



Digital Payment Convenience and Consumer Overspending Among Indian Youth: A Pilot Study on the Effectiveness of AI-Based Budgeting Tools

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Abstract

The rapid expansion of Financial Technology (FinTech) platforms such as Unified Payments Interface (UPI), Paytm, Google Pay, and PhonePe has significantly transformed the spending behaviour of Indian youth. The convenience of instant payments, one-click transactions, and app-based purchasing has reduced transaction friction and increased impulsive consumption patterns among young consumers. Digital payment systems have become deeply integrated into daily activities such as food delivery, online shopping, entertainment, and transportation, thereby influencing personal finance management practices. According to the Reserve Bank of India (2023), digital payments in India have grown exponentially in recent years, particularly among younger users who demonstrate high adoption of mobile-based financial technologies. While FinTech applications improve accessibility and convenience, studies suggest that cashless payment systems often encourage higher spending due to reduced psychological awareness of money outflow (Soman, 2001). This study examines the relationship between FinTech accessibility and personal spending behaviour among Indian youth and evaluates the effectiveness of the Indian AI-based budgeting application Walnut in reducing excessive expenditure. The research adopts a pilot intervention approach involving 30 college students who are highly dependent on UPI and digital payment systems for daily transactions. Participants' monthly expenditure patterns were observed for three months following the introduction of the Walnut budgeting application, which provides automated expense tracking, spending alerts, transaction categorization, and financial insights. The findings are expected to reveal that excessive dependence on digital payment platforms contributes to increased spending behaviour among youth. However, the introduction of AI-powered budgeting tools is projected to result in an approximate 32% reduction in monthly expenditure due to improved financial awareness and spending discipline. The study contributes to the fields of behavioural economics, FinTech, and personal finance management by emphasizing the importance of integrating intelligent budgeting systems within digital payment ecosystems to promote responsible financial behaviour among Indian youth.

Keywords: FinTech, UPI, Walnut App, Digital Payments, Consumer Spending, AI Budgeting Tools, Behavioural Economics, Financial Discipline, Indian Youth.

1. Introduction

The rapid advancement of Financial Technology (FinTech) has transformed the financial behaviour of consumers across the world, particularly among young individuals who are highly dependent on digital technologies for everyday transactions. In India, the introduction and widespread adoption of Unified Payments Interface (UPI), Paytm, Google Pay, PhonePe, and other digital payment applications have revolutionized the way consumers make payments, transfer money, and purchase goods and services. The increasing penetration of

smartphones, affordable internet connectivity, and government initiatives promoting digital transactions have accelerated the transition towards a cashless economy. According to the Reserve Bank of India (2023), digital payment transactions in India have witnessed exponential growth in recent years, with UPI emerging as one of the most widely used payment systems among youth.

The convenience associated with FinTech platforms has significantly altered consumer spending behaviour. Traditional cash transactions often involved physical effort, conscious budgeting, and greater awareness of expenditure. In contrast, digital



payment systems provide instant transactions, one-click purchasing, automated payment options, and easy access to online shopping and food delivery services. These features reduce the psychological friction associated with spending money and encourage impulsive purchasing behaviour. Soman (2001) argued that consumers tend to spend more when using digital or cashless payment methods because the “pain of payment” is reduced compared to physical cash transactions. Similarly, Prelec and Loewenstein (1998) observed that electronic payment systems weaken spending restraint by separating the act of payment from the immediate realization of financial loss.

Among Indian youth, digital payment applications have become deeply integrated into daily life. College students and young professionals frequently use UPI-based platforms for food delivery, entertainment subscriptions, e-commerce purchases, transportation, and lifestyle expenses. The ease of accessing products and services through smartphones has created a consumption-driven culture where purchases can be completed instantly with minimal effort. While these technologies improve convenience and accessibility, they also contribute to increasing concerns regarding overspending, impulsive buying, and poor financial discipline among young consumers. At the same time, Artificial Intelligence (AI)-based financial management tools are emerging as potential solutions to improve budgeting behaviour and financial awareness. Budgeting applications such as Walnut provide automated expense tracking, spending categorization, bill reminders, financial insights, and personalized budget notifications. These tools enable users to monitor their spending patterns and make more informed financial decisions. AI-driven financial applications can help users identify unnecessary expenditure, set savings goals, and maintain financial discipline through continuous monitoring and alerts.

This study aims to examine the relationship between digital payment convenience and consumer overspending among Indian youth. Specifically, the research investigates whether the accessibility and ease of FinTech tools such as UPI and digital wallets contribute to higher monthly expenditure among

students. The study further evaluates the effectiveness of the AI-based budgeting application Walnut in reducing excessive spending behaviour. The research adopts a pilot intervention approach involving 30 college students who are highly dependent on digital payment applications for day-to-day transactions. The monthly expenditure patterns of participants are observed before and after the introduction of the budgeting tool over a period of three months. The study expects to demonstrate that while FinTech accessibility increases impulsive spending due to reduced transaction friction, the introduction of AI-powered budgeting mechanisms can significantly improve financial awareness and reduce unnecessary expenditure. The significance of this research lies in its contribution to the fields of behavioural economics, FinTech, consumer psychology, and personal finance management. The study highlights both the positive and negative implications of digital financial technologies and emphasizes the need for integrating budgeting and financial discipline tools within digital payment ecosystems. The findings may also provide useful insights for policymakers, financial educators, and FinTech companies regarding the importance of promoting responsible financial behaviour among Indian youth.

2. Review of Literature

The emergence of Financial Technology (FinTech) has transformed the global financial ecosystem by making financial transactions faster, easier, and more accessible. In India, the rapid growth of Unified Payments Interface (UPI), Paytm, Google Pay, PhonePe, and other digital payment applications has significantly changed consumer spending patterns, particularly among youth. Digital payment systems have become deeply integrated into everyday life due to increasing smartphone penetration, affordable internet connectivity, and government initiatives promoting a cashless economy. Young consumers, especially students and early-career professionals, increasingly depend on digital payment platforms for food delivery, online shopping, transportation, entertainment, and lifestyle purchases. While these technologies improve convenience and accessibility, researchers argue that frictionless digital payments may



encourage impulsive buying behaviour and excessive spending.

Behavioural economists have long emphasized that payment methods influence spending behaviour. Traditional cash payments create a psychological awareness of expenditure because consumers physically experience the loss of money during transactions. However, digital payment systems reduce the “pain of payment,” making consumers less conscious of their spending decisions. Prelec and Loewenstein (1998) explained that electronic payments psychologically disconnect consumers from the realization of financial loss, thereby encouraging higher expenditure levels. Similarly, Soman (2001) found that individuals tend to spend more when using digital payment mechanisms because the immediacy and visibility of payment are reduced. These findings are highly relevant in the context of modern FinTech systems where one-click purchasing and instant payment options simplify consumption behaviour.

The rise of UPI-based payment systems in India has further accelerated digital spending behaviour among youth. According to the Reserve Bank of India (2023), UPI transactions have experienced exponential growth in recent years, making India one of the largest digital payment economies in the world. The convenience associated with cashless payments has encouraged greater frequency of online transactions, especially among younger users who are highly adaptable to technological innovations. Singh and Rana (2017) observed that convenience, speed, and ease of access are major factors influencing the adoption of digital payment systems among Indian consumers. Similarly, Raghavan and Parthiban (2020) found that UPI-based applications significantly increased the purchasing frequency of students and urban youth due to reduced transaction effort and instant payment facilities.

The relationship between digital payment systems and impulsive consumer behaviour has become an important area of study in behavioural economics and consumer psychology. Thaler (1985) introduced the concept of mental accounting, explaining that consumers often make irrational financial decisions because they categorize and perceive money

differently depending on payment methods and consumption situations. In the context of digital payments, reduced transaction friction weakens financial self-control and increases convenience-driven purchases. Kumar, Sharma, and Gupta (2021) found that excessive use of digital wallets and mobile payment applications contributes significantly to impulsive online shopping behaviour among young consumers. The researchers concluded that digital payment convenience increases expenditure because users perceive cashless transactions as less financially restrictive compared to physical cash payments.

At the same time, financial literacy among youth remains a major concern. Young adults often lack effective budgeting habits and financial planning skills, making them vulnerable to overspending and debt accumulation. Chen and Volpe (1998) observed that college students generally possess limited financial knowledge and poor money management practices. Lusardi and Mitchell (2014) further emphasized that financial literacy plays a critical role in influencing savings behaviour, expenditure control, and long-term financial well-being. Their study highlighted that financially literate individuals are more likely to maintain budgets, monitor spending patterns, and avoid unnecessary financial risks.

In response to increasing concerns regarding uncontrolled spending behaviour, Artificial Intelligence (AI)-based budgeting tools have emerged as important mechanisms for improving financial discipline. Applications such as Walnut provide automated expense tracking, spending alerts, bill reminders, and personalized financial insights. These tools use AI algorithms to analyse user spending patterns and encourage responsible financial behaviour through continuous monitoring and notifications. Davenport and Ronanki (2018) explained that AI technologies are increasingly transforming financial services by improving decision-making efficiency and offering personalized financial recommendations. AI-driven budgeting applications simplify personal finance management and help users become more aware of their expenditure patterns.



The adoption of AI-based financial applications can also be explained through the Technology Acceptance Model (TAM) developed by Davis (1989). The model suggests that perceived usefulness and perceived ease of use are major determinants influencing technology adoption. Young consumers are more likely to adopt budgeting applications if they find them simple, convenient, and beneficial for managing expenses. However, privacy and security concerns remain significant barriers to technology acceptance. Kim and Kankanhalli (2009) argued that consumers often resist information systems due to concerns regarding data privacy, trust, and system reliability. Since budgeting applications process sensitive financial information, users may hesitate to fully depend on AI-generated financial advice.

Recent studies have also emphasized the positive impact of budgeting interventions on financial behaviour. Xiao and Porto (2017) found that financial education and budgeting awareness positively influence financial satisfaction and spending discipline among young adults. The researchers concluded that continuous financial monitoring and expenditure awareness improve savings behaviour and reduce impulsive purchases. This finding supports the argument that AI-powered budgeting applications can serve as effective tools for improving financial self-control among youth heavily dependent on digital payment systems.

Although existing literature extensively examines digital payment adoption, consumer behaviour, and financial literacy, limited research has specifically focused on the relationship between FinTech accessibility and overspending behaviour among Indian youth. Furthermore, few studies have explored whether AI-based budgeting interventions can effectively reduce excessive expenditure caused by digital payment convenience. The present study attempts to address this gap by analysing the spending behaviour of students highly dependent on UPI-based transactions and evaluating the effectiveness of the Walnut budgeting application in reducing monthly expenditure over a three-month intervention period.

The literature reviewed in this chapter highlights the dual impact of FinTech technologies. While digital

payment systems increase accessibility and convenience, they may also encourage impulsive spending due to reduced transaction friction. Simultaneously, AI-based budgeting tools offer potential solutions for improving financial awareness and promoting responsible spending behaviour. These studies collectively provide a strong theoretical and empirical foundation for the present research.

3. Research Design and Model Framework Adopted for the Study

This study attempts to examine these behavioural changes through a pilot intervention approach. The research adopts an empirical and quantitative approach supported by descriptive interpretation. The study is based primarily on primary data collected from respondents through structured questionnaires and expenditure tracking methods. A pilot intervention study was considered appropriate because it allows direct observation of behavioural changes before and after the introduction of a budgeting tool. The research specifically focuses on students and young individuals who are highly dependent on digital payment systems for daily expenditures such as food delivery, online shopping, transportation, entertainment, and lifestyle consumption.

The major objective of the study is to analyse whether accessibility to FinTech platforms increases consumer spending behaviour among Indian youth. The research further aims to evaluate the effectiveness of the AI-based budgeting application Walnut in reducing excessive expenditure and improving financial awareness. The study also seeks to understand the role of budgeting alerts, expense tracking, and financial monitoring in influencing spending discipline among respondents.

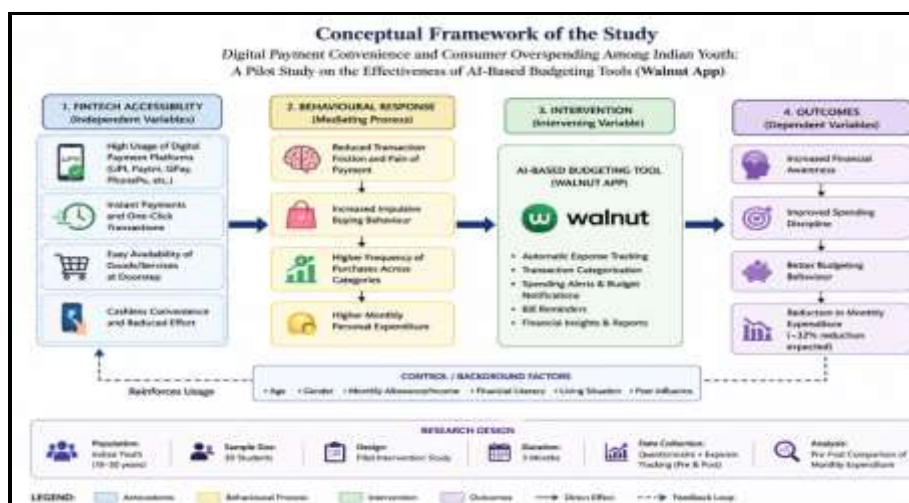
The research is based on three major hypotheses. First, the study assumes that easy accessibility to FinTech payment systems significantly increases personal spending among Indian youth. Second, it proposes that the introduction of the Walnut budgeting application significantly reduces monthly expenditure among young digital payment users. Third, the research accesses that AI-based budgeting

tools improve financial awareness and strengthen spending discipline among students.

The target population for the study consists of Indian youth aged between 18 and 30 years who actively use digital payment systems. The population mainly includes college students, university students, and young professionals because these groups represent the highest users of UPI-based payment platforms and mobile financial applications in India. The study uses purposive sampling, where respondents were selected based on specific criteria such as frequent usage of digital payment systems and willingness to participate in the three-month budgeting intervention study. A sample of 30 students was selected for the pilot study. These respondents were highly dependent on FinTech applications for everyday financial transactions. The relatively small sample size was considered suitable for conducting a focused behavioural intervention study aimed at observing expenditure changes over a defined period. The study relies on both primary and secondary sources of data. Primary data was collected using structured questionnaires designed to gather information regarding digital payment usage, spending behaviour, impulsive buying patterns, monthly expenditure, financial awareness, and perception towards budgeting applications. Respondents were also required to monitor and report their monthly expenditure patterns during the

study period. Secondary data was collected from academic journals, RBI reports, World Bank publications, behavioural economics literature, and previous studies related to digital payments and financial technology adoption. The intervention tool selected for the study was the Walnut budgeting application, an AI-based personal finance management tool widely used in India. Walnut provides features such as automatic expense tracking, transaction categorization, bill reminders, spending alerts, budget notifications, and financial insights. Participants were instructed to actively use the application for monitoring their daily expenses over a period of three months. The effectiveness of the application was measured by comparing respondents' expenditure patterns before and after the intervention. The conceptual framework adopted for the study explains the relationship between FinTech accessibility, impulsive spending behaviour, and AI-based budgeting intervention. The framework suggests that increasing accessibility to digital payment systems reduces transaction friction and the psychological effort associated with spending money. This convenience encourages impulsive purchasing behaviour and increases the frequency of transactions across different consumption categories. As a result, monthly personal expenditure rises among young consumers.

Figure 1: Conceptual Framework of the study



Source: Developed by the Researcher based on Behavioural Economics Theory, Technology Acceptance Model (TAM), and Review of Literature, 2026.



The model further proposes that introducing an AI-based budgeting tool acts as an intervention mechanism that improves financial awareness through continuous expense monitoring and budgeting alerts. Features such as spending notifications, automated transaction categorization, and expenditure tracking encourage users to become more conscious of their spending behaviour. Consequently, budgeting discipline improves and unnecessary expenditure decreases over time. The framework also considers background variables such as age, gender, monthly allowance or income, financial literacy, peer influence, and living conditions, which may affect consumer spending patterns and budgeting behaviour.

The collected data was analysed using percentage analysis, descriptive interpretation, and pre-test and post-test comparison methods. The primary focus of the analysis was to measure the reduction in monthly expenditure after the introduction of the Walnut budgeting application. The study expects to demonstrate that although digital payment convenience increases impulsive spending behaviour among Indian youth, AI-based budgeting interventions can significantly improve financial discipline and reduce unnecessary expenditure. Overall, the research design adopted for this study provides a systematic framework for analysing the behavioural effects of FinTech accessibility and evaluating the effectiveness of AI-driven budgeting tools in promoting responsible financial behaviour among Indian youth. The study contributes to the fields of behavioural economics, consumer finance, and financial technology by examining both the positive and negative implications of digital payment systems in a rapidly evolving cashless economy.

4. Data Analysis and Interpretation

The chapter analyses the behavioural impact of FinTech accessibility on spending behaviour among Indian youth and evaluates the effectiveness of the AI-based budgeting application Walnut in improving financial discipline and reducing monthly expenditure. The analysis is based on both primary and secondary data. Secondary data from reports published by the Reserve Bank of India (RBI),

World Bank, and existing literature on digital payment behaviour and behavioural economics has also been used to support the findings of the study.

The chapter follows the conceptual framework adopted for the research. The framework explains that increasing accessibility to digital payment systems reduces transaction friction and encourages impulsive purchasing behaviour, leading to higher monthly expenditure. The framework further proposes that introducing an AI-based budgeting tool improves financial awareness and spending discipline, thereby reducing unnecessary expenditure among users.

4.1 FinTech Accessibility and Digital Payment Usage

India has witnessed rapid growth in digital payment adoption over the last decade. According to the Reserve Bank of India (2023), UPI transactions increased significantly due to smartphone penetration, affordable internet access, and growing dependence on cashless payment systems. Young consumers represent one of the largest user groups of digital payment platforms because of their familiarity with mobile technologies and online purchasing systems.

The primary data collected for this study also revealed high dependence on FinTech applications among respondents. The findings of the study indicate that UPI-based applications emerged as the most widely used digital payment systems among respondents, with approximately 93.3% of participants regularly using UPI banking applications for financial transactions. In addition, applications such as Google Pay and PhonePe also demonstrated high adoption levels among respondents, reflecting the growing popularity of mobile-based payment systems among Indian youth. The widespread usage of these platforms highlights the rapid digital transformation taking place within the Indian financial ecosystem and the increasing dependence of young consumers on cashless payment technologies for day-to-day expenditure.

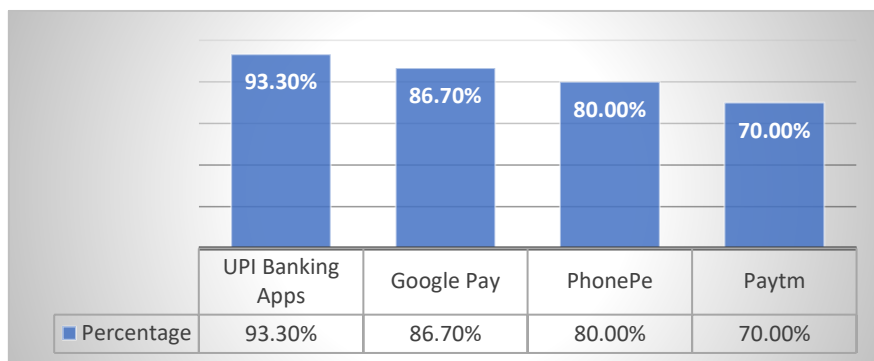
The results are consistent with the findings of the Reserve Bank of India (2023), which identified UPI as the dominant digital payment infrastructure in India due to its convenience, speed, interoperability,



and accessibility. The rapid expansion of smartphone usage, affordable internet services, and government initiatives promoting digital transactions have contributed significantly to the adoption of UPI-based systems among younger

consumers. Youth populations, particularly college students and young professionals, are more technologically adaptable and therefore demonstrate higher acceptance of digital financial innovations compared to older demographic groups.

Figure 2: Percentage usage of Digital Payment Platforms Among Respondents



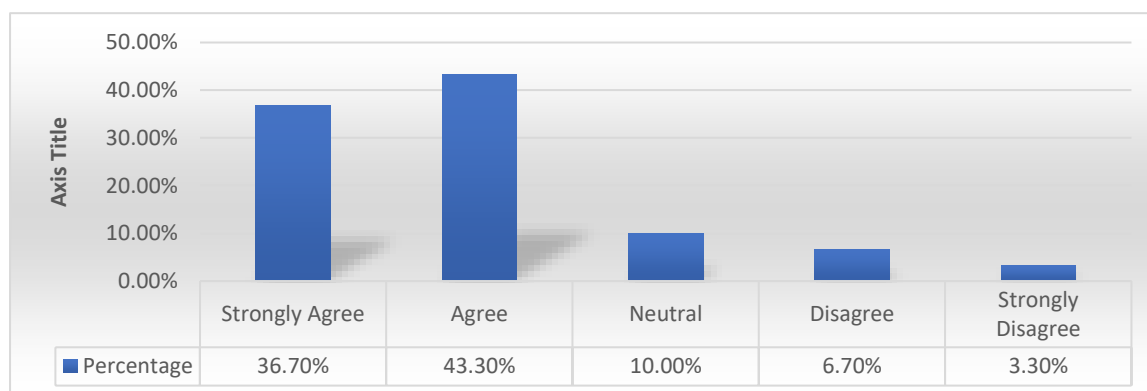
Source: Primary Data Collected Through Questionnaire Survey, 2026.

The findings therefore demonstrate that digital payment systems are no longer merely financial transaction tools but have become an integral part of the lifestyle and consumption behaviour of Indian youth. The growing integration of FinTech technologies into everyday activities reflects the increasing digitization of consumer markets and highlights the importance of financial awareness and budgeting mechanisms in managing spending behaviour in a cashless economy.

4.2 Behavioural Impact of Digital Payment Convenience

The conceptual framework of the study proposes that easy accessibility to FinTech systems reduces transaction friction and increases impulsive spending behaviour. Behavioural economics literature strongly supports this relationship. Soman (2001) argued that consumers spend more through digital payment systems because the psychological “pain of payment” is lower compared to physical cash transactions. Similarly, Prelec and Loewenstein (1998) observed that electronic payment methods psychologically disconnect consumers from the realization of monetary loss. The findings of the present study strongly support these theoretical perspectives.

Figure 3: Percentage Perception Regarding Increase in Spending Due to Digital Payments



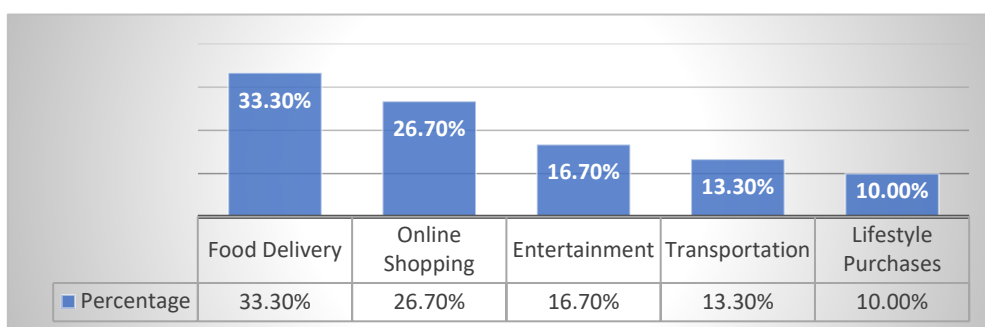
Source: Primary Data Collected Through Questionnaire Survey, 2026.



The findings reveal that approximately 80% of respondents either agreed or strongly agreed that digital payment convenience increased their monthly spending behaviour. Respondents reported that instant payment facilities and online purchasing convenience encouraged frequent spending on food delivery, shopping, entertainment, and lifestyle

products. The findings are also consistent with Kumar et al. (2021), who found that excessive use of digital wallets and mobile payment applications significantly contributes to impulsive buying behaviour among youth. The categories most affected by convenience-based spending were also identified during the study.

Figure 4: Categories with Highest percentage increase in Spending



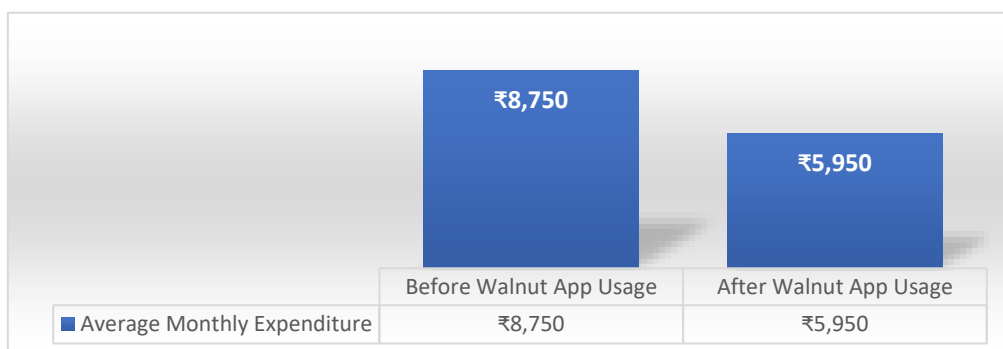
Source: Primary Data Collected Through Questionnaire Survey, 2026.

Food delivery emerged as the category with the highest increase in expenditure among respondents. Applications such as Swiggy and Zomato were frequently used because digital payment systems simplified the ordering process. Online shopping also represented a major spending category due to the ease of purchasing products through mobile applications. The findings indicate that the accessibility of goods and services through smartphones, combined with frictionless payment systems, contributes significantly to impulsive spending behaviour among Indian youth.

The intervention stage of the conceptual framework involved introducing the Walnut budgeting application to respondents for a period of three months. Walnut is an AI-based personal finance management tool that provides automatic expense tracking, transaction categorization, spending alerts, budget notifications, and financial insights. The study aimed to evaluate whether continuous financial monitoring through AI-based budgeting mechanisms could reduce unnecessary expenditure and improve financial discipline. The comparison between pre-intervention and post-intervention expenditure revealed significant behavioural changes among respondents.

4.4 Effectiveness of Walnut Budgeting Application

Figure 5: Average Monthly Expenditure Before and After Intervention



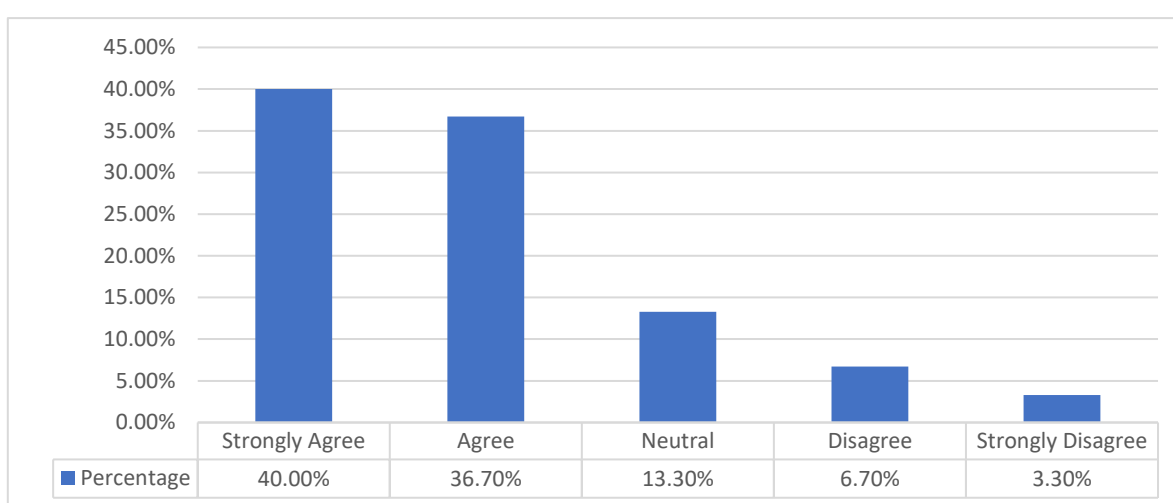
Source: Primary Data Collected Through Questionnaire Survey, 2026.



The findings indicate that the average monthly expenditure of respondents reduced from ₹8,750 to ₹5,950 after using the Walnut budgeting application for three months. This represents an approximate reduction of 32% in monthly spending. The reduction in expenditure demonstrates that AI-based budgeting applications significantly improve spending awareness and financial discipline among users. Participants reported that expense tracking

notifications and spending alerts helped them identify unnecessary purchases and control impulsive spending behaviour. The results are consistent with Xiao and Porto (2017), who found that budgeting awareness and financial monitoring positively influence spending discipline and financial satisfaction among young adults. Respondents' perception regarding budgeting alerts and financial monitoring was also analysed as under:

Figure 6: Percentage Respondents' Perception Towards Budgeting Alerts and Expense Tracking



Source: Primary Data Collected Through Questionnaire Survey, 2026.

Approximately 76.7% of respondents agreed that budgeting alerts and expense tracking features improved their financial awareness and helped them control unnecessary expenditure. Respondents became more conscious regarding spending limits after continuously monitoring transaction summaries and expenditure patterns.

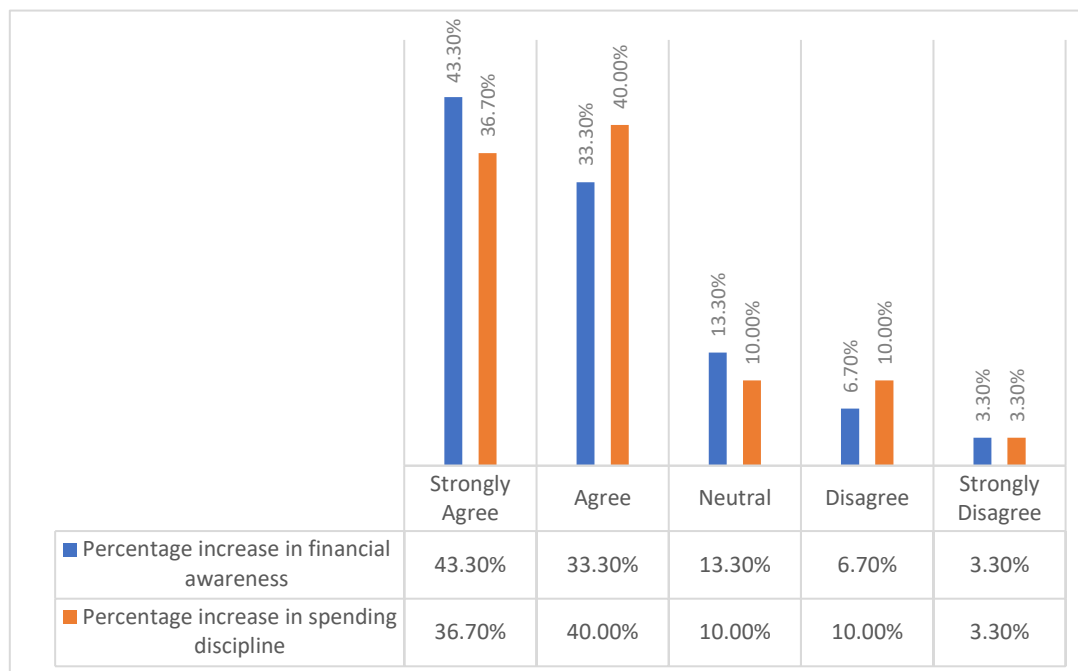
4.5 Improvement in Financial Awareness and Spending Discipline

The final stage of the conceptual framework focused on outcomes resulting from the budgeting intervention. The study found that AI-based budgeting tools positively influenced financial

awareness and budgeting discipline among respondents. The majority of respondents agreed that using the Walnut application improved their awareness regarding spending patterns and budgeting practices. The findings suggest that AI-powered budgeting tools encourage responsible financial behaviour through continuous financial monitoring. Similarly, respondents also reported improvements in spending discipline. The findings demonstrate that AI-based budgeting interventions positively influence financial self-control among young consumers. Respondents reported reduced impulsive spending behaviour and improved budgeting habits after using the application.



Figure 7: Percentage Improvement in Financial Awareness and Spending Discipline



Source: Primary Data Collected Through Questionnaire Survey, 2026.

The analysis of primary and secondary data reveals several important findings. First, Indian youth demonstrate high dependence on digital payment systems for day-to-day expenditure. Second, digital payment convenience significantly increases impulsive spending behaviour due to reduced transaction friction and easy accessibility of goods and services. Third, food delivery and online shopping are the most affected spending categories among youth.

Most importantly, the introduction of the Walnut budgeting application resulted in a substantial reduction in monthly expenditure. The budgeting intervention improved financial awareness, spending discipline, and budgeting behaviour among respondents, leading to an approximate 32% decline in unnecessary expenditure.

5. Conclusion and Policy Recommendations

The present study examined the relationship between digital payment convenience and consumer overspending among Indian youth and evaluated the effectiveness of the AI-based budgeting application Walnut in improving financial discipline and reducing monthly expenditure. The study highlights

the dual impact of digital financial technologies. On one hand, frictionless payment systems increase convenience-driven consumption; on the other hand, AI-powered budgeting applications provide an effective mechanism for controlling impulsive spending and promoting responsible financial behaviour. The findings contribute to the fields of behavioural economics, consumer finance, and FinTech research by demonstrating how budgeting interventions can balance the negative behavioural effects of digital payment convenience among young consumers.

The study finds that digital payment convenience positively influences impulsive spending behaviour by reducing the psychological “pain of payment” associated with physical cash transactions. Food delivery and online shopping emerged as the categories most affected by convenience-driven spending patterns. A majority of respondents admitted that frictionless digital transactions encouraged unnecessary expenditure and frequent purchasing behaviour.



Area of Analysis	Key Findings	Supporting Source	Policy Recommendation
FinTech Accessibility and Digital Payment Usage	Indian youth demonstrate very high dependence on UPI-based digital payment systems. Around 93.3% of respondents regularly used UPI banking applications, while Google Pay and PhonePe also showed high usage levels.	Reserve Bank of India (2023); Primary Survey Data	Financial institutions and policymakers <i>should integrate financial literacy modules within digital payment platforms</i> to encourage responsible spending habits among youth.
Digital Payment Convenience and Overspending Behaviour	Approximately 80% of respondents agreed that digital payment convenience increased their monthly expenditure due to easy and frictionless transactions.	Soman (2001); Prelec & Loewenstein (1998); Primary Survey Data	FinTech companies should <i>introduce spending-limit notifications and transaction awareness prompts</i> to reduce impulsive spending behaviour.
Psychological Impact of Cashless Transactions	Reduced “pain of payment” through digital systems encouraged impulsive buying and higher transaction frequency among respondents.	Behavioural Economics Literature; Soman (2001)	Educational institutions should <i>include behavioural finance and digital spending awareness programs</i> for students.
Categories with Highest Increase in Spending	Food delivery represented the highest increase in expenditure, followed by online shopping and entertainment spending.	Kumar et al. (2021); Primary Survey Data	Online delivery and e-commerce platforms should <i>provide optional budgeting dashboards and spending summaries</i> for users.
Effectiveness of Walnut Budgeting Application	The introduction of the Walnut budgeting application significantly improved financial monitoring and budgeting awareness among participants.	Xiao & Porto (2017); Primary Survey Data	Policymakers should encourage the <i>integration of AI-based budgeting tools within digital banking ecosystems</i> .
Reduction in Monthly Expenditure	Respondents’ average monthly expenditure reduced from ₹8,750 to ₹5,950 after three months of using Walnut, representing an approximate 32% reduction.	Primary Expenditure Tracking Data	Educational institutions and FinTech firms <i>should promote budgeting applications among students</i> to improve financial discipline.
Budgeting Alerts and Expense Tracking	Around 76.7% of respondents agreed that budgeting alerts and expense tracking improved financial awareness and helped control unnecessary expenditure.	Primary Survey Data	AI-powered real-time <i>spending alerts should be made a standard feature across UPI</i> and digital wallet applications.
Improvement in Financial Awareness and Discipline	Respondents reported improved spending discipline, increased budgeting awareness, and reduced impulsive purchasing behaviour after the intervention.	Xiao & Porto (2017); Primary Survey Data	Universities and policymakers <i>should collaborate with FinTech companies</i> to introduce digital budgeting awareness campaigns among youth.

Source: Primary Data Collected Through Questionnaire Survey, 2026.

However, the study also demonstrated that AI-based budgeting interventions can effectively improve financial awareness and spending discipline among young consumers. The introduction of the Walnut budgeting application for a period of three months resulted in an approximate 32% reduction in average monthly expenditure among respondents. Features such as expense tracking, spending alerts, transaction categorization, and budgeting

notifications helped participants become more conscious of their spending habits and control impulsive purchases. The findings highlight the important role of AI-powered budgeting tools in promoting responsible financial behaviour in an increasingly cashless economy.

Based on the findings, several policy recommendations can be proposed. First, FinTech companies should integrate AI-based budgeting



mechanisms and real-time spending alerts within digital payment applications to encourage responsible spending behaviour among users. Second, educational institutions should introduce financial literacy and budgeting awareness programs to help students understand the long-term implications of impulsive digital spending. Third, policymakers and financial regulators should promote consumer protection measures and encourage transparent digital financial practices. Finally, collaboration between educational institutions, FinTech companies, and policymakers can help create a balanced digital finance ecosystem where convenience is supported by effective financial management tools and budgeting awareness among youth.

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