019). This study is important to the financial institutions like banks, fintech companies and mobile money service providers in Pakistan as it offers understanding about the behavioural change and preferences of young generation of people towards digital payments. Learning about the relationship between financial literacy and the adoption of digital payments, these institutions can adapt their services to cater to the needs of the digital age (Ahmed and Khan, 2021). It not only means providing a world-class digital payment platform but also educational resources to deepen consumer understanding of spend, savings and capital allocation.

This research is conducted from a policy perspective and informed by Pakistan's National Financial Inclusion Strategy (NFIS) focused on addressing a large segment of people without access to formal banking system by providing them access to financial services via digital means. It presents that the result of this research would influence the evolution of policies that promote financial literacy and digital spending for the upcoming generations in the country so that they could make wiser financial decisions in their lives (Malik, 2022). These measures will reduce the technological gap and boost the economy due to increased involvement in financial activities.

## **2. Literature Review:**

The accelerating digitization of the global economy has significantly altered financial behaviours, particularly for younger generations. Generation Y have emerged as one of the biggest demographic catalysts of innovation and economic growth in Pakistan. However, their digital payment behaviour and financial literacy remain worrisome. This literature review explores the body of studies on financial literacy and digital payment behaviour amongst Pakistani Millennials by examining the reasons behind these behaviours, difficulties faced, and potential strategies to enhance financial literacy and promote digital payments. Higher levels of digital financial literacy are associated with increased adoption and effective use of digital wallets, highlighting the importance of targeted financial education programs to enhance digital payment behaviours in this demographic (Shaikh and Sharif, 2024).

The current research study utilised a descriptive research approach that enabled the researchers to observe, examine and systemically understand the relationship between financial literacy and digital payment behaviour among Pakistani Millennials (Gen Y). Descriptive research is most appropriate for studies in which the primary goal is to describe the characteristics of people, actions, or events as they are, without manipulating the environment or variables (Babbie, 2020). Through this approach, the researcher can assess degree of financial literacy, examine the acceptance of digital payment and identify factors like peer pressure, trust in digital payment, infrastructural issues etc. The study uses structured questionnaires to collect quantitative data to explore trends and relationships. Creswell (2023) argues that descriptive studies are important to identify patterns and relationships in a target group, findings in a descriptive study are the basis for future experimental or causal studies. In line with the work of Sekaran and Bougie (2019) who describe useful, non-experimental techniques, the exploratory study that aims to comprehend the digital transformation of financial behaviours across a developing country environment justifies the use of descriptive framework for the current study. This study consequently contributes to the existing literature by explaining the financial decision-making and digital payment behaviours of Millennials and practical implications for financial institutions and legislators as well.

The rise of digital technologies have revolutionised the way people make payments. People of younger demographic in Pakistan are manoeuvring towards internet banking and mobile wallets as efficient digital payment methods. A focus on digital payment behaviour is now, and especially among millennials, who are a generation that knows their tech in and out. According to the global data on payment methods to achieve the above, the different types of payment, which are electronic payments like online payment, E-wallet, and mobile banking, are gaining popularity because it provides convenience, speed, and accessibility (Purba et al., 2021; Hossain et al., 2020). This demographic find security & ease of usage, and social influences, as critical determinants of digital payment (Tang et al., 2021). But it is also the financial literacy levels that affect the electronic payments usage; there is higher usage of trustworthy digital payments by more financially literate individuals (Adil & Hatekar, 2020). With Pakistan having a largely cash-based economy, millennials are required to have financial literacy and trust in digital platforms to make the leap to digital payments (Daud et al., 2022). Haider and Khan (2023) examined the determinants influencing the acceptance of digital payments by Pakistani Millennials. Digital infrastructure, security concerns and trust were significant variables, they found. Akhtar and Hussain (2022) stated that ensuring the promotion of digital payments is the responsibility of financial institutions and government. They also emphasized a reliable and robust digital payment environment that eases their transaction process. Khan and Ali (2020) investigated the links between digital payment inclination of Pakistani Millennials and their financial literacy. Higher financial literacy was found to be a significant predictor of increased use of digital payment. A solid grounding in financial concepts helps people assess the costs and benefits of online transactions and make informed decisions, they said.

H<sub>1</sub>: Financial literacy positively influences the adoption and use of digital payment systems.

The financial independence of individuals is influenced by their financial literacy, understanding, and attitude to spend money. There are thousands of the studies that emphasize on importance of financial literacy comparatively Pakistan Gen Y. According to Morgan et al. (2019), financial literacy (the ability to understand and utilize financial concepts) plays a pivotal role in determining choice to adopt digital payment. Electronic mode of payment is another place where financial literacy is important, as it reduce the chances of happening fraud and financial mistakes providing required knowledge and skill to millennial for handling electronic money with confidence. (Henager & Cude, 2016; Simatele & Mbedzi, 2021). A study in Pakistan also highlights that the importance of financial literacy may influence millennial financial behaviour toward safer and more effective practices (Rahayu et al., 2022). Pakistani Millennials will find themselves in it ineffective for basic financial skills such as saving and budgeting (Ali et al. (2022). They blame the gap on formal financial education not being offered in schools and universities. Khan and Ahmed (2021) also stressed that social/cultural elements and parental guidance have a significant impact on Millennials financial behaviours. A propensity to avoid risk and a reliance on traditional financial methods, they said, could prevent the spread of revolutionary financial products. As per the study by Akhtar and Hussain (2022), the grasp of finance binds all the financial behaviours of Pakistani Millennials. Better understanding of finance leads to good finance choices such as saving, investing and no debt purchases. The Role of Financial Literacy in Digital Payment Behaviour shows that people who are financially literate are more likely to accept or use digital payment (Khan and Ali, 2020). A basic grasp of financial concepts enables people to assess the risks and rewards of online transactions, they said, and to make informed decisions. As shown by Haider and Khan (2023) it is also significant acceptance of digital payment garden is importance of financial literacy. Financial literacy can help potential users also to overcome some of the barriers they might face in terms of adoption of digital payments, relating to issues such as security and trust, according to them.

H<sub>2</sub>: Digital financial literacy benefits the adoption and use of digital payment systems.

Financial Knowledge Concepts talks about how financial literacy affects the financial behaviour of millennials of Pakistan. According to this theory, people cannot make sound financial decisions without knowing some fundamental principles and having an in-depth knowledge of the basic economic concepts such as investing, saving, budgeting, & way communication happens in the form of digital transactions. With the ecosystem of financial practices rapidly evolving towards the digital domain, the paradigm of financial literacy compellingly gains relevance. According to Lusardi and Mitchell (2014), people need financial literacy in order to make good financial decisions. They are quick to point out that poor financial literacy can result in poor financial outcomes like insufficient retirement savings and poor debt management. Their study highlights the importance of financial literacy to how well people can plan for the future. Akhtar and Hussain (2022), Financially literate individuals are significantly likely to have positive financial behaviours. The study says millennials who understand basic financial concepts can comfortably make smart financial decisions, and most importantly, use digital payment systems the right way. In fact, knowledge of online banking, mobile payment apps, and digital wallets can lead millennials to use these services safely and confidently. Digital payment solutions have changed how Millennials have managed their finances. According to Purba et al. (2021) In past generations, technology was not as prevalent, and this has made financial processes more streamlined and easier for more tech-savvy generations. But the convenience also presents challenges, including security dangers and the necessity for consumers to take a cautious approach to financial products. Millennials, on the other hand, are financially literate, making them more likely to analyse the pros and cons of the growing array of digital payment services, endowing them with a greater degree of confidence and sense of security around innovations. In addition, Simatele, Mbedzi (2021) emphasize that the comprehension of financial concept is significantly influential in the adoption rates of digital payment systems among youths. Their research shows that millennials who have a greater understanding of financial products feel more qualified to manage their finances and therefore are adopting digital payment methods at a higher rate. This aligns with larger idea that financial literacy speeds the adoption of new financial technologies (fintech). Better financial literacy is not just helpful but crucial to protect this segment in an ever-evolving financial landscape. Tang et al. (2021) warns, with low financial knowledge comes low financial choice, particularly as it relates to digital payments. Poor money management, fraud, or scamming can happen to many millennials because of the scarcity of information. Given the rapid growth of technology and increasing sophistication of electronic financial risks, this is particularly worrying

H<sub>3</sub>: The adoption and usage of Digital Payment Systems positively influence Consumer Behaviour among Gen Y.

Millennials need someone to be a Financial Coach and show them the ropes of how to create and manage a budget to make the right financial choices and get financial stability. It is all the more importance for Generation Y to learn how to budget; no thanks to the growing role of digital payment systems in Pakistan. This is the basis of all personal financial management budgeting. It enables them to effectively manage their resources, and budget their income and expenditures. It also establishes financial goals. Studies indicate that people who budget and plan well are better able to stay out of debt, prepare for emergencies, and make sound investments (Lusardi & Mitchell, 2014). For Pakistani millennials who currently have to battle issues like inflation and a lack of job opportunities, learning budgeting skills can help lead to financial stability. Zuppa and Miller (2021) also found that millennials who budget efficiently are more likely to engage in other beneficial financial activities such as saving and investing, which are crucial for long-term financial health. If they are aware of their financial inflow and outflow, these people can make more responsible financial decisions by using digital payment platforms judiciously. In a study by Morris, M. D., and V. G. Perry (2005), it was concluded that there is a positive relationship between self-effectiveness and efficient budgeting and financial behaviour. Self-effectiveness, defined as the belief one can handle financial

obligations. Renowned for their budget-friendly minds and thoughts, such individuals tend to embrace frugal money-made easy solutions. This includes regulating their spending, as well as ensuring bills are paid in a timely manner. Fisher, P. J. & Dwyer, P. D. (2018) found that one of the most common behaviours that millennials displayed was budgeting, which in large part, was governed by their financial literacy. Budgeting skills need to become better to improve overall financial health because millennial budgeting masters would manage debt and save well. With the increasing prevalence of digital payment methods, budgeting skills are gaining traction as well. Purba et al. (2021) walkthrough that even as digital payment systems have many benefits in terms of convenience, they can also lead to overspending and poor money management when users lack proper budgeting skills. Without a good idea of their budget, millennials run the risk of reckless spending that could threaten their financial security. In addition, Simatele & Mbedzi (2021) argue that an individual's ability to adopt digital payment technology can be linked to their budgeting capacity, as budgeting fosters the development of budgeting skills. Financially savvy millennials can use digital payments strategically to track their spending, manage their bills, and help them get to where they want to be. This helps consumers to readily avail themselves of the benefits that come with certain payment methods. Over time, this encourages responsible financial behaviour by empowering consumers to use the payment methods that make the most sense to them and to use them only when it makes sense. Tang et al. (2021) show that financial education is a key tool in helping the youth improve their budgeting ability. According to their study, millennials who learn about budgeting are more likely to use digital payment methods responsibly to benefit their economic health. With your data set up until October 2023, they can finally educate millennials to take charge of their financial future by bridging financial literacy and effective digital payment applications.

H4: Financial Literacy and Digital Financial Literacy serve as key enablers for the adoption of Digital Payment Systems, leading to improved Consumer Behaviour.

Saving Behaviour argues that psychological, social and economic reasons are influencing saving behaviour in individuals. A generation that is characterized by the increased use of digital wallets and automated savings technology is, therefore, more likely to prioritize saving (Zulbetti et al., 2019). As Pakistan's millennials are becoming well-acquainted with a financial sphere progressively characterised by digital payment mechanisms, understanding their approach towards saving will be imperative for fostering financial stability among the Pakistani millennials. It also impacts on saving behaviours and addresses the need for strategies established to maintain these habits in Gen Y. Whether or not a person saves money is indicative of their sustainability as a user of digital payments, as it requires risk management and planning for future finances. Another study found that poor saving habits can cause people to become unstable financially from their inconsistency with digital payments (Moenjak et al., 2020). Saving behaviour is a crucial behaviour, and it is a knowledge-based behaviour and so financial literacy which covers the knowledge about interest rates, saving strategies, pros and cons of savings over consumption, is an essential element of saving behaviour. Data indicates that financial literacy is linked to improved saving behaviour. Lusardi and Mitchell (2014), for example, demonstrate that individuals who understand financial concepts save more optimally for emergencies and retirement.

A substantial number of factors apart from affordability shape participants' saving habits: self-control, which is related to delaying satisfaction; and forward-looking time inventory. High self-control people are more likely to prioritize saving over instant gratification. As per research done by Webley et al. (2005), future-oriented people tend to save more as they recognize the long-term benefits of spending money. When friends have a certain behaviour, everything seems normal for that way, and even people try to follow that behaviour. Akhtar and Hussain (2022), suffering from some glares of the family and social network of the individual have an impact on the saving habits of the individual. When their social circles value saving, millennials are more likely to adopt similar practices. A person's saving habits are affected by

the economic environment in which he/she lives. Factors such as inflation rates, employment stability, and income level will encourage or discourage saving. How external factors are linked to saving behaviour will be important to design effective financial literacy interventions in the Pakistani context, which is characterised by volatile economic conditions.

Digital payment platforms have led to emerging trends in saving behaviour. These tools may be convenient, but they may encourage impulse purchases and undermine attempts to save money. According to the article Purba et al. (2021), if millennials are lacking good skills of saving money, they might not be able to withstand the temptation of easy shopping on the Internet, that can lead to lower rates of savings. Digital payment methods, however, also help users save with ease. Several apps provide tools that allow users to automate saves, track spending and establish savings goals. Simatele and Mbedzi (2021) found that millennials save more wisely when they have access to digital tools designed explicitly for savings. It can aid individuals in reaching their savings goals, in addition to reinforcing the importance of saving. H<sub>5</sub>: Digital Payment Systems enable the relationship among Financial Literacy, Digital Financial Literacy, and Consumer Behaviour.

### **Hypotheses Development:**

The hypotheses of the study are directional as it measures the impact of specific independent variable which is financial literacy on a dependent variable that is digital payment behaviour. These theories provide a starting point for investigating how important variables influence consumer behaviour in the context of digital payments, a quickly developing field fuelled by technological breakthroughs and the growing popularity of cashless transactions. Since the hypotheses aim to explore specific relationships between the independent variables-Financial Literacy & Digital Financial Literacy & the dependent variable, Consumer Behaviour among Generation Y, they are directed. Additionally, Digital Payment Systems act as a mediating variable in this relationship. Every hypothesis is intended to investigate influence or causality, enabling a targeted and quantifiable study. For politicians, financial institutions, and technology developers looking to encourage the adoption of digital payments, this method offers practical insights on the elements that have the greatest influence on digital payment behaviour.

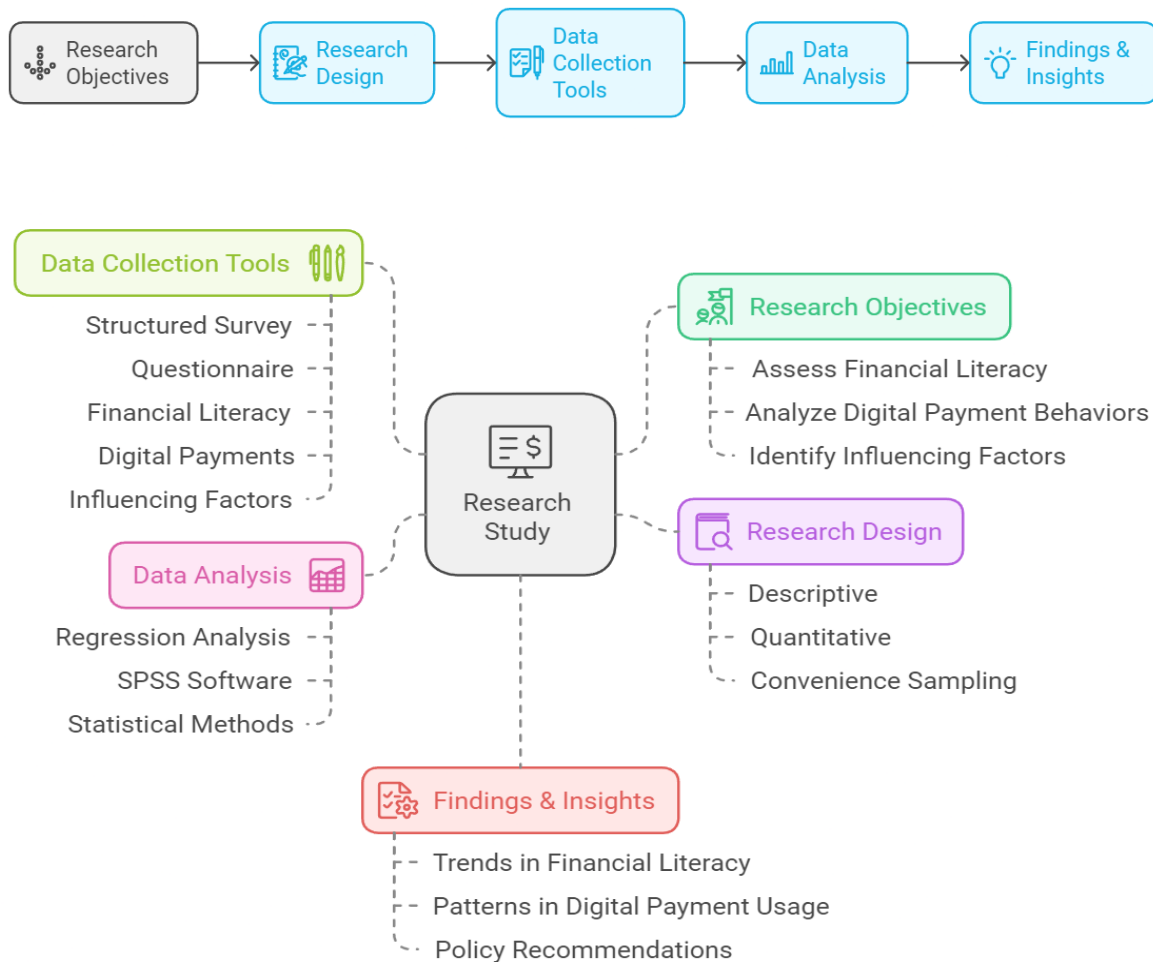
### **3. Methodology:**

#### **Research Design:**

The target population for this research will be millennials in Pakistan. (Generation Y, commonly referred to as millennials, includes individuals born approximately between 1981 and 1996.) According to data from the Pakistan Bureau of Statistics, as of 2017, 56% of Pakistan's population falls within the age range of 15 to 64. Almost 30% of the population belongs to Generation Z, and it is projected that by 2022, they will form a distinct consumer sector. Pakistan has the largest Gen Z population globally, with 60–65% of its citizens being under the age of 30. Nevertheless, data from the World Bank in 2021 indicates that 59% of Pakistan's population is between the ages of 15 and 64. **Sample Sizes is 214 respondents.** **Sampling Technique:** For this research, we will utilize convenience sampling to gather data from millennials in Pakistan regarding their financial literacy and digital payment behaviours. This study will employ a quantitative research design, utilizing convenience sampling to gather data from millennials across various regions of Pakistan. A structured questionnaire will be developed to measure financial literacy, digital payment usage, and related behaviours. Data analysis will involve statistical methods to examine correlations and trends.

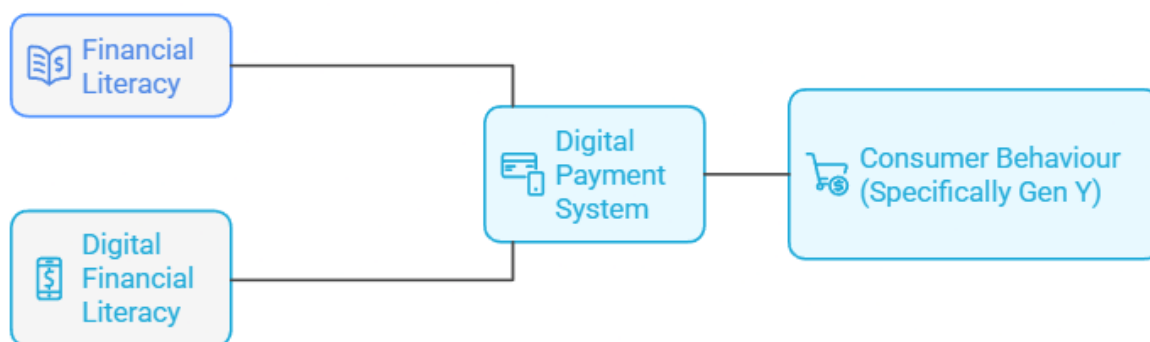


### Research design flow:



Therefore, regression analysis is our main statistical tool for "The Analysis of Enhancing Financial Literacy and Digital Payment Behaviour Among Gen Y (Millennials) in Pakistan". Specifically, we will explore the relationship between millennials' use of digital payments and financial literacy through Multiple regression analysis. This analysis will be carried out on SPSS software. One of the most widely used stats tools used to perform your analysis quickly, and SPSS has an excellent range of statistical features and an easy to navigate interface. Using this software, we will now be able to enter our aggregated data, conduct the necessary regression analysis, and produce comprehensive outputs including coefficients, p-values, and R-squares which indicate the strength and significance of the relationship between financial literacy and millennials' digital payment behaviours. SPSS will also enable the testing of assumptions of regression (normality, linearity, homoscedasticity), providing validation for the reliability and accuracy of our results.

### Conceptual Framework:



### 4. Data Analysis & Results:

**Table 1 Descriptive Statistics**

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
FL	214	3.5963	0.76175	-0.916	0.166	1.159	0.331
DFL	214	3.7430	0.79595	-0.996	0.166	1.084	0.331
DPS	214	3.5028	0.72662	-0.664	0.166	0.806	0.331
CB	214	3.7187	0.81300	-0.849	0.166	1.057	0.331
Valid N 214 (listwise)							

Average scores are around 3.6 to 3.7, suggesting that overall participants have a good awareness of finance topics and a significant degree of responsible consumer behavior. However, in contrast with this financial awareness, engagement with digital payment systems (DPS) is marginally low, as observed from its mean score.

There was a slight skew towards the negative side of the scale such that the majority of responders scored higher levels of financial and consumer understanding. Moreover, such small positive kurtosis means that the answers are low diffused around the average.

**Table 2 Pearson Correlation Analysis**

Correlation		FL	DFL	DPS	CB
FL	Pearson	1	.357**	.448**	.425**
	Correlation				
	Sig. (2-tailed)		0.000	0.000	0.000
DFL	N	214	214	214	214
	Pearson	.357**	1	.565**	.705**
	Correlation				
	Sig. (2-tailed)	0.000		0.000	0.000

DPS	N	214	214	214	214
	Pearson	.448**	.565**	1	.690**
	Correlation Sig. (2-tailed)	0.000	0.000		0.000
CB	N	214	214	214	214
	Pearson	.425**	.705**	.690**	1
	Correlation Sig. (2-tailed)	0.000	0.000	0.000	
	N	214	214	214	214

Table 3 Correlation Between Financial Literacy, Digital Payment Systems, and Consumer Behaviour

Relationship	Pearson Correlation (r)	Strength	Significance (p- value)	Interpretation
FL → DFL	0.357	Moderate	0.000	Higher FL is moderately associated with higher DFL.
FL → DPS	0.448	Moderate	0.000	Those with higher FL moderately more likely to use DPS.
FL → CB	0.425	Moderate	0.000	FL has a moderate positive effect on CB.
DFL → DPS	0.565	Strong	0.000	Higher DFL is strongly associated with DPS adoption.
DFL → CB	0.705	Strong	0.000	DFL has a strong positive impact on CB.

DPS → CB 0.690

Strong

0.000

The use of DPS is strongly related to positive CB changes.

The analysis confirms that all correlations are significant ( $p < 0.01$ ). The strongest connection is between DFL & Consumer Behaviour ( $r = 0.705$ ), indicating that higher digital financial knowledge leads to better consumer decision-making. Digital Payment Systems also strongly correlate with Consumer Behaviour ( $r = 0.690$ ), showing their impact on purchasing habits. Financial Literacy has a moderate correlation with both Digital Payment Systems ( $r = 0.448$ ) and Consumer Behaviour ( $r = 0.425$ ), suggesting it is beneficial but less influential than DFL. Overall, DFL plays a crucial role in driving digital payment adoption and shaping consumer behaviour.

Table 4 Multiple Regression Analysis

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.684	2	21.842	67.011	.000 <sup>b</sup>
	Residual	68.774	211	0.326		
	Total	112.458	213			
a. D.V: DPS						
b. Predictors: (Constant), DFL, FL						

The model is significant ( $p < 0.001$ ) & explains 38.8% of the variance in Digital Payment System (DPS) adoption ( $R^2 = 0.388$ ). Both FL and DFL positively influence DPS adoption, with DFL ( $\beta = 0.464$ ) having a stronger impact than FL ( $\beta = 0.282$ ). ANOVA results ( $F(2,211) = 67.011$ ,  $p < 0.001$ ) confirm the model's validity. H1 and H2 are supported, indicating that both FL and DFL significantly impact DPS adoption, with DFL playing a more influential role.

Table 5 Multiple Regression Analysis

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	67.040	1	67.040	192.726	.000 <sup>b</sup>
	Residual	73.745	212	0.348		
	Total	140.785	213			
a. D.V: CB						
b. Predictors: (Constant), DPS						

The model is significant ( $p < 0.001$ ) & explains 47.6% of the variance in Consumer Behaviour (CB) ( $R^2 = 0.476$ ). Digital Payment Systems (DPS) have a positive strong impact on CB ( $\beta = 0.690$ ,  $t = 13.883$ ,  $p < 0.001$ ), confirming that increased DPS adoption enhances consumer behaviour. ANOVA results ( $F(1,212) = 192.726$ ,  $p < 0.001$ ) further validate the model's significance. H3 is supported, demonstrating that Digital Payment System usage significantly influences Consumer Behaviour among Gen Y.

Table 6 Model 4 Mediation Analysis 1

Y : CB  
X : FL  
M : DPS

Sample Size: 214

OUTCOME VARIABLE: DPS

Model Summary:

R	R-sq	MSE	F	df1	df2	p
.4479	.2006	.4241	53.1950	1.0000	212.0000	.0000

Model:

	coeff	se	t	p	LLCI	ULCI
constant	1.9664	.2153	9.1334	.0000	1.5420	2.3908
FL	.4272	.0586	7.2935	.0000	.3117	.5427

OUTCOME VARIABLE: CB

Model Summary:

R	R-sq	MSE	F	df1	df2	p
.7021	.4930	.3383	102.5815	2.0000	211.0000	.0000

Model:

	coeff	se	t	p	LLCI	ULCI
constant	.7122	.2270	3.1376	.0019	.2648	1.1597
FL	.1547	.0585	2.6441	.0088	.0394	.2701
DPS	.6995	.0613	11.4023	.0000	.5785	.8204

DIRECT AND INDIRECT EFFECTS OF X ON Y:

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.1547	.0585	2.6441	.0088	.0394	.2701

Indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI
DPS	.2988	.0589	.1728 .4073

ANALYSIS NOTES AND ERRORS:

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

Financial Literacy (FL) significantly influences Digital Payment System (DPS) adoption, explaining 20.06% of its variance ( $R^2 = 0.2006$ ,  $p < 0.001$ ). Higher FL leads to increased DPS usage ( $B = 0.4272$ ,  $p < 0.001$ ). Additionally, FL and DPS together explain 49.3% of the variance in Consumer Behaviour (CB) ( $R^2 = 0.4930$ ,  $p < 0.001$ ), with DPS ( $B = 0.6995$ ,  $p < 0.001$ ) & FL ( $B = 0.1547$ ,  $p = 0.0088$ ) both impacting CB. Mediation analysis confirms DPS as a partial mediator between FL and CB, supporting H4. This highlights the role of FL in driving electronic payment adoption and improving consumer behaviour. The concept has been developed by Hayes (2022)

Table 7 Model 4 Mediation Analysis 2

Y : CB  
X : DFL  
M : DPS

Sample Size: 214

OUTCOME VARIABLE: DPS

Model Summary:

R	R-sq	MSE	F	df1	df2	p
.5648	.3190	.3613	99.2932	1.0000	212.0000	.0000

Model:

	coeff	se	t	p	LLCI	ULCI
constant	1.5730	.1980	7.9454	.0000	1.1828	1.9633
DFL	.5156	.0517	9.9646	.0000	.4136	.6176

OUTCOME VARIABLE: CB

Model Summary:

R	R-sq	MSE	F	df1	df2	p
.7887	.6221	.2521	173.6770	2.0000	211.0000	.0000

Model:

	coeff	se	t	p	LLCI	ULCI
constant	.2691	.1884	1.4282	.1547	-.1023	.6405
DFL	.4728	.0524	9.0262	.0000	.3695	.5760
DPS	.4796	.0574	8.3586	.0000	.3665	.5927

DIRECT AND INDIRECT EFFECTS OF X ON Y:

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.4728	.0524	9.0262	.0000	.3695	.5760

Indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI
DPS	.2473	.0444	.1650 .3408

ANALYSIS NOTES AND ERRORS:

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

H5: Digital Payment Systems (DPS) act as a mediator variable between FL, DFL, and CB among Millennials. Regression analysis shows that FL and DFL explain 38.8% of the variance in DPS adoption ( $R^2 = 0.388$ ,  $p < 0.001$ ). Both FL ( $B = 0.269$ ,  $p < 0.001$ ) and DFL ( $B = 0.424$ ,  $p < 0.001$ ) predict DPS usage. Additionally, DPS explains 47.6% of variance in CB ( $R^2 = 0.476$ ,  $p < 0.001$ ) and significantly impacts consumer behaviour ( $B = 0.772$ ,  $p < 0.001$ ). Mediation analysis confirms that DPS plays a vital role in linking FL and DFL to CB, supporting H5. This

highlights the importance of FL & digital literacy in promoting DPS adoption & improving financial behaviour. The concept has been developed by Hayes (2022)

## Discussion and Conclusion

Findings of this study replicate previous research showing importance of financial literacy for affecting digital payment behaviour. Prior studies, such as Lusardi and Mitchell (2014), have established that the People with a solid basis in FL are able to join in educated financial decision making. Similarly, study demonstrates that In Pakistan, Millennials having higher financial awareness are inclined to accept digital payment options.

A significant difference occurs on the relative effect of standard monetary literacy as well as DFL. Existing research has indicated that FL is a leading factor in utilizing digital payment (Khan & Ali, 2020); however, this study shows that a more pronounced aspect is digital financial literacy. This finding is aligned with the study of Simatele and Mbedzi (2021), that argued technological competence has become an important part in financial decision making in digital era, above the knowledge of finances.

Similarly, the study supports findings found by Adil and Hatekar (2020), where their study has identified Security and privacy issues to be an important reason for not ready to adopt digital payments. This rates the trust issue higher, as many responses from the respondents included that lack of trust in digital financial service platforms impacts their adoption of digital payments. But this study takes the conversation a step further by illustrating how increased digital financial literacy can lessen security concerns and ultimately allow users to interact more confidently with digital payment systems.

**Methodological Contributions:** Research contributes the existing knowledge of consumer behaviour & financial matters by increasing our understanding of the ways in which DFL affects the financial decision-making processes. Highlighting the need to adapt theoretical models that focus solely on the impact of FL as a standalone variable on financial behaviour (Lusardi & Mitchell, 2014), this research provides a compelling case for integrating digital financial literacy into existing theories.

Moreover, results emphasize the role of technology familiarity as a promoter of digital financial behaviour. This study states that financial literacy has often been approached in a one-off manner by previous frameworks. However, according to this study, financial literacy must evolve in line with digital progression to remain pertinent.

**Practical Implications:** The study findings provide much value to policy makers, financial organizations, and fintech companies. **Relevance to Policy:** Since digital financial literacy is a crucial factor, policymakers must ensure the introduction of financial education programs include the training of digital literacy. **Digital financial inclusion DFL:** Digital education about finances is necessary but, if not managed internally, occurs outside the ecosystem and often ignores the technology component. **Banking and Fintech Domain:** Financial services corporations must prioritize consumer education and embed financial literacy modules in digital banking applications. By providing interactive tutorials and gamified financial education experiences, increased user engagement and trust in DPS could be achieved. **Security and Consumer Protection:** The research shows security issues continued to prevent people from using digital payments. Regulatory bodies and fintech firms need to work on making consumer protection mechanisms stronger through better cyber security awareness and fraud prevention drives. The future research could build on this qualitative research in a number of important ways to advance understanding regarding FL and digital payment behaviours. Longitudinal studies could measure changing levels of digital and financial literacy over time, especially with respect to technology changes. Through longitudinal studies examine changes in consumer knowledge & behaviour this research would offer important insights into the effectiveness of financial education initiatives & policy interventions. Moreover, cross-cultural comparisons would be useful to examine the variation in FL and uptake of digital payments across different sociocultural and socioeconomic contexts. Such research would provide a

comprehensive understanding of how regional, economic, & societal factors shape financial behaviours. Another key area for exploration is behavioural experiments, through which experimental studies can be conducted to assess the causal effect of financial education programmes on adoption of digital payments. Such experiments could quantify the extent to which interventions such as targeted training or awareness campaigns affect each step of the decision-making process and, ultimately, financial behaviour. Additionally, the swift progress in financial technology requires us to study the various kinds of technological innovations such as the implications of AI-based financial advisors and decentralized payment systems on consumer behaviour. Policymakers and industry leaders will find it critical to understand how emerging technologies influence financial decision making. Finance World also emphasizes the need for studies on the possibility of education-based fintech solutions like mobile financial literacy applications that could improve financial decision-making, and enhancing digital financial literacy interventions. Further exploration of how these technologies can promote personal finance awareness and support prudent financial behaviours can lead to more effective and accessible financial literacy and educational programming.

### **Limitations and Future Research Direction**

The study examined the bond between FL, DFL, and CB of Millennials in Pakistan. DFL strongly influences the use of digital payments, while FL helps in using digital payments. High levels of DFL instil a sense of security & confidence in digital payment modes among people, reducing the risk of safety and fraudulent transactions. The Influence of DFL: FL is a well-established factor in taking on digital payment solutions and CB. A familiarity with & use of fintech tools fosters trust in digital transactions and encourages wise financial decisions. Digital Payments and Consumer Behaviour: The results show that digital payment adoption has a direct impact on consumer behaviour. Millennial users of DPS tend to have more structured approach to their finances, including budgeting and tracking spending. Barriers to Adoption: Security concerns and lack of financial education remain key barriers to digital payment adoption. Many respondents expressed hesitancy in using digital services due to fears of fraud and misuse of personal data.

Findings of this research demonstrate the constantly growing importance of DFL in the current financial world. Capacity to conduct financial transactions using digital platforms has become an essential skill, despite the fact that conventional financial literacy is still useful. Because of the fast growth of digital payment technologies, there is a need for a change in the approaches that are used to educate people about finance in order to include digital competences. A concrete example of the need for policymakers and financial organisations to develop special financial awareness endeavours that target both traditional & digital financial knowledge is provided by the study that is given here. Increasing the amount of people who have access to financial services and bridging the knowledge gap may be accomplished by including digital financial education into the curriculum of schools & workplace training programs. In light of the expansion of the financial ecosystem, it is importance to guarantee that people possess the necessary skills to become proficient in use of digital financial services. Stakeholders have the ability to support increased use of digital payments by resolving security concerns and boosting digital financial education. This will ultimately result in consumers engaging in more informed financial behaviour and a stronger, more equitable financial system.

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