

Why Do Teenagers Spend More When Paying Digitally?

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Abstract

Digital payment systems, such as the Unified Payments Interface (UPI), debit cards, and mobile wallets, have become deeply entrenched in teenagers' lives today. The study aimed to understand why teenagers spend more when making digital payments than when using cash, by identifying the psychological, behavioural, and experiential factors that affect spending decisions. The study employed a mixed-methodology approach, collecting data through survey questionnaires administered to secondary school-going children, as well as semi-structured interviews, to investigate their spending attitudes and perceptions towards digital payments, emotional experiences associated with spending using different modes of payment, and their understanding of their expenditures. The results suggested that digital payments affect the "pain of paying" in a significant manner, thereby creating less psychological resistance towards spending in teenagers. There was considerable mention by the respondents of digital payments being an automatic process, an abstraction, and less likely to remain in memory compared to cash spending, which was accompanied by more hesitation and control over spending. The spending observed in digital modes was seen to record higher values on average when compared to cash payments. These results were in line with the theories of behavioural economics. These theories linked decreased payment salience to increased consumption. This study thus observed that though digital payments improved convenience, they also heightened the possibility of impulsive and excessive spending among adolescents. Understanding these psychological mechanisms is crucial to promoting mindful financial behaviour and improving financial literacy amongst young consumers.

I. Introduction

The digital payment system has brought a paradigm shift to the world of consumption trends. In the Indian context, the digital payment system enabled by the use of UPI payments, debit cards, and mobile wallets has normalised cashless payments. Teenagers would be the first group to have access to a world that increasingly lacks cash as the chief payment method. This has led to the emergence of some pertinent questions regarding money-spending behaviour and whether the trend towards cashless payments impacts the manner in which spending trends are gauged. It would be interesting to explore the implications of the choice related to digital payments.

Digital payments are transactions conducted in the absence of physical change in money, normally processed via electronic networks, which are funded directly by one's bank account or digital wallet. Unlike cash, whose absence requires a physically palpable and visually observable loss, digital payments are abstract and frictionless, complete in a single tap or scan. Behavioural economics suggests that this difference is not just technological, it's also psychological. Economic conventionalism presumes people act rationally based on stable preferences, with full awareness of the costs. Behavioural economics dismantles this thinking by showing how contextual factors-the way a payment is made-can massively influence decisions.

A prominent idea in behavioural economics is that of the "pain of paying." This idea captures the distaste that consumers exhibit as they watch money leave their pockets. This distaste tends to be greater in immediate payments that are vivid and tangible. This occurs in the case of cash payments, where consumers are literally handing over their money. By physically handing over the money, consumers are better equipped to understand exactly how much they are spending. This will naturally limit their spending. Another idea in behavioural economics is that spending is not subject to pure logic but rather psychological factors. This idea is connected to that of the pain of payments (Prelec & Loewenstein) in that spending is greater in psychological pain with cash payments. The distaste in spending is abated as consumers use numbers on a digital screen rather than actual money. The idea of mental accounting (Thaler) illuminates that consumers are better off with actual money since they can easily track it. Digital payments make this difficult. Loss aversion (Kahneman & Tversky) similarly captures that actual money makes consumers significantly cost-sensitive. This idea contradicts logical explanations since digital payments are obviously just as costly.

This impact may be particularly pronounced for teens because of both developmental and social influences. The teenage years represent a time when impulsivity, susceptibility to peer pressure, and self-

regulation are amplified. On the other hand, when teens do have limited experience with financial matters, this characteristic, in combination with impulsive behaviour because digital money is not accompanied by tangible emotional responses following money outlay, is likely to impact overall expenditure. These small purchases include things such as home deliveries, purchases made while online, or purchases made in applications. Such money outlays may not even be remembered.

The current literature on consumer behaviour has found that adults are known to spend significantly more while using credit cards or other forms of cashless transactions when compared to spending via cash. The primary reasons for these findings have been linked to less emphasis on the payment itself, deferred payment schedules, and less emotional involvement in the spending process. However, current studies generally target adult consumers for their research purposes and are conducted in controlled experimental conditions. In contrast, the widespread use of UPI transactions in India provides a rather distinct setting where online transactions are becoming increasingly integral to daily college life right from college canteens to nearby shopping centres.

Understanding why teenagers spend more when paying digitally is thus academically and socially relevant. From an academic point of view, this means being able to apply concepts from behavioural economics to a younger group, which would extend the existing theories from adult consumer markets. From a practical standpoint, these points highlight risks that may be associated with early exposure to frictionless payment systems in cases when strong financial literacy education is lacking. If teenagers do not know how payment methods shape their behaviour, it will be hard for them to build good spending habits that may extend into adulthood.

This research seeks to explain why adolescents tend to overspend when paying digitally, using the basic psychological mechanisms involved in spending. Precisely, this research investigates how digital payment methods affect the perceived pain of paying, awareness of expenditure, and self-reported spending control amongst adolescents. The research combines survey data, qualitative interviews, and comparative patterns of spending in an effort to provide a holistic understanding of how and why digital payments influence adolescent spending behaviour. Through this analysis, the study aims to contribute to broader discussions on consumer behaviour, financial decision-making, and the importance of mindful spending in an increasingly cashless economy.

II. Methodology

Research Design

For the study, an exploratory mixed-methods design was employed, which combined the use of survey methods with semi-structured interviews to address the research question: "*Why do teenagers spend more when paying digitally?*" The reason for using a mixed-methods approach was to gain insights into the observable spending habits as well as the psychological perceptions linked to various forms of digital payments. The use of mixed methods is also pertinent to the study of behavioural economics, as psychological experiences such as awareness and hesitation play a significant role within behavioural economics as far as economic decisions are concerned.

The research concentrated on the spending habits of teenagers, comparing the use of physical money with digital payment systems like the Unified Payments Interface (UPI) system, debit cards, and other digital payment methods through mobile platforms. A major aspect of the research involved the understanding and use of the "pain of payment," which refers to the discomfort experienced by an individual when giving out payment, according to the principles of behavioural economics.

Sample and Participants

The quantitative component followed a convenience sample of 60 teenage respondents, aged 14 to 18 years. Participants were recruited from schools and through peer networks. Therefore, participants came from a mix of different genders and payment preferences. This range in age was deliberately selected to capture adolescents who already engaged in active management of personal spending but whose financial self-regulation skills might not be fully developed.

The qualitative component consisted of four semi-structured interviews conducted with undergraduate students aged 17–18 years, currently enrolled at globally recognised institutions, including:

- Yale University
- New York University (Stern School of Business)
- London School of Economics
- Frankfurt School of Finance & Management

To maintain ethical standards and anonymity, **no participant names were disclosed**, and interviewees are referred to only by age and university affiliation.

Data Collection Instruments

Survey Questionnaire

Primarily, the quantitative study employed a structured research instrument in the form of a questionnaire comprising entirely Multiple-Choice and/or scaled responses. The questionnaire was categorised into four sections:

1. **Demographic Information** (age, gender)
2. **Payment Usage Patterns** (preferred payment methods, frequency of use)
3. **Spending Behaviour** (weekly cash vs digital expenditure)
4. **Psychological Perceptions of Spending** (pain of paying, spending awareness, overspending realisation)

Likert-scale questions were measured on a **five-point scale**, ranging from strong disagreement to strong agreement, allowing respondents to express degrees of perception rather than binary opinions.

Interviews

The qualitative interviews were semi-structured and focused on:

- Perceived differences between cash and digital spending
- Awareness of spending at the moment of payment
- Emotional reactions to parting with money
- Post-transaction realization of expenditure

The interview responses were documented in the form of thematic summary notes. This method was adopted in order to avoid any misinterpretations and to retain the authenticity of the views expressed. The selection of undergraduate participants was done to add to analytical credibility rather than to widen the study group. All participants in the interview were between 17 to 18 years of age, so they belonged to the teenage age group. They had academic expertise in Economics, Business, or Finance. They were able to provide reflective views on spending behaviour, but the overriding theme of this study remained utilising digital payments by teenagers.

Data Analysis

Data was quantitatively analysed using descriptive statistical methods such as frequencies and percentages. The findings were presented using bar graphs and pie charts to illustrate the disparity between the cash and digital modes of expenditure.

The data gathered from the qualitative interviews were examined using thematic analysis to identify recurring themes, such as 'less hesitation', 'speed of transaction', 'absence of visuals', and 'realisation delay'.

III. Results

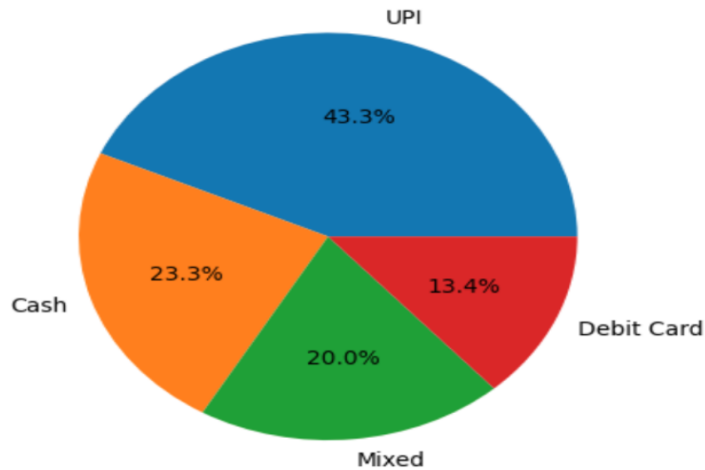
Demographic Overview

The sample size for the survey was 60, aged between 14 and 18, the majority being in the 15-16 years bracket. The gender representation was almost evenly distributed, with a small percentage of respondents not disclosing their gender. This distribution thus ensured that findings reflected a broad teenage spending demographic rather than a narrow subgroup.

Preferred Payment Methods

As shown in Figure 2, the major modes of digital payments preferred by teens are revealed. The result shows that UPI is the most preferred mode of payment (43.3%), followed by cash payments (23.3%), mixed payments (20%), and debit card payments (13.4%). The result shows that teens have shifted to digital payments for transactions.

Figure 2: Most Frequently Used Payment Methods Among Teenagers

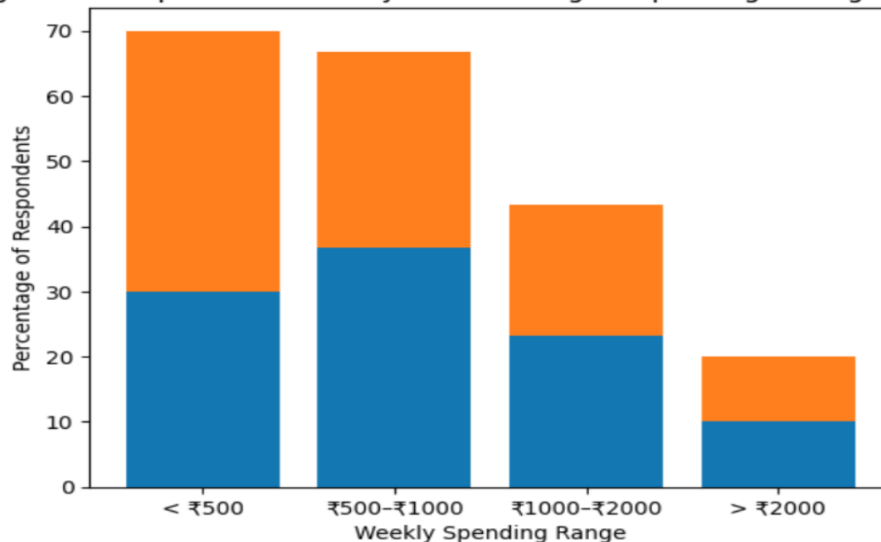


Weekly Spending Patterns: Cash vs Digital

A comparison of the spending ranges for cash as well as digital money revealed differences in spending. The differences are depicted in Figure 1, which indicates that more spending in the digital mode happened in the higher spending brackets, specifically in the ₹500-₹1000, ₹1000-₹2000 brackets, while in cash, a greater number of people in the lowest bracket (<₹500) spend.

This indicates that teenagers are likely to spend relatively higher amounts while using digital means compared to using cash.

Figure 1: Comparison of Weekly Cash and Digital Spending Among Teenagers



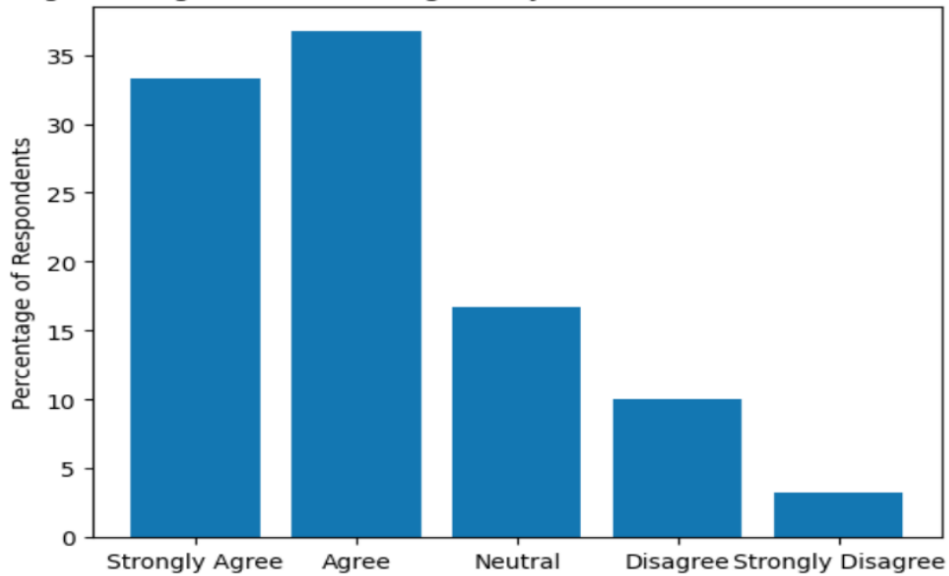
Frequency and Purpose of Digital Payments

A large number of participants were observed to use digital payments regularly, either daily or a few times a week, which was attributed to food, snacks, online shopping, and day-to-day purchases. This type of recurring transaction always took place through UPI or mobile wallets.

Psychological Perceptions: Pain of paying

Perceived pain with regard to payment, pain attitudes preferred cash-based payment. As evident from Figure 3, well over 70% of the respondents agreed or strongly agreed with the statement that digital payment was less painful than cash payment. A vast majority also agreed to the statement that cash payment increased their aware spend.

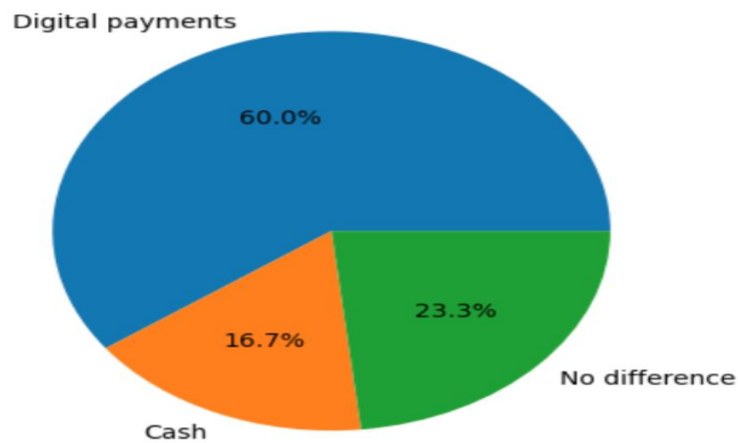
Figure 3: Agreement That Digital Payments Reduce the Pain of Paying



Overspending and Spending Awareness

Further analysis included a correlation between digital payments and overspending. Figure 4 above shows that 60% of customers thought that they overspent as a result of using digital payments, as compared to 16.7% of customers who thought that they overspent as a result of using cash. However, a considerable number of customers found out that they had overspent only when they rechecked their digital transaction accounts.

Figure 4: Perceived Payment Method Leading to Higher Spending



Interview Insights (Descriptive Summary)

Qualitative interviews supported survey results. Undergraduate participants consistently characterised digital payments as faster, more automated, and less psychologically real. Several interviewees stressed that cash payments created a natural delay, which prompted them to reconsider whether to spend the money, while digital payments valued ease over awareness.

These observations correlated well with the quantitative results, but further analysis is given in the Discussion section.

IV. Discussion

The results of the study clearly indicate that there are strong reasons to agree that teens are prone to spending more while using digital payment systems. By combining both the results of the online surveys and interviews conducted for the study, a comprehensive explanation has been provided for how digital payment systems reduce the conventional barriers of spending that are generally seen in cash transactions.

Digital Payments and the Reduction of the “Pain of Paying”

One of the interesting results of this study is the finding that consumers generally view digital payments as reducing the pain of paying. This is evident from Figure 3, where it has been seen that over 70% of consumers believed digital payments were less painful than payments in cash. This is in line with what is found in behavioural economics, which posits different levels of vividness in payments to consumers.

When money changes hands through cash transactions, there are palpable cues such as exchanging money and getting back change, which trigger both loss aversion and awareness of spending. When people use digital means, they deal with abstract concepts such as numbers displayed on a screen. This makes spending less emotionally important as there is a lack of discomfort associated with letting go of money.

Qualitative interviews further strongly supported this mechanism. Undergraduate interviewees from leading global universities consistently described digital payments as "automatic," "invisible," and "less deliberate." Several interviewees mentioned that when they are paying digitally, they focus on convenience and speed rather than thinking carefully about the amount of money actually spent. These perceptions partially explain how digital payments enable higher spending despite users' awareness that the same amount of money is indeed being exchanged.

Spending Awareness and Cognitive Control.

Another important insight lies in the moderating role of spending awareness. According to the results of the survey, the majority of respondents believed that cash payments made them more aware of how much they were spending, whereas digital ones reduced attentiveness to transaction amounts. This makes a difference because spending awareness is a cognitive control mechanism that enables individuals to rein in impulsive consumption.

Figure 4 shows that 60% of respondents perceived digital payments as leading to higher overall spending, while only a small proportion attributed increased spending to cash. This perception displays the cumulative effect of frequent low-effort digital transactions. Digital payments are often small, but because of their speed and low psychological cost, it is much easier for spending to build up without being noticed.

Further evidence from interviews reinforced this observation. The realisation about the extent of their expenditure only came to the notice of the respondents after they accessed their transaction statements or balances. This is an indication that technology reduces instant repercussions for overspending.

Transaction Speed, Convenience, and Impulse Spending

The findings also show the importance of the speed of transaction to the spending behaviours of the teens. Most participants agreed that online payments were fast and automatic. This affirms the notion that convenience increases the speed of decision-making. Research from the theories of behavioural economics suggests that when the process of payment becomes easy, people are less prone to engaging in cognitive thinking, hence active participants in impulsive purchasing.

This aspect can be seen especially with regard to purchases that were carried out through digital payment options. The most popular form of digital payment for participants was for meals, snacks, online shopping, and convenience shopping. These categories belong to impulse purchases. Self-control has little time to operate given the immediacy associated with digital payment options.

Interview participants reflected the same sentiment, stating that they had to wait while receiving cash, especially when cashing large amounts of currency or calculating the remaining cash. In contrast, they did not wait when making digital payments, such that the decision to spend occurred almost instinctively. This confirms the hypothesis that payment friction is a very important factor influencing consumer behaviour.

Mental Accounting and Budgeting Difficulties

This fits with the idea of mental accounting: How people mentally categorise and account for money spent. Handling cash naturally separates money into visible categories; a person can literally see money leave their hand. Digital payments prevent this separation of money into distinct categories into mere abstract records that may be examined infrequently.

Several interviewees reported that it felt harder to budget on digital payments because there were no immediate, natural visual cues signalling how much had been spent or how much remained. In this way, the lack of salience makes it more difficult for teenagers, who may have limited financial experience in the first place, to maintain spending discipline.

This interpretation is supported by the results of the survey. A majority of the responding subjects indeed realised that they forgot how much they had spent digitally and recognised overspending only later. This implies that digital payments decrease pain not only at the moment of purchase but also weaken ongoing spending monitoring. Integration of Quantitative and Qualitative Findings

The strength in this study is its consistency in both findings from its quantitative method and its qualitative findings. The survey shows trends in spending behaviour, lack of awareness, and pain associated with paying using digital forms. The ideas from the interviews offered additional depth in explaining how these teens have perceived digital payments as intangible, restrictive, and not as engaging as cash.

On the one hand, it is clear from the analysis above that digital payment systems are causing a paradigm shift in spending behaviours. Though digital payments are certainly more convenient, it is important to note that they are creating risks in spending behaviour, which are mostly prevalent in teenagers who have not developed self-regulatory spending controls.

V. Limitations and Implications

Limitations of the Study

Despite its contribution to the field of psychology and the development of research in the area of media psychology and consumer behaviour in modern society, there are some limitations of the research. Firstly, the study investigated 60 participants.

Second, there is a risk of recall bias and social desirability bias as this study is based on self-reported data. This might happen as people could underestimate and overestimate their spending behaviour, especially as it relates to online spending.

Thirdly, the sample for the qualitative interview was small and concentrated on the high-achieving group. Though it lends itself to a richer analysis, it might not be a true indicator of the experience of teenagers in general.

Lastly, the research did not focus on actual spending data. A longitudinal analysis of spending data would help to provide more accurate information on the effects of digital payment systems on spending habits.

Implications for Teenagers

This study has significant implications for teen financial literacy. Teenagers should be made aware that, though digital payments are convenient, they may be promoting unconscious overspending. Developing behaviour such as regularly checking transaction history, setting limits to spend, and occasionally using cash for discretionary purchases could help restore awareness.

Implications for Parents, Schools, and Policymakers

An integral part of teenagers' financial lives is their parents and teachers, who can significantly influence their financial practices. Workshops for financial literacy should emphasise related psychological implications of digital payment systems, unlike at present, where attention remains centred on budgeting methods. There can be designs for digital payment platforms that enhance spending visibility.

VI. Conclusion

The purpose of this research was to determine why teenagers exhibit higher levels of spending behaviour when using digital forms of payment. This study integrates the results from a quantitative survey with those from qualitative interviews to create a well-rounded explanation for the observed behaviour using behavioural economics. The results show there is clear evidence that digital forms of payment lower the pain of paying and increase the likelihood of impulse buying among teenagers.

Findings from the survey demonstrated stable patterns across several indicators of spending behaviour. Teens demonstrated greater spending, a lower ability to recollect total spending, and a greater likelihood of overspending inadvertently when using digital payments in comparison to spending when using cash. Visual representations of the findings (Figures 1 through 4) were used to support this idea in that digital payments were linked to a higher spending category, as well as a lack of attentiveness to spending when making payments. Findings were also validated through the use of a secondary method of study, whereby undergraduate students from world-class universities identified digital payments as being rapid, automatic, and psychologically separate from experiences of spending.

Consistently, from a behavioural economics perspective, these findings closely correspond with theories of loss aversion, mental accounting, and transaction salience. Cash transactions create a strong feeling of loss when tangible cash is exchanged, evoking affective and cognitive processes that instinctively regulate expenditure. Digital transactions abstract cash to a numerical summary, removing visual and tactile cues signalling expenditure. This has the consequence of reducing emotional resistance to spending and disturbing the mental processes of budgeting. Teenagers are still developing self-control related to financial discipline.

Importantly, the study is not saying that digital payments are, in themselves, bad. What it does find important is how their design combines with human psychology to make overspending take place, albeit unintentionally. For teenagers, who often involve themselves in small, habitual purchases, this effect is amplified through the speed and convenience afforded by digital transactions. These transactions add up fast without much deliberation or mechanisms of feedback, and hence are only known after one has spent.

Moreover, aside from the academic contribution it made, this study brings to the foreground the importance and significance associated with the early impact that the frictionless nature of digital payments could portray in relation to the preparation of the individual for the future in relation to the habits that could be formed. The fact that the cashless nature associated with the handling of money by teenagers is gaining increasing importance in relation to abstract systems could result in the formulation of erratic spending habits in the future.

In general, the study clearly indicates that the higher levels of spending that come with digital payments are more than just a matter of convenience; they are a result of a shift in the perception of the wallet, which is an important factor in a world in which cashless payments are on the rise.

VII. Recommendations and Future Research

Practical Recommendations

On the heels of the results from the aforementioned research, a number of best practices can be offered. It would be important for the teen to cultivate an awareness of their digital expenditure habits through the assessment of transaction histories and the establishment of firm expenditure limits within digital expenditure applications. It might also prove prudent to fluctuate between cash and digital forms of expenditure for unnecessary purchases.

Parents and teachers should include digital payment psychology as part of financial education. Conventional financial education on budgeting might not be adequate if this area of payment psychology is not covered. A simulated activity could be developed through which people will be made aware of the effect of micro-payments through digital payment solutions.

Financial institutions and payment systems also have their own part to play. Designs with the intent to increase the salience of transactions, such as balance information or transaction narratives through subtle nudges for frequent buys, may help people make sound economic decisions without having to compromise on convenience.

Directions for Future Research

Further research based on this study should work towards a larger sample size and demographic diversity to achieve generalisation. Longitudinal designs focusing on actual transaction data over longer periods of time could yield even more accurate information on just how digital payment traits change over time. Experimental designs, in which spending behaviour is examined under controlled conditions related to forms of payment, may further isolate the causal link between the payment method and expenditure.

Furthermore, future research could examine personality traits, socioeconomic background, or financial education as moderators of the effect of digital payments on spending behaviour. In general, financial technology will keep changing; hence, continuous research is needed to understand wider behavioural implications.

Ethical Consideration

The research abided by the elementary ethics required for exploratory social research. The survey was optional for the respondents, and they knew that the results would be for educational purposes only. The respondents were not asked for any information that could be traced back to them, except for their age and the gender they wished to disclose. The respondents for the interviews were anonymised. Only their age and the institutions they are associated with are included. The data was not falsified in any form.

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