

The Impact of Digital Payment Systems on Consumer Spending Patterns in India

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ABSTRACT

India's rapid development in its digital payment systems, particularly through Unified Payments Interface (UPI), has transformed the way people transact throughout the country. This research provides an analysis of how consumers' spending behaviour may be influenced by the adoption of technologies (i.e., digital payment systems) and includes both primary and secondary data sources along with comprehensive statistical analysis. The primary data was collected through the use of 852 respondents across a number of different studies, while secondary data was sourced from multiple sources, including the Reserve Bank of India (RBI), the National Payments Corporation of India (NPCI), and the industry as a whole in different reports. The following methodologies were used for analyses: correlation analysis, multiple regression analysis, ANOVA, t-tests, and structural equation modelling (SEM). Although digital payments also had an impact on improving transactional efficiency and convenience, the degree to which digital payments impacted actual spending levels demonstrated mixed statistical findings. In particular, 54.8% of the surveyed users agree that convenience via digital payments has impacted their total expenditure. While 33.2% of respondents have stated that they engage in impulse purchases relatively frequently; however, the regression analysis showed that depreciation rates were explained by UPI-related variables only accounted for a 1.17% of the variance in consumer spending. Digital payments accounted for 99.8% of the total number transactions processed (by volume) and 97.7% (by value) through the first half of 2025. In addition, UPI alone accounted for 18.39 billion transactions (worth ₹24.03 lakh crore) in June of 2025. Overall, the findings indicate that there is partial behavioural neutrality within India — digital payment systems are used as a substitute for cash and there has not been a significant change in total consumer expenditures as a result of using digital payment systems; however, youth and urban consumers are more likely to use digital payments or make impulse purchases as a result of the convenience digital payment systems provide.

1. INTRODUCTION

1.1 Background

The landscape related to the Indian financial system is changing rapidly due to the development and growth of various types of digital payment platforms/services. The availability of a zero-cost real-time payments infrastructure for consumers - via the Unified Payments Interface (UPI) by the National Payment Corporation of India (NPCI) - provides a seamless payment experience nationally while raising consumer awareness about the benefits of using digital payments.

Government efforts led by the Reserve Bank of India, along with large-scale initiatives such as Digital India, have propelled UPI to approximately 100 million monthly transactions and consistent growth in the number of consumers using digital payments.

This rapid adoption of digital payments, driven to a significant degree by the pandemic, has led many consumers to change their payment behaviour from cash to digital payment options due to the increasing popularity of non-contact transaction facilities. The volume of consumers using digital payment options for their offline purchases will grow from 48% in 2024 to more than half (56%) in 2025; this data indicates that India is on a fast track to becoming a \$7 trillion digital economy by 2030.

1.2 Research Problem

The increased usage of digital payment methods has grown at a dizzying pace, but the question still exists – is the ability to make quicker and simpler payments influencing how much money an individual spends? There is a suggestion based on traditional economic theory that the method of payment being easier and quicker will result in increased spending due to the decreased ‘pain of payment’ associated with spending. However, consumer behaviour is frequently governed more by deeper psychological and contextual elements than by just how easy the process of payment is.

1.3 Research Objectives

1. To evaluate the development and usage of digital payments in India.
2. To determine the impact of digital payments on consumer behaviour and purchasing decisions.
3. To analyse the relationship between different modes of payment and the resulting consumer spending patterns using statistical techniques.
4. To establish whether digital payments result in impulsive and discretionary buying behaviour by the consumer.
5. To assess the challenges, limitations and concerns of consumers regarding digital payment systems.

1.4 Research Questions

- What is the impact of digital payment systems on Indian consumer behaviour?
- What is the statistical relationship between the frequency of UPI usage and consumer spending levels?
- Are digital payment users more likely than cash-based payment consumers to make impulsive purchases?
- What percentage of consumers have acknowledged that they have spent a higher amount as a result of the convenience of using digital payments?

2. LITERATURE REVIEW

2.1 Evolution of Digital Payments in India

In the last ten years, digital payments have increased rapidly throughout India. The main players involved in India's digital payments ecosystem include:

Payment Category	Key Platforms
UPI Applications	Google Pay, Phone Pe, Paytm
Mobile Wallets	Paytm Wallet, Amazon Pay, Mobikwik
Credit/Debit Cards	Credit/Debit cards from Visa, Mastercard, Rupay Credit/Debit
Net Banking	Traditional banking platforms

UPI has been adopted faster than any other existing payment method, and UPI's growth has exceeded all other forms of payment, including credit card and mobile wallet payments combined). UPI facilitated INR 24.03 Lakh Crore in payments via 18.39 Billion transactions during the month of June 2025.

2.2 Consumer Behaviour and Digital Adoption

Consumer behaviour involves studying the actions or behaviours of individuals and their groups to better understand the reasons for purchasing or consuming a product or service. For example, with digital payments, behaviourally based factors (i.e. perceived usefulness, perceived ease of use, trust and/or social influence) are all critical factors for determining whether to adopt digital payments.

The following are examples of how to find the key findings from existing literature which support this proposal:

Finding	Evidence
Millennials Are Early Adopters	Age 18-35 represent the largest group of users based on activity on apps.
Trust and Ease of Refund Affect Retention	Cybersecurity and ease of refund are critically important to retain a customer.
Convenience Drives Adoption	Offers such as cashback or rewards are often the leading motivator for customers to adopt a cashless payment system.
Convenience Will Cause Impulse Buying	More than half (54.8%) of respondents said they would spend more, up to 100% due to the convenience of making purchases via cashless payments.

2.3 Theoretical Frameworks

Behavioural Economics Perspective: Some research indicates that cashless payment systems eliminate the "pain of paying"; therefore, consumers use them to spend more. This concept is from the field of behavioural economics, which studies how various payment methods impact consumers' perceptions of money as they make monetary transactions.

Technology Acceptance Model (TAM): Consistent with results showing that perceived usefulness and perceived ease of use are important factors influencing adoption.

Concept of Behavioural Neutrality: Some research indicates that consumers apply financial discipline regardless of the type of payment used, producing behaviourally neutral consumers who use technology to change their method of payment and do not change the total amount spent.

2.4 Gaps in Existing Research

Despite the rapid rise in the volume of digital transactions in the past decade, there has been relatively little research examining how platforms for electronic payment systems might affect actual behaviours related to spending. The majority of existing studies focused on urban centres, leaving out a substantial portion of the population in semi-urban and rural areas, which makes it more difficult to understand the effects of digital payments as a whole.

3. RESEARCH METHODOLOGY

3.1 Research Design

Using an exploratory and explanatory approach, this study seeks to understand how digital payments have impacted consumers' behaviour in India. Specifically, it will look at changes in purchasing behaviour, purchasing preferences, and frequency of transactions since adopting digital payments. This investigation will also include statistical analyses and observational data.

3.2 Data Collection

Primary Data Sources: In addition to three major studies outlined below, additional research on the effect of digital payments on consumer behaviour will be included:

Study	Sample Size	Location	Year
RBI Payment Systems Report (Karthik P)	500 respondents	Jabalpur, urban	2025-26
India Journal of Retail and Product Research Kearney report (Avinash K)	150 respondents (100 analyzed)	Urban & semi-urban	2025
Journal of Payment studies; Amazon Pay	202 respondents	Multiple cities	2025
Total Sample Size	852 respondents	All India	2025-26

Secondary Data Sources: Reports from RBI on performance of digital payment systems such as their statistical performance, usage patterns, etc.; NPCI UPI statistics demonstrating digital payment makers like Amazon Pay, Kearney, and PwC have generated detailed reports on digital payments.

3.3 Sampling Technique

A nonprobability convenience method was employed for all studies; specifically, selection of respondents was based on access to and experience with electronic payment systems.

3.4 Variables and Measurement

Type of Variable	Variable	Measurement
Dependent	Average Spending	Monthly Expenditures (₹)
Explanatory	Convenience	Ease of use of UPI using a 5-point Likert scale
Explanatory	Security	Perceived safety of transacting using UPI using a 5-Point Likert scale
Explanatory	UPI Share	Proportion of transactions made with UPI
Explanatory	Frequency	Describes how often UPI has been used (Daily/Weekly/Occasionally)
Control	Income Level	Categorical (Less than 25K/25K-50K/greater than 50K)
Behavioral	Impulse Buying	Category (Very often/Sometimes/Rarely/Never)

3.5 Statistical Techniques Employed

1. **Correlation Analysis:** Used to assess the linear relationships between variables
2. **Multiple Regression:** To predict spending based on UPI-related factors
3. **ANOVA:** To assess differences in spending between groups by frequency of UPI use
4. **t-tests:** To compare means of impulse purchasers vs non-impulse purchasers
5. **Chi-Square Tests:** To assess the relationship between one categorical factor and another
6. **Structural Equation Modeling (SEM):** To assess the total of all relationships within a structured framework.

3.6 Limitations

- Convenience sampling will have a sample bias where the results cannot be generalized as representative of all of India's population and especially of India's rural population.
- Geographic distribution largely reflected in this sample only largely reflects urban and semi-urban respondents.
- Self-reported variables may have social desirability bias.
- Rapid technological advancements may make the findings of this study outdated in the near future.

4. DATA ANALYSIS AND RESULTS

4.1 Demographic Profile of Respondents

Demographics of the combined sample include (852 Respondents):

Category	Distribution
Gender	56% Male, 44% Female
Age	48% Age 18-25, 30% Age 26-35, 22% Age 36-50
Occupation	35% Students, 45% Working Professionals, 20% Others
Income Range	40% Below ₹25,000, 35% ₹25,000-₹50,000, 25% ₹50,000 or greater

48% of the sample respondents are young adults age 18-35, indicating that the greatest number of users and most active users of this technology are young adults age 18-35. They are also likely the most enthusiastic users because of their experience using technology.

4.2 Usage of Digital Payment Methods

The Digital Payment Method Most Commonly Used:

Payment Mode	Percentage
UPI (GPay, PhonePe, Paytm)	64%
Mobile Wallet	18%
Credit/Debit Card	10%
Net Banking	5%
Cash on Delivery	3%

Insight: UPI has become popular because it is easy to use, does not incur a transaction fee and links with your bank account.

Frequency of UPI Usage:

- Daily users: 45%
- Weekly users: 35%
- Occasionally: 20%

4.3 UPI Transaction Growth Statistics

Metric	Value	Time Period
UPI Transactions (H2 CY24)	93.23 Billion	H2 CY24
YoY Growth (H2 CY24)	42%	H2 CY24
Transaction Value (H2 CY24)	₹210 Trillion	H2 CY24
UPI Transactions (June 2025)	18.39 Billion	June 2025
Transaction Value (June 2025)	₹24.03 Trillion	June 2025
UPI Transactions (November 2025)	19 Billion	Nov 2025
Transaction Value (November 2025)	₹24.58 Trillion	Nov 2025
QR Code Deployments	633.44 Million	2024
QR Code Growth	126%	2024
PoS terminals	>10 Million	2024

Digital Payment Dominance: Growth of Digital Payments was reported in the Reserve Bank of India's Payment System's Report, noting that Digital Payments comprised 99.8% of all transactions based on the volume and 97.7% of all transactions based on the value occurring in H1 2025.

Retail Digital Payments Growth:

- FY18: \$300 Billion
- FY24: \$3.6 Trillion
- FY30 (projected): \$7 Trillion

4.4 Perception and Satisfaction

Satisfaction Level Using Digital Payment Methods:

Satisfaction Level	Percent of Respondents
5 – Very Satisfied	38%
4 – Satisfied	42%
3 – Neutral	15%
2 – Dissatisfied	4%
1 – Very Dissatisfied	1%

Conclusion: There are a large number of people who are satisfied with the digital payment method, resulting in a very positive effect on over 80% of users using this method.

4.5 Impulse Buying Behavior

Impulse Spending Activity:

Category	Percentage
Very Often	33.2%
Sometimes	44.1%
Rarely	~15%
Never	~7.7%

Combined: Overall, approximately 77.3% of respondents reported impulse purchase (Very Often + Sometimes).

Users Report Spending More with Digital Payments: Due to Convenience: 54.8% of respondents reported spending more money overall as a result of the ease attributed to using digital payment methods.

4.6 Security Concerns

Security/Fraud Issues Hinder Use of Digital Payments: 47% of users reported not fully trusting digital payment methods due to security/fraud concerns, especially among older aged individuals.

4.7 Payment Preferences by Category

Payment Methods Also Vary in Preference by Spending Category:

Category	Payment Method	Percentage
Utility Bills	Digital Payment Methods	87%
Subscriptions	Digital Payment Methods	87%
Daily Expenses	UPI and Cash	Preferred
Electronics (High-Value)	Credit Instruments	19%
Apparel (High-Value)	Credit Instruments	14%
Groceries/Essential Items	Digital Payment Methods	57%
Preferred Payment Methods for Holiday Gifting	Digital Payment Methods	41%
Preferred Payment Methods for Holiday Gifting by Age Range 25-34	Digital Payment Methods	50%
Tap and Go Payments	Sold in Urban Areas	21%

4.8 Correlation Analysis

Correlation Matrix (from IJFMR Study, 500 Respondents):

Variable	Convenience	Security	UPI Share	Avg Spending	Frequency
Convenience	1	0.026	-0.052	0.084	0.067
Security	0.026	1	0.014	-0.06	0.043
UPI Share	-0.052	0.014	1	0.021	0.022
Avg Spending	0.084	-0.06	0.021	1	0.011
Frequency	0.067	0.043	0.022	0.011	1

Interpretation: All correlations are weak when analyzed together, suggesting that UPI usage variable correlations with overall spending behavior show little to no linear trend relationship between factors used in this study. Convenience has a slightly positive correlation ($r = 0.084$) to overall average spending but only has very little to no effect due to lack of statistically significant findings to conclude anything affirmative from convenience's relationship to spending. Security issues, UPI share and frequency of usage did not yield enough statistical significance for the researcher to make any definitive conclusion on these three variables to determine their effect on overall spending.

4.9 Regression Analysis

Model: Avg Spending ~ Convenience + Security + UPI Share + Frequency

Regression Results:

Variable	Coefficient	p-Value	Significance
Intercept	24006.2	< 0.001	Significant
Convenience	777.9	0.053	Weakly significant
Security	-561.01	0.163	Not significant
UPI Share	15.5	0.556	Not significant
Frequency	129.51	0.864	Not significant

Model Fit:

- $R^2 = 0.0117$ (1.17%)
- p-value = 0.211

Interpretation: The model explained only 1.17% of variance suggesting that UPI-related variables demonstrate very little to no ability to predict spending. Convenience implies a marginally positive impact on overall spending but does demonstrate to be statistically significant weakly only ($p = 0.053$). The variables security issues, UPI share and frequency of usage demonstrated no statistically significant effects on overall spending.

4.10 ANOVA Analysis

ANOVA for UPI Usage Frequency and Consumer Spending:

Source of Variation	Sum of Squares	df	Mean Square	F-value	p-value
Between Groups	1520.48	2	760.24	2.31	0.101
Within Groups	163920.4	497	329.82	-	-
Total	165440.8	499	-	-	-

Interpretation: Overall, your analysis shows several different ways to understand consumer spending behaviour when using alternative payment methods. The p-value of 0.101 demonstrates that there are no statistically significant differences in the way consumers spend their money across the different frequencies of use for digital payments (i.e., UPI) and how often they use cash. If you were to look at the average amount spent on retail purchases by UPI users as opposed to cash users, your analysis shows that this would not change based upon the frequency in which the consumer used either form of payment.

Mean Spending by UPI Frequency:

- Daily UPI users: No significant difference from weekly/occasional users
- Weekly UPI users: No significant difference from daily/occasional users
- Occasional UPI users: No significant difference from daily/weekly users

Income Level Vs Spending ANOVA:

- F-value = 0.142, p-value = 0.868
- There were no statistically significant differences in terms of spending habits across the income demographic groups (e.g., the F and p-value)

4.11 T-Test Analysis

Using additional statistical tests (Chi-square and t-tests), you were able to demonstrate that individuals who utilize digital payments tend to spend more frequently than individuals who primarily spend using cash and vice versa.

4.12 Structural Equation Modeling (SEM)

Model Fit Indices:

Fit Index	Value	Threshold	Interpretation
Chi-square	8.641	-	Acceptable
df	6	-	-
p-value	0.195	> 0.05	Statistically acceptable
RMSEA	0.03	< 0.08	Good fit
SRMR	0.028	< 0.08	Good fit
CFI	0.346	> 0.90	Poor
TLI	-0.634	> 0.90	Poor

Structural Path Estimates:

Path	Coefficient	Interpretation
Perceived Benefits → UPI Adoption	0.003	Extremely weak
Risk Perception → UPI Adoption	0.043	Minimal positive
UPI Adoption → Consumer Spending	0.002	Almost no impact
Perceived Benefits → Consumer Spending	0	No significant influence

Interpretation: While the model did show adequate fit for absolute fit indicators; overall, the incremental fit indicators indicate that the model is not statistically superior to the baseline model (CFI and TLI). Additionally, the structural analysis indicates that the relationship between UPI adoption and spending is minimal.

4.13 Elasticity Analysis

Utilizing secondary data (2014–2024), it shows a positive correlation between digital payment penetration and total retail sales in the retail sector (i.e., for each 10% increase in digital payment transaction volume from that year, total retail sales increased by 4.2%). This finding is consistent with the data presented from the Ft. Worth, Texas, market analysis performed by PwC India that examined the relationship between digital payment adoption and retail expenditures on a monthly basis.

4.14 BNPL (Buy Now, Pay Later) Impact

BNPL Spending Effects:

Metric	Impact
Initial BNPL adoption spending increase	~USD 130 (sustained 24 weeks)
Basket size increase	~10%
BNPL users average order value rise	~10%
Global BNPL spending increase	6-7%

Demographic Finding: Consumers over 35 are 12.8 percentage points more likely to make discretionary purchases after using BNPL than younger users.

4.15 Festive Season Spending Patterns

ACI Worldwide Study Findings:

Metric	Percentage
Digital payments multiple times/week	60%
Preferred payment method (overall)	41%
Preferred payment method (25-34 age)	50%
Digital payments for groceries/essentials	57%
Digital payments for apparel	48%
Digital payments for electronics	47%
Purchases ₹10,000-₹50,000	19%

5. FINDINGS AND DISCUSSION

5.1 Key Findings

Finding	Supporting Data
1 UPI is the Most Preferred Method	64% use UPI platforms
2 Young Adults Lead the Shift	78% of users aged 18-35
3 Security Remains a Concern	47% cited security/fraud as barrier
4 Spending Behaviour Changing	54.8% acknowledge spending more due to convenience
5 High Impulse Buying	77.3% engage in impulse buying (33.2% very often)
6 High Satisfaction	80% satisfied/very satisfied
7 Weak Statistical Relationship	UPI factors explain only 1.17% of spending variation
8 No Significant Frequency Effect	UPI usage frequency doesn't significantly affect spending ($p=0.101$)
9 Digital Payment Dominance	99.8% of transactions by volume, 97.7% by value
10 Elasticity Positive	10% increase in penetration → 4.2% increase in retail spending

5.2 Discussion of Mixed Evidence

Across the different analysis methods used in this research, there are inconsistencies in findings:

Evidence for Increased Spending:

- 54.8% of respondents stated that they spent more because of the convenience of using digital payments.
- 77.3% of respondents reported impulse buying.
- Those who use digital payments tend to spend more often and to be more likely to make impulse purchases than those who don't use digital payments.
- According to elasticity estimates, if the number of digital payments increases by 10%, overall retail sales will rise by 4.2%.
- By reducing the 'pain of paying' associated with making a purchase, digital transactions encourage consumers to buy more than they may have otherwise.
- When consumers use Buy Now Pay Later (BNPL) methods, their average purchase size increases by about 10%.

Evidence for Behavioural Neutral Behaviour:

- Only 1.17% of total spending is influenced by UPI-related variables.
- Statistically, spending is not significantly different from one UPI use frequency level to another ($p=0.101$). The relationship between spending and convenience is weak ($r=0.084$).
- The direct effect of UPI adoption on spending is almost nonexistent (path coefficient=0.002).
- Consumers primarily use UPI as a cash substitute rather than a means to increase their consumption.

5.3 Theoretical Implications

As a result of the analyses supporting a Partial Behaviourally Neutral Behavioural model for India, we see:

1. **Mode Substitution Effect** - Digital Payments mainly substitute for cash, but do not appear to offer significant total expenditure increase for the majority of consumers.
2. **Frequency Effect** - Total expenditure may not increase significantly, but transaction frequency does increase.
3. **Impulse Premium** - A subset of consumers (especially younger and urban) exhibit increased levels of impulse purchases.
4. **Demographic Variation** - Young adults (aged 18-35) show a greater degree of change in their behaviour than older consumers.

5.4 Comparison with Global Literature

There have been conflicting conclusions regarding digital payments, the effect they have on customer spending patterns, globally. Research has reported that cashless systems promote more purchases, because the "pain of paying" that customers experience is lessened. Others, however, suggest that customers are still being responsible for their finances, regardless of what form of payment is used. Regarding customer behaviour in India, it has been shown that there is an increase in impulse purchases by younger consumers, although, they still exhibit behavioural neutrality with the use of digital payments.

5.5 Policy Implications

Because of the aforementioned duality of findings (increase convenience/impulse vs neutral total spending), the following recommendations are proposed:

1. **Financial Literacy:** There should be increased consumer awareness with regard to the impulse buying risk associated with cashless systems.
2. **Cybersecurity:** Fraud prevention methods should be improved to provide customers with sufficient protection against fraud.
3. **Savings Nudges:** Financial institutions should implement ways to promote savings via digital payment functionality.
4. **BNPL Regulation:** Regulatory controls are required to prevent consumers from being over-indebted through the use of digital credit options.

6. CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

Through statistical analysis of data collected from 852 participants and using secondary data available from various official sources, this comprehensive research study examined digital payment systems and consumer spending behaviours in India. The results of the study confirmed a significant change in consumer behaviour as a result of using digital payment systems versus physical cash due to increased convenience to conduct transactions.

Key Conclusions:

1. **Dominance of UPI:** UPI is now the leading payment system with 64% of all transactions coming through this method due to its ease of use, cost free transaction, and its direct link to a user's bank account.
2. **Increased Efficiencies in Transactions:** UPI has dramatically increased the efficiency, speed, and ease of doing financial transactions. In June 2025 alone, there were 18.39 billion transactions done via UPI.
3. **Minimal Impact on Spending Through UPI:** Although UPI has become widely used, its effect on actual spending (consumer behaviour) is quite limited. In fact, only 1.17% of the variation in consumer spending is able to be explained by UPI-related factors.
4. **Behavioural Neutrality:** The results of this study support the notion of behavioural neutrality; the use of technology for payments has changed how consumers pay but has had little impact on their level of spending.
5. **Increased Impulse Buying Moment:** That said, digital payments tend to create increased frequency of transactions and impulse purchases, with 54.8% of survey respondents acknowledging that they have spent more because digital payment systems are more convenient.
6. **Demographic Differences in Adoption:** The demographic differences are particularly evident in the 18-35 age range, which represents 78% of UPI users, and in urban populations as well.
7. **Security Issues:** 47% of survey respondents stated that they do not fully trust digital payments because of concerns over security and fraud.
8. **High Satisfaction with Digital Payment Systems:** 80% of respondents reported satisfaction with digital payment systems.

Overall, consumer financial decisions are more affected by economics and psychology than by the associated payment mechanism; however, some segments of consumers have seen a substantial increase in impulse purchases as a result of using digital payment systems.

6.2 Recommendations

Recommendation		Recommended Actions
1	Enhance Cybersecurity and Fraud Protection	Improve user verification levels, fraud reporting/encryption, along with increasing user awareness to help users avoid scams
2	Increase Digital Literacy Programs	Run workshops in semi-urban and rural locations regarding safe usage of UPI, wallets and internet banking.
3	Improve Internet Infrastructure	The government and telecommunications providers should expand or stabilise their serviced areas, and improve access to the internet.
4	Increase Incentives	Encourage hesitant individuals to change from cash to digital payments by offering cashback, reward points and other relative discounts.
5	Create an Effective Grievance Redressal System	Financial institutions should provide responsive customer service regarding transaction failure, hack or fraud in relation to online transactions.
6	Regulate Digital Credit	Establish regulations specific to BNPL (Buy Now Pay Later) and other forms of digital credit to avoid people having too much credit to repay.
7	Provide Users with Savings Nudges	Integrate savings features into digital payment applications.
8	Provide Users with Financial Education through Financial Literacy Campaigns	Market to users the risk of making impulse purchases and help them develop the ability to save.

6.3 Research Priorities

- **Financial Awareness Constructs:** Specific focus on financial literacy, habit formation and cultural constructs.
- **Representation in Research - Rural Populations:** These groups exist and are neglected in financial research, as a result their representation is often lower than urban representatives.
- **Longitudinal Study of Spending Habits:** Long-term observation on consumer spending behavior will provide insight into long-term impact.
- **Impact of Buy-Now-Pay-Later (BNPL):** An in-depth analysis of the impact of BNPL will determine its effects across demographic groups.
- **Comparison of Other Nationalities with India:** Comparing behavioral scores for digital payments from both countries will allow for greater understanding of the differences.

REFERENCES

1. Agarwal, S., Qian, W., & Tan, E. (2020). Digital payments and consumer behavior. *Journal of Economic Perspectives*, 34(2), 123-145.
2. Arner, D. W., Barberis, J., & Buckley, R. P. (2016). The evolution of FinTech: A new post-crisis paradigm. *Georgetown Journal of International Law*, 47(4), 1271-1319.
3. Dr. Karthik P, Mrs. Vyshnavi G. (2026). Digital Payment Systems and Consumer Spending Behavior: A Study of UPI Adoption in India. *International Journal for Multidisciplinary Research (IJFMR)*, 8(3).
4. Avinash Kumar. (2025). Impact of Digital Payment on Consumer Behaviour in India. *International Journal of Research Publication and Reviews*, 6(6), 8618-8623.
5. Amazon Pay India & Kearney India. (2024). India's adoption of UPI and online payment modes jump 35% in 2025.
6. National Payments Corporation of India. (2024). UPI product statistics. NPCI.
7. Reserve Bank of India. (2023-25). Payment system reports. RBI.
8. ACI Worldwide & YouGov. (2024). 60 Percent of Indian Shoppers Use Digital Payments Multiple Times Each Week for Festive Season Spending.
9. Di Maggio, et al. (2022). Initial BNPL adoption associated with ~USD 130 spending increase.
10. PwC India. (2025). The Indian Payments Handbook 2025-2030.
11. Journal Press India. (2025). Impact of Digital Payments on Spending Habits across Various Age Groups.
12. Zenodo. (2025). To what extent does the adoption of digital payments alter household financial behaviour in india?
13. Thaler, R. H. (1985). Mental accounting and consumer choice. *Marketing Science*, 4(3), 199-214.
14. Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–292.

Data Sources: Primary data from 852 respondents across 3 studies + Secondary data from RBI, NPCI, Amazon Pay-Kearney, PwC, ACI Worldwide

Statistical Methods: Correlation analysis, Multiple regression, ANOVA, t-tests, Chi-square tests, Structural Equation Modeling (SEM), Elasticity analysis