

Sound, Convenience, And Spending: Exploring the Role of UPI Payment Confirmation Feedback in Digital Payment Behaviour

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Abstract—Purpose: This study examined whether the short sounds used to confirm UPI and other digital payments are experienced only as functional feedback or also as part of the way users perceive and complete a payment. **Design/Methodology/Approach:** A cross-sectional online survey of 66 respondents was conducted in September 2026. The questionnaire covered payment habits, spending perceptions, cashback influence, payment sounds, emotional response to confirmation sounds, security concerns, and satisfaction with UPI. The analysis was descriptive and based on response frequencies and percentages. **Findings:** UPI or digital payment apps were the most frequently used payment method for 53.0% of respondents. A total of 53.0% reported that digital payments made spending easier when the agree and strongly agree categories were combined. Similarly, 45.5% agreed or strongly agreed that they spent more overall when using cashless methods than cash. Payment confirmation sounds were enabled for 31.8% of respondents, while 48.5% described the sound as mildly pleasant or very satisfying. Importantly, 40.9% said the sound made a payment feel more complete, while another 31.8% selected maybe. **Practical Implications:** Payment interfaces should treat confirmation audio as part of the user experience while avoiding unnecessarily stimulating or reward-like cues. Clear confirmation may improve confidence, but designers should also preserve spending awareness and user control. **Originality/Value:** The study connects the established cashless-payment literature with a narrower and less examined feature of digital payment interfaces: the confirmation sound.

Index Terms—UPI; digital payments; payment confirmation sound; cashless effect; consumer spending; auditory feedback; payment behaviour

JEL CLASSIFICATION

D12; D14; G18; M31

I. INTRODUCTION

Digital payments have become an ordinary part of everyday purchasing in India. A payment that once involved handing over notes or a card can now take only a few seconds on a phone. UPI has played a major role in this shift. NPCI's transaction statistics show that UPI processed more than 24.5 billion transactions in August 2026, illustrating the scale at which digital payment interactions now occur.

The change is not only about the payment instrument. It also changes what a payment feels like. Cash provides a visible and physical signal that money has left the consumer. A digital payment replaces much of that experience with a sequence of screen changes, vibrations, notifications, and sounds. Among these cues, the confirmation sound is particularly interesting because it arrives at the exact moment the transaction is completed. It tells the user that the action worked, but it may also shape how the payment is perceived.

Previous research gives a useful starting point. Prelec and Loewenstein [1] described the 'pain of paying' as an important part of consumer self-regulation. Later work has repeatedly examined whether less tangible payment methods weaken this feeling. A 2024 meta-analysis covering 71 papers and 392 effect sizes found a small but significant cashless effect, meaning that consumers tended to spend more with cashless methods than with cash. The authors also found that the strength of the effect depends on context and has generally weakened over time.

At the same time, payment interfaces are not silent systems. Sound is used to communicate success, failure, progress, and other system states. Research on nonspeech auditory feedback shows that well-designed sounds can convey useful information, while poorly designed sounds can become distracting or annoying (Absar & Guastavino, 2008). Their later user-centred design work also showed that auditory feedback can be designed around what users actually find meaningful rather than around assumptions made by interface designers (Absar & Guastavino, 2015). Recent work has begun to examine payment sounds specifically, including their possible effect on the attractiveness of cashless payment services (Sanaka et al., 2025).

This study brings these two strands together. It does not claim that a payment sound by itself causes overspending. Instead, it asks a narrower question: how do users experience the confirmation sound, and does that experience sit alongside the broader perceptions associated with cashless spending? The study uses survey data from 66 respondents to describe payment habits, spending perceptions, emotional responses to confirmation sounds, and attitudes toward digital payments.

The paper is organised around three questions. First, how common are cashless payment use and payment-sound exposure among the respondents? Second, do respondents perceive digital payments as making spending easier or increasing the amount they spend? Third, do confirmation sounds appear to add a sense of completion, speed, or positive emotion to the payment experience?

II. LITERATURE REVIEW

The behavioural economics literature provides an important background for studying digital payments. Prelec and Loewenstein [1] argued that paying can produce an immediate psychological cost that interacts with the pleasure of consumption. The physical act of paying can therefore matter beyond the monetary value of the transaction itself. Cash makes the reduction in money relatively visible, whereas many digital payments separate the purchase from a physical transfer of notes.

This idea is closely related to the cashless effect. Schomburgk et al. [2] reviewed four decades of research and found a small positive effect of cashless

payment methods on consumer spending. Their findings are useful for the present study because they suggest that payment format can influence behaviour, but they also caution against treating the effect as universal. Consumption situation, economic conditions, and familiarity with cashless payments can change the size of the effect.

The interface layer adds another dimension. Auditory feedback can make a system state immediately noticeable without requiring the user to look at the screen. Absar and Guastavino [3] noted that nonspeech sounds can be useful when they communicate information clearly, but that auditory feedback is transient and can also cause annoyance when poorly designed. Their 2015 study further demonstrated the value of involving users in the design of meaningful nonspeech feedback.

Payment sounds therefore sit between functionality and experience. A confirmation chime can simply answer the practical question 'Did the payment succeed?' Yet repeated exposure, timing, tone, and association with successful transactions may also give the sound a small emotional role. Sanaka et al. [5] examined payment sounds in cashless payment and reported work focused on the attractiveness of the service, suggesting that payment audio deserves attention as a design element rather than being treated as background noise.

Despite this growing interest, there is still limited survey evidence connecting the specific experience of payment confirmation sounds with users' own perceptions of spending. The present study addresses that gap at an exploratory level. It is intentionally descriptive rather than causal. Its purpose is to identify patterns that can inform a stronger experimental study later.

III. RESEARCH QUESTIONS

RQ1. What payment habits and levels of cashless-payment use are reported by the respondents?

RQ2. Do respondents perceive digital payments as making spending easier or increasing their overall spending compared with cash?

RQ3. How do respondents experience payment confirmation sounds in terms of availability, emotional response, and perceived completeness?

RQ4. What other factors, such as cashback, convenience, satisfaction, and payment concerns, shape the broader digital-payment experience?

IV. METHODOLOGY

Research design. The study used a cross-sectional, descriptive survey design. Data were collected through an online questionnaire containing 14 closed-ended questions. The questionnaire focused on payment method preference, frequency and context of digital payment use, spending perceptions, cashback influence, sound notifications, emotional responses to successful payment sounds, perceived payment completeness, security concerns, perceived advantages, and satisfaction with UPI.

Sample and sampling. The final dataset contained 66 valid responses. The respondents were recruited through convenience sampling using online sharing of the questionnaire. Because the study used a non-probability sample and did not collect a representative population frame, the findings should be interpreted as exploratory rather than as estimates of the behaviour of all UPI users.

Data collection period. Responses in the supplied dataset were timestamped on September 8, 2026. The analysis therefore represents a short cross-sectional snapshot of respondents' perceptions at that time.

Analysis. The analysis was carried out using frequency counts and percentages. For each question, the number of respondents selecting each response option was divided by the total of 66 valid responses. Where interpretation required it, adjacent Likert categories were combined, such as agree plus strongly agree. No causal claim was made from these

descriptive results. The raw response file was used as the source for the calculations, rather than relying on earlier chart images or previously reported percentages.

V. RESULTS AND DISCUSSION

Payment Behaviour and Usage

UPI or digital payment apps were the most commonly used payment method, selected by 35 of the 66 respondents (53.0%). Cash was the main method for 19 respondents (28.8%), debit or credit cards for 10 respondents (15.2%), and digital wallets for 2 respondents (3.0%). This indicates that digital payment applications were already a normal part of the respondents' payment routines, although cash remained important for a substantial minority.

Frequency of use was also high. Twenty-two respondents (33.3%) used cashless payment methods multiple times a day and 15 (22.7%) used them once a day. Another nine (13.6%) used them a few times a week. Together, these figures show that 46 respondents, or 69.7%, used cashless methods at least several times a week. The remaining respondents reported weekly use (15.2%) or rare use (15.2%).

Retail stores were the most common setting for digital payments, reported by 20 respondents (30.3%). Food outlets and cafés accounted for 15 respondents (22.7%), online shopping for 14 (21.2%), school or college canteens for 9 (13.6%), and other settings for 8 (12.1%). The pattern is useful because it shows that digital payments in this sample were not limited to online shopping; they were also embedded in small, everyday purchases.

Table 1. Selected payment behaviour indicators. Source: Survey data, N = 66.

Payment behaviour	n	%
UPI / digital payment apps	35	53.0
Cash	19	28.8
Debit/credit card	10	15.2
Digital wallet	2	3.0
Cashless use multiple times/day	22	33.3
Cashless use once/day	15	22.7

Perceived Spending Changes

The responses suggest that many participants saw digital payment as making spending easier than cash.

Twenty-two respondents (33.3%) agreed and 13 (19.7%) strongly agreed with the statement that digital payments make it easier to spend money compared

with cash. Combined, 35 respondents (53.0%) expressed agreement. Twenty-two respondents (33.3%) were neutral, while only 9 (13.6%) disagreed or strongly disagreed.

The responses to the more direct spending question were somewhat less strong, which is important. Seventeen respondents (25.8%) agreed and 13 (19.7%) strongly agreed that they spent more overall when using cashless payment methods than when using cash. This gives a combined agreement level of 45.5%. Twenty-one respondents (31.8%) were neutral, while 15 (22.7%) disagreed or strongly disagreed. The

result therefore points to a noticeable perception of increased spending, but not a unanimous one.

Cashback and discounts were another potential influence. Eighteen respondents (27.3%) said such offers often encouraged them to spend more than planned, and four (6.1%) said this always happened. Fifteen respondents (22.7%) selected occasionally and another 16 (24.2%) selected sometimes. Only 12 respondents (18.2%) said never. This suggests that promotional incentives may be a more direct spending trigger than the confirmation sound itself. It also supports the need to avoid treating every behavioural change around digital payments as an audio effect.

Table 2. Selected spending perceptions. Source: Survey data, N = 66.

Spending-related statement	Positive response	n	%
Digital payments make spending easier than cash	Agree + Strongly agree	35	53.0
Spend more overall with cashless methods	Agree + Strongly agree	30	45.5
Cashback/discounts encouraged extra spending	Often + Always	22	33.3

The Role of Payment Confirmation Sounds

Only 21 respondents (31.8%) reported that sound notifications were currently enabled, while 35 (53.0%) said they were not enabled and 10 (15.2%) selected sometimes. This matters because a payment sound cannot influence the experience if the user is not exposed to it. The survey therefore measures perceived effects among a mixed group of users rather than a group in which everyone receives the same audio feedback.

Among the emotional responses, 29 respondents (43.9%) selected neutral. Seventeen (25.8%) described the sound as mildly pleasant and 14 (21.2%) described it as very satisfying or a dopamine boost. Five respondents (7.6%) found it annoying or irritating. Combining the two positive categories gives 32 respondents, or 48.5%, with a positive emotional response. The finding is more balanced than a simple claim that payment sounds are inherently rewarding: nearly half were neutral, and a small group actively disliked the sound.

The strongest result for the central research question came from perceived completeness. Twenty-seven respondents (40.9%) said that hearing the confirmation sound made the payment feel more complete. Twenty-one (31.8%) selected maybe, while 18 (27.3%) said no. Thus, 48 respondents, or 72.7%, were either certain or at least open to the possibility that the sound added to the feeling of completion. This does not prove that the sound changes spending behaviour, but it does suggest that the sound is not psychologically irrelevant to a large part of the sample.

The question about whether audio confirmation makes paying feel faster and less like losing money produced a more cautious pattern. Five respondents (7.6%) strongly agreed and 18 (27.3%) agreed, giving 34.8% positive responses. Twenty-nine respondents (43.9%) remained neutral, while 14 (21.2%) disagreed or strongly disagreed. This result fits the broader interpretation: the confirmation sound may support a smoother or more complete payment experience, but respondents were not uniformly convinced that it changed the perceived cost of paying.

Table 3. Payment sound responses. Source: Survey data, N = 66.

Sound-related measure	n	%
Sound notifications enabled: Yes	21	31.8
Positive emotional response: Mildly pleasant + Very satisfying	32	48.5
Sound makes payment feel complete: Yes	27	40.9
Sound makes payment feel complete: Yes + Maybe	48	72.7
Audio makes paying feel faster/less like losing money: Agree + Strongly agree	23	34.8

Security, Convenience, and Satisfaction

Payment failure was the most frequently selected concern, reported by 27 respondents (40.9%). Fraud or unauthorised transactions followed at 16 respondents (24.2%), while hacking was selected by 14 (21.2%). Privacy loss was a concern for 6 respondents (9.1%), and only 3 respondents (4.5%) selected that nothing concerned them. The result shows that convenience does not remove uncertainty. Users may appreciate the speed of digital payments while still worrying about whether a transaction will succeed or whether money can be accessed without authorisation.

Speed and convenience were also the most commonly cited advantage, selected by 27 respondents (40.9%). Safety was selected by 20 (30.3%), rewards or cashback by 10 (15.2%), and ease of tracking spending by 9 (13.6%). This combination is revealing: safety was viewed as a major advantage, but fraud, hacking, and unauthorised transactions were also major concerns. Users therefore appear to hold both positive and cautious views of the same system.

Overall satisfaction with UPI was relatively positive. Thirty-three respondents (50.0%) were satisfied and 9 (13.6%) were very satisfied, giving 42 satisfied or very satisfied respondents (63.6%). Fourteen respondents (21.2%) were neutral, while 10 (15.2%) were dissatisfied or very dissatisfied. The result suggests that the general payment experience was favourable even though specific reliability and security concerns remained.

VI. INTERPRETATION

The findings support a careful interpretation of the relationship between payment design and spending.

The survey does not show that confirmation sounds cause people to spend more. It does show that respondents commonly perceive digital payments as easier for spending, that almost half perceive greater spending with cashless methods, and that many respondents attach some sense of completion or positive emotion to payment sounds.

This distinction is important. The established cashless-effect literature concerns payment methods and spending outcomes. The present study adds an interface-level question: what happens around the payment method at the moment the transaction is confirmed? A confirmation sound may reduce uncertainty by telling the user that the transaction succeeded. At the same time, if the sound is designed to feel rewarding, it could make the completion of a purchase more emotionally positive. The survey data are consistent with this possibility but cannot establish the mechanism.

The relatively high neutral response to several sound-related questions is also informative. It suggests that the audio cue may be a subtle part of the experience rather than a strong stimulus for everyone. This is consistent with research on auditory feedback, where usefulness depends on whether the sound communicates meaningful information without becoming distracting. The 7.6% of respondents who described the payment sound as annoying also shows why 'more sound' should not automatically be treated as better interface design.

Another point is the difference between completion and spending. Forty respondents said the sound made the payment feel complete, but fewer respondents agreed that the sound made paying feel faster and less like losing money. This may mean that the sound's

primary role is reassurance rather than reducing the psychological cost of the transaction. In practical terms, a user may appreciate knowing that a payment succeeded without necessarily feeling that the money spent was less significant.

VII. PRACTICAL IMPLICATIONS

For payment platforms and merchants, the findings suggest that confirmation audio should be designed first as a clear status signal. The sound should make success easy to recognise and should not depend on users constantly checking a screen. At the same time, designers should be careful with reward-like audio that could turn routine spending into a repeated positive stimulus.

For consumers, the results point toward a simple form of spending awareness. Digital payments are fast enough that the moment of purchase can pass without much reflection. Budget limits, transaction summaries, and spending alerts can provide a second checkpoint after the payment has been completed.

For researchers, the main implication is that payment-method studies should consider interface details rather than treating 'cashless' as a single uniform experience. Sound, vibration, visual animation, cashback messages, and transaction confirmations may each contribute differently to the user's experience.

VIII. LIMITATIONS

The study has several limitations. First, the sample consisted of 66 respondents recruited through convenience sampling, so the findings cannot be generalised to the wider Indian population or to all UPI users. Second, the study relied on self-reported perceptions rather than transaction records or observed spending. Respondents may not accurately estimate whether they spend more with cashless methods. Third, the survey was cross-sectional and descriptive, so it cannot establish that payment sounds cause changes in spending. Fourth, sound exposure was not experimentally controlled: respondents differed in whether their payment sounds were enabled, disabled, or used sometimes. Finally, the questionnaire did not include detailed demographic or socioeconomic variables, which limits subgroup analysis.

IX. DIRECTIONS FOR FUTURE RESEARCH

A useful next step would be a controlled experiment with the same participants completing matched purchases under different feedback conditions: no sound, a neutral confirmation tone, and a more reward-like confirmation sound. The study could record actual spending, purchase time, recall of transaction value, and willingness to make an additional purchase. A second useful measure would be the perceived 'pain of paying' immediately after each transaction. This would help separate three possible effects that the current survey cannot distinguish: sound improving confidence, sound improving enjoyment, and sound reducing the salience of spending.

Future work could also compare age groups and levels of digital-payment experience. Since familiarity with cashless payment may reduce the cashless effect over time, experienced users may respond differently to payment sounds than new users. Finally, research should examine whether payment sounds have different effects for small routine purchases and larger discretionary purchases.

X. CONCLUSION

This study examined the role of payment confirmation sounds within the broader experience of digital payments using survey responses from 66 participants. The results show a clear place for UPI and other cashless methods in everyday payment behaviour: 53.0% used UPI or digital payment apps most often, and 69.7% used cashless methods at least several times a week. At the same time, 53.0% agreed or strongly agreed that digital payments made spending easier than cash, while 45.5% agreed or strongly agreed that they spent more overall with cashless methods.

The sound findings were more nuanced. Only 31.8% currently had payment sounds enabled, but 48.5% reported a positive emotional response to the confirmation sound. More importantly, 40.9% said the sound made the payment feel more complete, while another 31.8% were unsure. These findings suggest that confirmation audio has a meaningful place in the payment experience, even though the present study does not establish a causal effect on spending.

The broader message is that a digital payment is not just a financial transaction. It is also an interface experience. The confirmation sound is one small part

of that experience, but it arrives at a psychologically important moment: immediately after money has been spent. Designing that moment responsibly means keeping the confirmation clear and useful without unnecessarily turning spending into a reward loop. Future experimental research can test whether the associations observed here translate into measurable changes in spending behaviour.

ETHICAL DISCLOSURES

Author's Contribution

The author conceptualised the study, designed and distributed the survey, collected and analysed the data, interpreted the findings, and prepared the manuscript.

Conflict of Interest

The author declares no conflict of interest.

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DATA AVAILABILITY

The survey dataset contains 66 responses and was used for the analysis reported in this manuscript. The author should confirm the appropriate method for sharing or restricting access to the anonymised dataset before submission.

ETHICS APPROVAL

AUTHOR TO CONFIRM BEFORE SUBMISSION:

State whether institutional ethical approval was obtained, not required, or not obtained for this anonymous student survey. Do not submit with this placeholder.

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