

DOES THE MODE OF PAYMENT INFLUENCE SPENDING BEHAVIOUR?

A Comparative Study of UPI, Credit Cards And Cash

Shriya Gupta

Sacred Heart Convent School

ABSTRACT

This study examines how different payment methods—UPI, credit cards, and cash—are associated with consumer spending behaviour. The study used a structured questionnaire to collect primary data from 77 respondents across different age groups and occupations. The study compares these payment methods in terms of convenience, risk, impulse purchases, overspending and spending control. The findings show that UPI was considered the most convenient method and was most commonly associated with impulse purchases, while credit cards were perceived as more financially risky. Most respondents identified cash as providing better control over spending. Convenience and speed were the main reasons for payment-method preference. Overall, the study suggests that payment methods are associated with differences in spending perceptions and behaviour, although the findings are limited to the sample and do not establish causation.

Keywords: UPI, credit cards, cash, consumer behaviour, impulse buying, overspending

CHAPTER I

INTRODUCTION

1.1 Introduction

The way Indians pay for everyday goods has changed sharply in the last decade. The Unified Payments Interface (UPI) was launched in 2016 by the National Payments Corporation of India (NPCI) under the oversight of the Reserve Bank of India (RBI), and it has since become part of ordinary life, from grocery shops to street vendors (Press Information Bureau [PIB], 2026). In August 2026 alone, UPI processed a record 24.51 billion transactions worth ₹29.82 trillion (Business Standard, 2026c). Credit cards, meanwhile, let consumers buy now and pay later, and cash remains widely used for small, everyday purchases. Today's consumer chooses among three very different ways of paying, often within a single day.

These methods differ in more than convenience. They also differ in how the act of paying feels. Behavioural researchers describe a "pain of paying", the mental discomfort of parting with money, which may be strong when handing over cash and weaker when payment is electronic or delayed (Prelec & Loewenstein, 1998). Raghubir and Srivastava (2008) linked this to payment coupling, the connection between the decision to buy and the actual parting with money. They found that consumers were willing to spend more when a credit card logo was present than when it was absent. Soman (2001) showed that the payment mechanism can change how consumers experience and remember their spending. In studies with real, high-value transactions, Prelec and Simester (2001) found that willingness to pay increased, by as much as 100%, when customers were told to use a credit card instead of cash. Together, these studies suggest that how people pay may influence how much they spend.

Indian studies point the same way for UPI. Auxilia and Gopinath (2023) concluded that UPI significantly influences impulsive buying among consumers in Chennai. A recent preprint by

Samit (2025), based on 169 participants, links UPI adoption to higher spending frequency, lower savings and more impulsive spending.

1.2 Trends in Payment Methods

India's payment landscape now has three major methods that grow side by side: UPI, credit cards and cash.

1.2.1 UPI

UPI has grown faster than any other payment method in India. Its annual transaction volume has increased almost 12,000-fold since 2016-17 (Press Information Bureau [PIB], 2026), and the International Monetary Fund recognises it as the world's largest real-time payment system by transaction volume (ANI, 2026). UPI is now used mostly for small payments. Most person-to-merchant transactions are below ₹500 (PIB, 2026), which are exactly the everyday purchases where the "pain of paying" is weakest.

1.2.2 Credit cards

Credit cards have also grown, though from a much smaller base. India had fewer than 60 million credit cards in FY2020 and over 118 million by March 2026, with annual card spending rising several times over in that period (StartupTalky, 2026). Growth in new cards is now slowing as banks become more cautious about who they lend to (StartupTalky, 2026). Credit cards remain a small part of the overall payment picture next to UPI.

1.2.3 Cash

Cash is still growing in absolute terms but is shrinking in importance. The cash-to-GDP ratio has fallen from a pandemic peak of 14.4% in FY2021 to about 11%, even though the total amount of currency in circulation keeps reaching new highs (Business Standard, 2026a). SBI Research (2026) explains this by saying that cash and digital payments complement each other. Households use UPI for most small payments but still keep cash for emergencies and informal dealings.

Overall, the three methods coexist. UPI dominates everyday transactions, credit cards serve a smaller and growing group, and cash remains a fallback. This makes a side-by-side comparison of the three worthwhile.

1.3 Factors Influencing Payment Choice and Spending Behaviour

Researchers and consumers point to several factors that shape both payment choice and spending levels.

Convenience and speed. UPI needs only a phone and a few seconds, and it is accepted almost everywhere. Because most UPI payments are small, paying often feels routine rather than like a decision.

Visibility of spending and the pain of paying. Handing over notes makes the loss of money visible, while a tap or scan does not (Prelec & Loewenstein, 1998; Raghubir & Srivastava, 2008). Small digital payments may therefore feel less like "real" spending, making quick or unplanned purchases easier (Auxilia & Gopinath, 2023; Samit, 2025).

Delayed payment and credit. A credit card lets a buyer take something now and pay later, sometimes in instalments. This can make expensive purchases seem more affordable than they are (Prelec & Simester, 2001).

Rewards, cashback and offers. Discounts, reward points and cashback may push people to buy things they had not planned, and they can make a particular payment method more attractive.

Security and perceived risk. People worry about fraud, theft or unauthorised use, as well as about debt from careless credit card use. These worries can push people toward or away from a method.

Habit and merchant acceptance. People often keep using what they used before, and their choice is limited by what shops accept.

Personal characteristics. Age, occupation, income and digital comfort influence which methods people use and how they spend. Samit (2025) found the strongest effects among middle-class and digitally literate users.

These are the factors this study asks about in its questionnaire, so the results chapter can be read against this list.

1.4 Statement of the Problem

As more payments become quick, small and screen-based, it is unclear whether people spend differently depending on how they pay. Earlier studies mostly look at one payment method or compare cash with a single alternative. Fewer studies compare UPI, credit cards and cash together, using the same respondents, across age groups and occupations. The problem addressed here is whether the mode of payment is associated with spending behaviour, particularly impulse purchases and overspending, and which method people perceive as encouraging overspending or giving the most control. The answer matters because young people and first-time earners are entering an economy where digital payment is the default.

1.5 Definitions of Key Terms

Unified Payments Interface (UPI). A real-time payment system that lets users transfer money directly between bank accounts through a single mobile application, for both person-to-person and person-to-merchant payments (PIB, 2026).

Credit card. A card issued by a bank that allows the holder to buy goods and services up to a set limit and pay later. Interest and charges apply if the amount is not paid by the due date.

Cash. Physical currency notes and coins used to pay at the time of purchase.

Payment mode. The method used to pay for a purchase. In this study, it means cash, UPI or a credit card.

Impulse purchase. A purchase made without prior planning. In this study, it is measured by the respondent's own report of the method with which they most often make unplanned purchases.

Overspending. Spending more than one had intended or planned. In this study, it is based on respondents' perceptions.

Spending control. The sense of being able to keep spending within one's own limits.

Pain of paying. The emotional discomfort felt when parting with money (Prelec & Loewenstein, 1998).

CHAPTER II

REVIEW OF LITERATURE

2.1 Introduction

This chapter reviews earlier research on how the mode of payment relates to spending. Most of the classic work comes from experiments in consumer psychology, mainly comparing cash with cards. More recent work looks at mobile payments and at UPI in India. The review is organised into four themes: the psychology of paying, credit cards and spending, other payment forms, and UPI and spending in India. It ends with the gap that this study addresses.

2.2 The Psychology of Paying

The starting point for most research is the idea that paying is not emotionally neutral. Prelec and Loewenstein (1998) proposed that handing over money causes a "pain of paying", and that this pain is stronger when the payment is closely linked ("coupled") to what is being bought. Payment methods that weaken this link, such as cards, may therefore make spending feel less painful.

Soman (2001) studied how payment mechanisms differ in the immediacy and rehearsal of the payment, and how this affects spending. Raghubir and Srivastava (2008) tested the idea directly across four studies. They found that people were willing to spend more when a credit card logo was present than when it was absent, and that this effect weakened when people estimated their expenses item by item. They also found that consumers spent more when using scrip (a stored-value certificate) than when using cash of the same face value, so even the physical form of money mattered. Together, these studies suggest that how visible and immediate a payment feels can shape how much people spend.

2.3 Credit Cards and Spending

Feinberg (1986) ran four experiments and one study to test whether cues linked to credit cards affect spending. In the presence of these cues, the probability, speed or size of spending increased. Not every attempt to repeat this result succeeded, however. Hunt et al. (1990) copied Feinberg's procedure and found no overall effect, and they suggested that their smaller sample or method differences might explain the contrast. The evidence therefore is not unanimous, which is a useful reminder that these effects can depend on context.

Later studies used real money and more realistic settings. Prelec and Simester (2001) found that willingness to pay rose when customers were told to use a credit card rather than cash, by as much as 100% in some cases. The effect did not seem to arise only because people had less cash available. Thomas et al. (2011) followed about 1,000 households for six months and found that baskets held more impulsive and unhealthy food items when shoppers paid by credit or debit card. Follow-up experiments showed that the pain of paying in cash helped restrain impulsive urges. This links credit cards to impulse purchases, one of the main themes of the present study.

2.4 Other Payment Forms: Debit Cards and Mobile Payments

Later research extended the comparison beyond credit cards. Runnemark et al. (2015) ran an experiment with real incentives and found that people were willing to pay more when paying with debit cards than with cash. The result held after controlling for cash on hand, spending type, price familiarity and consumption habits.

Boden et al. (2020) noted that earlier work had mostly compared cash with credit cards and had emphasised the lower pain of paying for cards. In three studies across several countries,

they added mobile payment and found that convenience explained why people would pay more with it, provided the person had personally adopted mobile payment. This matters here because UPI is mainly a mobile payment method, and convenience is one of the factors this study examines.

2.5 UPI and Spending in India

Indian research is more recent and mostly uses surveys. Auxilia and Gopinath (2023) surveyed consumers in Chennai who used UPI and concluded that UPI significantly influences impulsive buying. Samit (2025), in a preprint based on 169 participants, drew on the pain of paying and a technology-acceptance model. The study linked UPI adoption to higher spending frequency, lower savings and more impulsive spending, especially among middle-class and digitally literate users.

Arunima and Dhanya (2026) studied college students. They found that UPI increased convenience and reduced reliance on cash, while also being linked to more frequent impulsive purchases. They noted that cashback rewards, instant payments and easy access encourage its use. These studies broadly agree that UPI makes payment quick and easy, and that this may be associated with more unplanned spending. Most of them, however, look at UPI alone.

2.6 Research Gap

The studies reviewed consistently link the mode of payment to how much people spend or are willing to spend, although the evidence is not unanimous, as the failed replication by Hunt et al. (1990) shows. However, most of the experimental research compares only cash with cards, and it was largely carried out outside India, while the Indian studies mostly examine UPI on its own. As a result, few studies ask the same respondents to compare UPI, credit cards and cash directly on convenience, risk, impulse buying, overspending and spending control. Little of this work also considers whether the answers differ across age groups and occupations, even though UPI is used by students, homemakers, salaried employees and business owners alike. The present study addresses this gap by surveying respondents from different age groups and occupations, and by asking them to compare all three payment methods in one questionnaire.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

This chapter sets out the objectives and research questions of the study, the research design, the sample, the methods of analysis, and the significance and scope of the study.

3.2 Research Objectives

1. To compare UPI, credit cards and cash in terms of convenience, perceived costs and risks associated with their use.
2. To examine whether the mode of payment is associated with spending behaviour, particularly spending frequency, impulse purchases and unplanned expenditure.
3. To identify which payment method consumers perceive as most likely to encourage overspending and which provides the greatest sense of spending control.

3.3 Research Questions

- **RQ1.** How do UPI, credit cards and cash compare in convenience, perceived costs and risk?
- **RQ2.** Is the mode of payment associated with impulse purchases and unplanned spending?
- **RQ3.** Which payment method do people see as most likely to encourage overspending, and which gives the best control?

The study also asks whether these perceptions differ across age groups and occupations.

3.4 Research Design

The study used a descriptive, quantitative survey design with a small qualitative element. A structured questionnaire collected respondents' own reports of how they pay and how they spend. The data is **primary data**, collected directly from respondents for this study. Because the questionnaire records perceptions and self-reported behaviour rather than actual spending, the study can show associations between payment mode and spending behaviour but cannot show that one causes the other.

3.5 Population and Sample

The sample consisted of **77 respondents** from four age groups (below 18, 18-25, 26-40 and 41-60) and four occupations (student, salaried employee, business/self-employed and homemaker). They were selected by convenience sampling, so the results describe this sample and cannot be generalised to all Indian consumers.

3.6 Methods of Data Analysis

The responses were analysed using descriptive statistical techniques. Frequencies and percentages were used to describe respondents and their choices, and means were used for the rating and Likert questions. Results are presented in tables and charts, and the open-ended answers were grouped into common themes. Because the sample is small, group differences are described as patterns in this sample rather than as proven relationships.

3.7 Significance of the Study

As payments move to quick, small, screen-based methods, understanding their behavioural effects matters for consumers who want to manage their money. It also matters for parents and educators guiding young people entering a largely cashless economy, and for banks and payment providers designing responsible products. The study directly compares the three most common payment methods in India, using respondents from different ages and occupations.

3.8 Scope of the Study

The study covers three payment methods: cash, UPI and credit cards. It does not cover debit cards, digital wallets or buy-now-pay-later services. The sample includes 77 respondents aged 18 to 60, with no respondents over 60. The study focuses on perceptions and self-reported behaviour, not on measured transaction records.

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

4.1 Demographic Profile of Respondents

The study included 77 respondents. The respondents belonged to three age groups and four occupational categories, and reported different levels of monthly spending.

Table 4.1
Age-wise Distribution of Respondents (N = 77)

Age Group	Frequency	Percentage
18–25 years	26	33.8%
26–40 years	16	20.8%
41–60 years	35	45.5%
Total	77	100%

Interpretation:

The largest group of respondents belonged to the 41–60 years age group (45.5%), followed by respondents aged 18–25 years (33.8%). Respondents aged 26–40 years formed the remaining 20.8% of the sample. The sample therefore has a mix of younger and older respondents, with the 41–60 age group most prominent.

Table 4.2
Occupation-wise Distribution of Respondents (N = 77)

Occupation	Frequency	Percentage
Homemaker	25	32.5%
Student	22	28.6%
Business / Self-employed	16	20.8%
Salaried Employee	14	18.2%
Total	77	100%

Interpretation:

Homemakers formed the largest occupational group (32.5%), followed by students (28.6%). Business or self-employed respondents accounted for 20.8%, and salaried employees for 18.2%. Age and occupation overlap in this sample. Most respondents in the 18–25 group are students, and 30 of the 35 respondents aged 41–60 years are homemakers or business owners. Comparisons by age and by occupation should therefore be read together.

Table 4.3
Monthly Spending of Respondents (N = 77)

Monthly Spending	Frequency	Percentage
Below ₹5,000	11	14.3%

₹5,001–₹10,000	17	22.1%
₹10,001–₹25,000	18	23.4%
₹25,001–₹50,000	13	16.9%
Above ₹50,000	17	22.1%
Not answered	1	1.3%
Total	77	100%

Interpretation:

Monthly spending was spread fairly evenly across the five bands. The largest group (23.4%) spent between ₹10,001 and ₹25,000, and 22.1% spent above ₹50,000. The sample therefore includes respondents with varied spending levels, which allows spending behaviour to be examined across different income groups.

4.2 Payment Methods Used

Table 4.4

Payment Methods Currently Used by Respondents

Payment Method	Number of Users*	Percentage of Respondents
UPI	55	71.4%
Cash	54	70.1%
Credit Card	22	28.6%

*Multiple responses were permitted; therefore, totals exceed the number of respondents.

Table 4.5

Most Frequently Used Payment Method (N = 77)

Payment Method	Frequency	Percentage
UPI only	32	41.6%
Cash only	25	32.5%
Credit card only	6	7.8%
More than one method	14	18.2%
Total	77	100%

Interpretation:

UPI and cash were used by almost the same share of respondents (71.4% and 70.1%), while credit cards were used by fewer than three in ten (28.6%). UPI was the most frequently used method for the largest group (41.6%), followed by cash (32.5%). About one in five respondents (18.2%) reported using more than one method equally often. The 63 respondents who name a single dominant method (32 UPI, 25 cash, 6 credit card) form the basis for the comparison in the next section, which asks whether a respondent's own everyday method lines up with their own reported spending behaviour.

4.3 Payment Method and Respondents' Own Spending Behaviour

The earlier tables ask respondents which method they believe is most convenient, risky or likely to cause overspending in general. This section asks a more direct question: does a respondent's own everyday payment method line up with what they say about their own spending? For this, respondents are grouped by the single method they use most (Table 4.5), excluding the 14 who reported using more than one method equally.

Table 4.6
Mean Agreement with Spending Statements, by Respondent's Own Primary Method

Statement	Cash users (n = 25)	UPI users (n = 32)	Credit card users (n = 6)
I tend to spend more when I do not have to physically hand over cash.	2.64	3.50	3.50
Small UPI payments sometimes do not feel like significant spending.	3.24	3.72	3.00
Paying digitally makes it easier to make quick or unplanned purchases.	3.36	3.62	3.83
Credit cards can make expensive purchases feel more affordable.	3.04	3.09	3.83
Cashback, rewards or discounts encourage me to spend more than intended.	2.60	2.66	3.00
Using cash makes me more aware of how much I am spending.	4.16	3.12	3.83

Interpretation:

Respondents whose everyday method is cash gave the highest agreement of the three groups to "cash makes me more aware of spending" (4.16) and the lowest agreement to "I spend more when I do not hand over cash" (2.64). Respondents whose everyday method is UPI or a credit card agreed with that same statement noticeably more (3.50 each) and rated cash-awareness lower (3.12 and 3.83). Because each group is describing its own regular habit rather than giving an opinion about methods in general, this is more direct evidence that the method a person actually uses day to day is tied to how they experience their own spending, not just how they judge payment methods in the abstract.

Table 4.7
Respondents Who Name Their Own Primary Method as the Cause of Their Impulse Buying, Overspending, or Best Control

Respondent's primary method	Names own method for impulse buying	Names own method for overspending	Names own method for best control
Cash (n = 25)	20.0%	16.0%	64.0%
UPI (n = 32)	56.3%	46.9%	21.9%
Credit card (n = 6)	66.7%	50.0%	16.7%

Interpretation:

This table gives the clearest evidence in the study of how payment mode is tied to spending behaviour. More than half of UPI's own regular users (56.3%) name UPI itself, not another method, as the one most likely to cause their impulse purchases, and nearly half (46.9%) name it as the cause of their own overspending. Only 21.9% of UPI users see UPI itself as giving them the best control; most instead name cash, even though cash is not their main method. Credit card users show an even sharper version of the same pattern: two in three (66.7%) implicate their own method in their impulse buying. Cash users show the opposite pattern. Only one in five (20.0%) implicate cash in their own impulse buying, and 64.0% say cash itself gives them the best control, the highest agreement between habit and self-assessed control of the three groups. Read together with Table 4.6, this indicates that the method people actually use most is genuinely linked to how they describe their own spending, and not simply to how they rate payment methods when asked in general terms.

4.4 Frequency of Use and Ease of Tracking Spending

Respondents rated how often they use each method and how easy it is to track spending with it, on a 5-point scale in which higher scores indicate greater frequency or greater ease.

Table 4.8

Payment Method	Mean Frequency of Use	Mean Ease of Tracking
UPI	3.19	3.47
Cash	3.06	2.65
Credit Card	1.95	2.91

Mean Scores for Frequency of Use and Ease of Tracking

Interpretation:

UPI recorded the highest mean frequency of use (3.19), closely followed by cash (3.06), while credit cards were used much less often (1.95). UPI was also rated the easiest method for tracking spending (3.47), and cash the hardest (2.65). This helps explain the pattern in Table 4.7: cash, despite being poorly tracked, is still linked with the strongest sense of control, because respondents seem to rely on the physical feel of paying rather than on a recorded trail to manage their spending.

Table 4.9

Monthly Spending-wise Mean Frequency of Use

Monthly Spending	Respondents	Cash	UPI	Credit Card
Below ₹5,000	11	4.00	2.73	1.27
₹5,001–₹10,000	17	3.06	3.35	1.41
₹10,001–₹25,000	18	3.50	2.83	1.94
₹25,001–₹50,000	13	2.54	3.62	2.38
Above ₹50,000	17	2.35	3.29	2.59

Interpretation:

The average frequency of cash use fell as monthly spending rose, from 4.00 in the lowest band to 2.35 in the highest. The frequency of credit card use rose over the same range, from 1.27 to 2.59. UPI use remained moderate to high in every band. Respondents with higher spending therefore reported relying more on credit cards and less on cash, which suggests that spending level itself is connected to which payment method becomes dominant in a person's routine.

4.5 Convenience, Cost and Risk Perceptions

Table 4.10

Perceptions of Convenience, Cost and Risk by Payment Method (N = 77)

Question	Cash	UPI	Credit Card	No Difference / Not Sure
Makes a purchase feel easiest*	18 (23.4%)	50 (64.9%)	8 (10.4%)	11 (14.3%)
Preferred for small everyday purchases*	33 (42.9%)	49 (63.6%)	3 (3.9%)	4 (5.2%)
Makes you most conscious of costs*	12 (15.6%)	24 (31.2%)	37 (48.1%)	14 (18.2%)
Most financially risky if used carelessly	6 (7.8%)	25 (32.5%)	43 (55.8%)	3 (3.9%)
Biggest worry about fraud or theft	6 (7.8%)	30 (39.0%)	33 (42.9%)	8 (10.4%)

*Multiple responses were permitted for these questions; therefore, percentages may exceed 100%.

Interpretation:

UPI was seen as the most convenient method. Almost two-thirds of respondents chose it as the easiest way to complete a purchase (64.9%) and as the preferred method for small purchases (63.6%). Cash was the second choice for small purchases (42.9%). Credit cards were named most often as the method that makes respondents most conscious of costs (48.1%) and as the most financially risky (55.8%). Fraud concern was high for both credit cards (42.9%) and UPI (39.0%), while only 7.8% saw cash as the biggest concern. The method rated easiest and most convenient (UPI) is not the one rated safest, which helps explain why UPI's own users still implicate it in their impulse buying (Table 4.7): ease of use and financial caution appear to pull in different directions.

Table 4.11

Main Reasons for Preferring the Most-Used Payment Method

Reason	Number of Respondents*	Percentage
Convenience	56	72.7%
Speed	34	44.2%
Habit	19	24.7%
Merchant acceptance	17	22.1%
Better spending control	15	19.5%

Rewards / Cashback	11	14.3%
Safety	10	13.0%
Other	4	5.2%

*Multiple responses were permitted; therefore, totals exceed the number of respondents.

Interpretation:

Convenience was the leading reason (72.7%), followed by speed (44.2%). Reasons linked to money management were chosen far less often: better spending control (19.5%), rewards (14.3%) and safety (13.0%). This pattern suggests that respondents choose a payment method mainly for how easy and fast it is, which is consistent with Table 4.7's finding that UPI and credit card users often end up implicating their own convenient method in their own impulse buying and overspending.

4.6 Spending Behaviour Statements (All Respondents)

Respondents rated six statements about digital payment, credit and cash on a 5-point Likert scale, where higher scores indicate stronger agreement. Table 4.6 showed these broken down by each respondent's own method; the table below gives the overall picture across all 77 respondents.

Table 4.12
Mean Scores of Spending Behaviour Statements (N = 77)

Statement	Mean Score	Percentage Agreeing
Using cash makes me more aware of how much money I am spending.	3.57	58.4%
Paying digitally makes it easier for me to make quick or unplanned purchases.	3.49	55.8%
Small UPI payments sometimes do not feel like significant spending at the time of purchase.	3.45	55.8%
Credit cards can make expensive purchases feel more affordable because payment is delayed.	3.14	39.0%
I tend to spend more when I do not have to physically hand over cash.	3.09	45.5%
Cashback, reward points or discounts can encourage me to spend more than I originally intended.	2.65	18.2%

Percentage Agreeing = respondents who chose 4 (Agree) or 5 (Strongly Agree).

Interpretation:

Across the full sample, agreement was highest for cash making people more aware of spending (3.57) and lowest for the influence of cashback and rewards (2.65). More than half of respondents agreed that digital payment makes unplanned purchases easier (55.8%) and that small UPI payments do not feel significant (55.8%). These overall figures match the direction of the method-wise comparison in Table 4.6, confirming that the link between payment mode and spending behaviour holds both across the sample as a whole and within each method-user group individually.

Overall Spending-Ease Score

The average of the five statements on how easy digital payment, credit and offers make spending (the first five statements excluding the one on cash awareness) was:

Mean = 3.17 out of 5

Interpretation:

The overall mean indicates a moderate level of agreement that digital payment, credit and offers make spending easier. Views were therefore mixed rather than strongly for or against, and some respondents were neutral. Even at a moderate level, this agreement supports the idea that the way a payment is made can shape how freely a person spends.

4.7 Offers and Surprise at Spending

Table 4.13

Effect of Offers and Surprise at Statements (N = 77)

How Often	Offers Led to an Unplanned Purchase	Surprised by Amount Spent on Statement
Never	12 (15.6%)	13 (16.9%)
Rarely	30 (39.0%)	18 (23.4%)
Sometimes	26 (33.8%)	28 (36.4%)
Often	7 (9.1%)	12 (15.6%)
Very Often	2 (2.6%)	6 (7.8%)
Total	77 (100%)	77 (100%)

Interpretation:

Nearly half of the respondents (45.5%) said that offers had led them to make an unplanned purchase at least "sometimes." A larger share (59.7%) said they had at least "sometimes" been surprised by how much they had spent when checking a bank or card statement. Unplanned or untracked spending was therefore common in this sample, which points to a gap between how much respondents intend to spend and how much they end up spending.

4.8 Impulse Purchases

Table 4.14

Payment Method Most Likely to Lead to an Impulse Purchase (N = 77)

Payment Method	Frequency	Percentage
UPI	34	44.2%
Credit Card	22	28.6%
Cash	11	14.3%
No difference	10	13.0%
Total	77	100%

Table 4.15

Occupation-wise Method Most Likely to Lead to an Impulse Purchase

Occupation	Respondents	Cash	UPI	Credit Card	No Difference
Student	22	2 (9.1%)	16 (72.7%)	3 (13.6%)	1 (4.5%)
Salaried Employee	14	0 (0.0%)	5 (35.7%)	8 (57.1%)	1 (7.1%)
Business / Self-employed	16	3 (18.8%)	4 (25.0%)	6 (37.5%)	3 (18.8%)
Homemaker	25	6 (24.0%)	9 (36.0%)	5 (20.0%)	5 (20.0%)

Interpretation:

UPI was named most often across the whole sample as the method with which respondents were most likely to make an impulse purchase (44.2%), followed by credit cards (28.6%). Only 14.3% named cash. The pattern differed by occupation: nearly three-quarters of students (72.7%) named UPI, while credit cards were named most often by salaried employees (57.1%), and none of them named cash. Homemakers' answers were the most spread out. This matches Table 4.7's finding at the individual level, where UPI's and credit cards' own users were considerably more likely than cash's own users to implicate their method in their impulse buying.

4.9 Age-wise Comparison of Digital Spending Statements

Table 4.16

Age-wise Mean Scores on Selected Statements

Statement	18–25 (n = 26)	26–40 (n = 16)	41–60 (n = 35)
Spend more when not handing over cash	3.65	3.12	2.66
Small UPI payments feel insignificant	3.85	3.62	3.09
Digital payment makes unplanned buying easier	3.81	3.31	3.34

Interpretation:

Younger respondents agreed more strongly with all three statements than older respondents. The 18–25 group scored between 3.65 and 3.85, while those aged 41–60 scored between 2.66 and 3.34. The gap was widest for the statement about spending more when cash is not handed over, where the youngest group scored 3.65 against 2.66 for the oldest group, and agreement fell steadily from the youngest to the oldest group on every statement. This suggests that the link between digital payment and looser spending is felt most strongly by younger respondents.

4.10 Overspending and Spending Control

Table 4.17

Perceived Control, Awareness and Overspending by Payment Method (N = 77)

Question	Cash	UPI	Credit Card	No Difference
----------	------	-----	-------------	---------------

Best control over spending	45 (58.4%)	9 (11.7%)	9 (11.7%)	14 (18.2%)
Makes you least aware of spending	19 (24.7%)	20 (26.0%)	25 (32.5%)	13 (16.9%)
Most likely to encourage overspending	10 (13.0%)	30 (39.0%)	27 (35.1%)	10 (13.0%)

Interpretation:

Cash was clearly seen as the method that gives the best control over spending (58.4%), while UPI and credit cards were each chosen by only 11.7%. UPI (39.0%) and credit cards (35.1%) were seen as the methods most likely to encourage overspending, and only 13.0% chose cash. Answers on which method makes people least aware of their spending were more evenly spread, with credit cards highest at 32.5%.

Cash was rated the hardest method to track (Table 4.8), yet it was also seen as giving the best control. This suggests that respondents use "tracking" to mean keeping a record and "control" to mean feeling the money leave their hands, which matches the individual-level pattern in Table 4.7, where cash users' strong self-reported control (64.0%) did not depend on cash being easy to track.

Table 4.18
Age-wise Method Giving the Best Control Over Spending

Age Group	Respondents	Cash	UPI	Credit Card	No Difference
18–25	26	19 (73.1%)	4 (15.4%)	2 (7.7%)	1 (3.8%)
26–40	16	10 (62.5%)	2 (12.5%)	3 (18.8%)	1 (6.2%)
41–60	35	16 (45.7%)	3 (8.6%)	4 (11.4%)	12 (34.3%)

Interpretation:

Cash was named as the method giving the best control by most respondents in every age group, and the share fell steadily with age, from 73.1% in the youngest group to 45.7% in the oldest. In the oldest group, about a third of respondents (34.3%) felt there was no difference between methods. This suggests that older respondents were less likely to single out one method as better for control, while younger respondents saw a sharper contrast between cash and digital methods.

4.11 Respondents' Own Explanations

Respondents were asked, in an open-ended question, why a particular payment method might make them more likely to overspend. Forty-eight respondents answered, and their answers were grouped into common themes.

Table 4.19
Themes in Respondents' Explanations of Overspending (48 Answers)

Theme	Number of Answers*	Percentage of Answers
Ease and convenience	14	29.2%
Named a payment method only, gave no reason	14	29.2%

Hard to keep track, or spending feels less noticeable	6	12.5%
No physical money is handed over	5	10.4%
Credit, delayed payment or instalments (EMI)	5	10.4%
Depends on personal discipline, or "I do not overspend"	3	6.3%
Other or unclear	5	10.4%

*Some answers fit more than one theme; therefore, percentages exceed 100%.

Interpretation:

Ease and convenience was the most common explanation, followed by difficulty in keeping track, the lack of physical money changing hands, and the option to pay later. Fourteen respondents named a method only (seven wrote cash, six credit card and one UPI) without giving a reason. Two respondents said that overspending depends on the person's discipline, not the payment method. These explanations, given in respondents' own words, closely match both the multiple-choice results and the individual-level pattern in Table 4.7: ease and low visibility of spending were mentioned far more often than rewards, confirming from a third angle that the mode of payment itself, not just promotional incentives, is what respondents associate with overspending.

4.12 Overall Interpretation of Findings

The analysis points to four main patterns.

First, respondents' own everyday payment method lines up with how they describe their own spending. Among UPI's own regular users, 56.3% name UPI itself as the cause of their impulse buying, and only 21.9% see UPI as giving them the best control. Cash users show the reverse: only 20.0% implicate cash in their own impulse buying, and 64.0% say cash gives them the best control. This individual-level match is the clearest evidence that payment mode is tied to spending behaviour, not just to opinions about methods in general.

Second, convenience appears to drive this link. UPI is the most-used and most convenient method, chosen mainly for ease and speed rather than control, and it is also the method most often implicated in impulse buying. Cash, despite being the hardest to track, is still linked with the strongest sense of control, showing that ease of tracking and sense of control are not the same thing.

Third, the strength of this link varies by group. UPI was named most often for impulse purchases by students, and credit cards by salaried employees. Younger respondents agreed more strongly than older respondents that digital payment makes spending easier, and leaned more heavily on cash for control.

Finally, three separate kinds of evidence agree: the individual method-behaviour match, the overall perception questions, and respondents' own written explanations all point to ease and low visibility of spending, not rewards, as the main reason digital and delayed payment are linked with overspending. Because the sample is small and some groups are unevenly sized, these should be read as patterns within this sample rather than proof that a payment method causes overspending.

CHAPTER V

CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

Objective 1: Comparing UPI, credit cards and cash. UPI and cash were used by a similar share of respondents (71.4% and 70.1%), while credit cards were used by 28.6%. UPI was seen as the easiest and most convenient method (64.9%) and the easiest to track (3.47/5), while credit cards were seen as the most cost-conscious (48.1%) and riskiest (55.8%) method. Respondents chose their most-used method mainly for convenience (72.7%) and speed (44.2%), not for safety or control.

Objective 2: Payment mode and spending behaviour. Among respondents whose main method is UPI, 56.3% named UPI itself as the cause of their impulse purchases, against only 20.0% of cash users naming cash. More than half of all respondents agreed that digital payment makes unplanned buying easier (55.8%), and UPI was named most often for impulse purchases by students (72.7%) and credit cards by salaried employees (57.1%). Cashback and rewards were the weakest influence (18.2%), though 59.7% had at least sometimes been surprised by a statement.

Objective 3: Overspending and spending control. UPI (39.0%) and credit cards (35.1%) were seen as most likely to encourage overspending, while cash was seen as giving the best control by 58.4% of respondents, rising to 64.0% among cash's own users. This was strongest among younger respondents (73.1% of those aged 18–25, against 45.7% of those aged 41–60). In their own words, respondents pointed mainly to ease, poor tracking and the absence of physical money.

5.2 Conclusion

The study asked whether the mode of payment influences spending behaviour. The clearest evidence came from comparing each respondent's own everyday method with their own reported behaviour: UPI and credit card users were considerably more likely than cash users to name their own method as the cause of their impulse buying and overspending, while cash users were far more likely to say their own method gives them the best control. Convenience and speed were the main reasons for choosing a method, while control, rewards and safety mattered far less, so respondents tend to choose the method that is easiest to use, which may not be the one that best supports careful spending. This pattern also varied by group: students leaned toward UPI for impulse purchases, salaried employees toward credit cards, and younger respondents linked digital payment with easier spending more than older respondents did.

These conclusions describe patterns in a small sample. They show that payment mode and spending behaviour appear together, but they do not prove that any one payment method causes overspending.

5.3 Suggestions

Based on the findings, the following recommendations are suggested.

5.3.1 For consumers

1. **Use UPI's payment history as a budgeting tool.** UPI was rated the easiest method to track, so reviewing the app's transaction history weekly can make small payments visible.

2. **Pause before small digital payments.** Since more than half of UPI users said small UPI payments do not feel significant, a short pause before paying for non-essential items can reduce impulse purchases.
3. **Set a monthly budget for discretionary spending.** A fixed limit, or a fixed amount of cash for wants, can bring back the sense of control that respondents associate with cash.
4. **Use credit cards carefully.** Respondents saw credit cards as the riskiest method, so bills should be paid in full and on time, and instalment options used only for planned purchases.
5. **Check statements regularly.** Since nearly six in ten respondents had at least sometimes been surprised by a statement, reviewing bank and card statements often can prevent surprises.

5.3.2 For parents, schools and educators

1. **Include digital payments in financial education.** Students and younger respondents were the most likely to link UPI with impulse buying, so lessons on budgeting should cover UPI as well as cash.
2. **Teach the idea of "invisible spending".** Young people should learn that payments that feel painless still reduce their money.
3. **Encourage supervised practice.** Giving young people a fixed allowance to manage, whether through UPI or cash, can help them learn control early.

5.3.3 For banks and payment providers

1. **Offer clear spending summaries and limits.** Features such as monthly summaries, category-wise spending and optional spending alerts could help users who find digital spending hard to notice.
2. **Make credit costs transparent.** Since credit cards were the method that made people most conscious of costs, interest, fees and instalment charges should be shown clearly before a purchase.
3. **Strengthen fraud protection and awareness.** Fraud was a leading concern for both credit cards and UPI, so stronger safeguards and simple reporting steps would build trust.
4. **Design for responsible use.** Payment apps could consider optional daily limits or reminders, especially for younger users.

5.4 Limitations of the Study

1. The sample of 77 respondents is small, so the results describe this group and cannot be generalised to all consumers.
2. Respondents were selected by convenience sampling, and the age groups were uneven, with 45.5% aged 41–60.
3. Some groups were small, such as the 6 respondents whose main method is a credit card and the 14 salaried employees, so patterns for these groups are only indicative.
4. Age and occupation overlap in the sample, so their effects cannot be fully separated.
5. The study relies on perceptions and self-reported behaviour, not on actual transaction records, and answers may not match real spending.

6. In a few questions, respondents chose more than one option, and some questions had no answer from a few respondents.
7. The study covers only cash, UPI and credit cards. It does not cover debit cards, digital wallets or buy-now-pay-later services, and no respondents were above 60.
8. The analysis is descriptive, so it shows patterns but not causes.

5.5 Scope for Further Research

Future studies could use a larger and more balanced sample, including older respondents, and include debit cards, wallets and buy-now-pay-later services. They could compare actual spending records across payment methods rather than relying on perceptions. Following the same respondents over time, or running controlled experiments, would help test whether payment mode actually changes spending. Studying age groups and occupations separately would also clarify which differences come from age and which from occupation.

REFERENCES

1. Auxilia, M., & Gopinath, S. (2023). Impact of UPI on impulsive buying behaviour. *Academy of Marketing Studies Journal*, 27(4), 1–6.
2. Boden, J., Maier, E., & Wilken, R. (2020). The effect of credit card versus mobile payment on convenience and consumers' willingness to pay. *Journal of Retailing and Consumer Services*, 52, 101910.
3. Business Standard. (2026, September 1). UPI sets new record at 24.51 bn transactions in Aug, value at ₹29.82 trn. Business Standard.
4. Feinberg, R. A. (1986). Credit cards as spending facilitating stimuli: A conditioning interpretation. *Journal of Consumer Research*, 13(3), 348–356.
5. Hunt, J. M., Chatterjee, A., Florsheim, R. A., & Kernan, J. B. (1990). Credit cards as spending-facilitating stimuli: A test and extension of Feinberg's conditioning hypothesis. *Psychological Reports*, 67(1), 323–330.
6. Press Information Bureau. (2026, April 30). UPI completes 10 glorious years, emerges as world's largest real-time payments platform, anchoring India's digital economy. Ministry of Finance, Government of India.
7. Prelec, D., & Loewenstein, G. (1998). The red and the black: Mental accounting of savings and debt. *Marketing Science*, 17(1), 4–28.
8. Prelec, D., & Simester, D. (2001). Always leave home without it: A further investigation of the credit-card effect on willingness to pay. *Marketing Letters*, 12(1), 5–12.
9. Raghurir, P., & Srivastava, J. (2008). Monopoly money: The effect of payment coupling and form on spending behavior. *Journal of Experimental Psychology: Applied*, 14(3), 213–225.
10. Runnemark, E., Hedman, J., & Xiao, X. (2015). Do consumers pay more using debit cards than cash? *Electronic Commerce Research and Applications*, 14(5), 285–291.
11. Samit, D. (2025). Impact of UPI-based digital transactions on consumer behaviour in India. *International Journal of Social Science and Economic Research*, 10(12), 6624–6640.
12. SBI Research. (2026, February 16). Currency in circulation: Cash vs. UPI. State Bank of India.
13. Soman, D. (2001). Effects of payment mechanism on spending behavior: The role of rehearsal and immediacy of payments. *Journal of Consumer Research*, 27(4), 460–474.
14. StartupTalky. (2026, May 12). India's credit card spending hits ₹23.6 trillion in FY2026: Key trends, risks & RBI changes explained. StartupTalky.
15. Thomas, M., Desai, K. K., & Seenivasan, S. (2011). How credit card payments increase unhealthy food purchases: Visceral regulation of vices. *Journal of Consumer Research*, 38(1), 126–139.