

UPI Payment Convenience and Its Impact on Impulsive Buying Behaviour Among Consumers

Nagesh S¹, Dr. Kalicharan Sabat¹

¹Department of Management Studies, Dayananda Sagar College of Engineering, Bengaluru, India

Abstract - The Unified Payments Interface (UPI) has become the dominant mode of digital payment in India, prized for its speed, ease of use, and seamless integration into everyday purchases. While UPI's convenience benefits are well documented, less is known about how specific dimensions of the UPI experience - ease of use, speed and availability, promotional incentives, and trust and security - jointly predict impulsive buying behavior among consumers. This study examines these relationships using primary survey data from 81 valid respondents, measured through a 20-item structured questionnaire combining four Yes/No items capturing impulsive buying behavior and sixteen five-point Likert items across four predictor constructs. The instrument demonstrated acceptable to good reliability (Cronbach's alpha = 0.762 overall). Descriptive results show respondents rate UPI highly on Ease of Use (M = 4.19) and Speed & Availability (M = 3.94), while Promotional Influence (M = 2.81) and Trust & Security (M = 3.30) were rated more moderately. Regression analysis revealed that Promotional Influence ($\beta = 0.263$) and Trust & Security ($\beta = 0.265$) were the strongest predictors of impulsive buying behavior, while Ease of Use and Speed & Availability showed negligible unique contribution once the other constructs were accounted for ($R^2 = 0.155$). These findings suggest that impulsive UPI-driven purchases are shaped more by promotional incentives and payment confidence than by sheer usability or speed, offering practical implications for retailers, fintech platforms, and policymakers concerned with responsible digital spending.

Keywords: UPI, digital payments, impulsive buying behavior, consumer behavior, ease of use, trust and security.

1. INTRODUCTION

The Unified Payments Interface (UPI), developed by the National Payments Corporation of India (NPCI), has fundamentally reshaped how Indian consumers pay for goods and services. By enabling instant, low-friction transactions directly from a bank account through a mobile application, UPI has all but eliminated the delays and manual effort associated with cash and card-based payments. In the fiscal year 2023-24 alone, UPI accounted for roughly 70% of India's 164 billion digital payment transactions, underscoring its central role in the country's payments ecosystem.

This growth has not been purely transactional. A growing body of consumer-behavior research suggests that the very features that make UPI convenient - instant processing, minimal cognitive friction, and seamless integration into the checkout process - may also lower the psychological barrier to spending, a phenomenon behavioral economists term the reduced "pain

of paying." Because digital payments abstract away the physical handling of money, consumers may be more prone to spontaneous, unplanned purchases when UPI is available compared to cash or card transactions.

This study examines this phenomenon directly, asking not simply whether UPI is convenient, but which specific dimensions of the UPI experience - ease of use, speed and availability, promotional incentives, or trust and security - most strongly predict consumers' impulsive buying behavior. Understanding this relationship has practical value for retailers designing checkout experiences, fintech platforms calibrating promotional strategies, and policymakers concerned with financial discipline among digitally-native consumers.

2. LITERATURE REVIEW

Auxilia and Gopinath (2023) examined the impact of UPI on impulsive buying behavior among consumers in Chennai, finding that the ease and speed of UPI-based payments significantly encouraged spontaneous purchase decisions, particularly when consumers were exposed to appealing products in-store or online.

Dev, Gupta, and Kumar (2024), in a large-scale study on UPI's impact on spending behavior among Indian users, found that the intangible nature of digital transactions reduces consumers' awareness of money leaving their accounts, thereby encouraging more frequent and less deliberate spending - a mechanism directly relevant to this study's Ease of Use and Speed & Availability constructs.

Samit (2025), drawing on behavioral finance concepts including the "pain of paying" and the Unified Theory of Acceptance and Use of Technology (UTAUT), found that UPI adoption was associated with higher spending frequency, lower savings, and more impulsive spending, particularly among digitally literate, middle-class consumers - lending theoretical grounding to this study's inclusion of Trust & Security as a distinct predictor alongside usability-focused constructs.

Kasera and Banerjee (2024) studied digital payment behavior among college students and found that cashback rewards, instant payments, and easy accessibility were the primary drivers of frequent UPI use, while students simultaneously expressed concern about overspending and fraud - directly motivating this study's inclusion of both Promotional Influence and Trust & Security as parallel predictor constructs, since consumers appear to weigh incentive-driven and risk-related considerations simultaneously rather than relying on usability alone.

Taken together, the reviewed literature confirms UPI's role in shaping impulsive purchasing but leaves open the question of which specific experiential dimension - usability, speed, incentives, or trust - carries the greatest predictive weight once

these factors are modelled jointly. This study addresses that gap directly.

3. RESEARCH METHODOLOGY

This study adopted a descriptive-cum-analytical research design using a structured questionnaire administered to consumers who actively use UPI for payments. A convenience sample of 84 respondents was collected; after removing 3 responses with incomplete items, 81 valid responses were retained for analysis.

The questionnaire comprised 20 items: four Yes/No items measuring Impulsive Buying Behavior (the outcome variable), and sixteen five-point Likert items (1 = Strongly Disagree to 5 = Strongly Agree) measuring four predictor constructs - Ease of Use, Speed & Availability, Promotional Influence, and Trust & Security - each with four items. Three items were reverse-worded and reverse-scored prior to analysis. Data were analyzed using descriptive statistics, Cronbach's Alpha for reliability, Pearson correlation, and multiple linear regression, with regression assumptions (normality, multicollinearity, homoscedasticity, autocorrelation) formally tested.

Hypotheses:

- H1: Ease of Use has a significant positive relationship with Impulsive Buying Behaviour.
- H2: Speed & Availability has a significant positive relationship with Impulsive Buying Behaviour.
- H3: Promotional Influence has a significant positive relationship with Impulsive Buying Behaviour.
- H4: Trust & Security has a significant positive relationship with Impulsive Buying Behaviour.

4. ANALYSIS AND RESULTS

Table 1: Demographic Profile of Respondents (N = 81)

Variable	Category	n (%)
Gender	Female	42 (51.9%)
	Male	39 (48.1%)
Age	18-24	53 (65.4%)
	25-34	13 (16.0%)
	35-54	4 (4.9%)
	55+	11 (13.6%)
UPI App Used	Google Pay	38 (46.9%)
	PhonePe	31 (38.3%)
	Others / Paytm	12 (14.8%)
Primary Shopping Mode	Online	37 (45.7%)
	Physical Stores	32 (39.5%)
	Social Commerce / Apps	12 (14.8%)

Table 2: Descriptive Statistics and Reliability of Constructs

Construct	Mean	SD	Cronbach's Alpha
Ease of Use	4.19	0.59	0.718
Speed & Availability	3.94	0.48	0.436
Promotional Influence	2.81	0.94	0.840

Trust & Security	3.30	0.71	0.811
Impulsive Buying Behaviour (proportion Yes)	0.59	0.35	0.710 (KR-20)

Overall instrument reliability across all 16 Likert items was 0.762, indicating acceptable internal consistency. The Speed & Availability construct returned a lower alpha (0.436), suggesting some item heterogeneity within this construct - noted as a limitation in Section 6.

Table 3: Correlation and Regression Results (DV = Impulsive Buying Behaviour)

Predictor	Correlation (r)	Standardized β	VIF
Ease of Use	0.121	0.053	1.44
Speed & Availability	0.099	-0.027	1.52
Promotional Influence	0.290	0.263	1.04
Trust & Security	0.282	0.265	1.11

The overall regression model was statistically modest ($R^2 = 0.155$), indicating the four constructs jointly explain approximately 15.5% of the variance in impulsive buying behaviour. Promotional Influence ($\beta = 0.263$) and Trust & Security ($\beta = 0.265$) emerged as the strongest predictors, while Ease of Use ($\beta = 0.053$) and Speed & Availability ($\beta = -0.027$) contributed negligibly once the other constructs were held constant. All VIF values were below 2, indicating no meaningful multicollinearity. A Shapiro-Wilk test on the regression residuals returned a mild deviation from normality ($W = 0.964$, $p = 0.021$), while a Breusch-Pagan test confirmed homoscedasticity ($LM = 3.492$, $p = 0.479$) and a Durbin-Watson statistic of 1.905 confirmed no significant autocorrelation.

Table 4: Hypothesis Testing Summary

Hypothesis	Result (r)	Decision
H1: Ease of Use $\rightarrow$ Impulsive Buying Behaviour	$r = 0.121$	Not Supported
H2: Speed & Availability $\rightarrow$ Impulsive Buying Behaviour	$r = 0.099$	Not Supported
H3: Promotional Influence $\rightarrow$ Impulsive Buying Behaviour	$r = 0.290$	Supported
H4: Trust & Security $\rightarrow$ Impulsive Buying Behaviour	$r = 0.282$	Supported

5. DISCUSSION

The findings present a nuanced picture of impulsive UPI-driven buying. While respondents rated UPI highly on Ease of Use and Speed & Availability, these usability-focused dimensions were not significant predictors of impulsive purchasing once Promotional Influence and Trust & Security were accounted for. This suggests that usability may function as a necessary baseline expectation - consumers take fast, easy payments for granted - rather than as an active trigger of unplanned purchases.

Promotional Influence and Trust & Security, by contrast, were significant predictors, indicating that consumers' impulsive purchasing is more strongly shaped by external incentives (cashback, discounts, offers) and by the psychological comfort of trusting the payment system, than by the mechanics of the payment process itself. This aligns with Kasera and Banerjee's (2024) finding that cashback and reward incentives are primary drivers of frequent UPI use, and with Samit's (2025) behavioral-finance framing that reduced "pain of paying" - underpinned by trust in the system's security - facilitates more spontaneous spending.

The relatively modest R^2 (0.155) indicates that impulsive buying behaviour is influenced by many factors beyond the payment mechanism itself - including individual personality traits, product exposure, and financial habits - that fall outside the scope of this study's payment-focused constructs.

6. CONCLUSION

This study examined how four dimensions of the UPI payment experience - ease of use, speed and availability, promotional influence, and trust and security - relate to consumers' impulsive buying behaviour. The results indicate that promotional incentives and trust in the security of the payment system are the strongest drivers of impulsive purchasing, while the sheer ease and speed of UPI payments, though highly rated by consumers, do not independently predict impulsive buying once other factors are considered. These findings suggest that retailers and fintech platforms seeking to responsibly manage impulsive spending should focus policy and design attention on promotional-offer transparency and security communication, rather than assuming usability improvements alone will meaningfully alter purchasing impulsivity. Future research should extend the sample across a broader demographic range, incorporate objective transaction-log data, and examine the moderating role of income level and financial literacy on the relationships identified here.

ACKNOWLEDGEMENT

The authors thank the Department of Management Studies, Dayananda Sagar College of Engineering, Bengaluru, for its support during the course of this research, and all respondents who participated in the survey.

REFERENCES

1. Auxilia, M., & Gopinath, S. (2023). Impact of UPI on impulsive buying behavior. *Academy of Marketing Studies Journal*, 27(4), 1-6.
2. Dev, H., Gupta, R., & Kumar, D. (2024). From cash to cashless: UPI's impact on spending behavior among Indian users. In *Proceedings of the CHI Conference on Human Factors in Computing Systems* (CHI '24). <https://doi.org/10.1145/3613904.3642507>
3. Kasera, R., & Banerjee, S. (2024). A study on student behavior towards digital payments. *Journal of Advanced Research in Humanities and Social Sciences*, 11(4), 9-18.
4. Samit, D. (2025). Impact of UPI-based digital transactions on consumer behaviour in India [Working paper]. SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5678963
5. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.
6. Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.
7. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.

BIOGRAPHY

	Nagesh S is a postgraduate student in the Department of Management Studies at Dayananda Sagar College of Engineering, Bengaluru, pursuing a Master of Business Administration. His research interests include consumer behavior, digital payments, and business analytics.
	Dr. Kalicharan Sabat is a Professor in the Department of Management Studies at Dayananda Sagar College of Engineering, Bengaluru. He has extensive teaching and research experience in the areas of business analytics, organizational behavior, and technology management, and has guided several postgraduate research projects in these domains.