

## The Influence of Cashless Transactions on Impulse Buying in Online and Offline Retail

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**Abstract:** *Cashless transactions' introduction and quick uptake have drastically changed how people make purchases in stores, particularly when it comes to impulsive purchases. This study investigates how the characteristics of cashless transactions—namely, payment security, rewards and cashback, payment options, and ease of payment—affect the prevalence of impulsive purchases in both online and physical retail environments. Customers may feel less "pain of paying" when using digital payment methods because they eliminate the physicality of financial transactions, which could increase their propensity to make impulsive purchases. The study's conclusions should provide important new information for merchants, marketers, and fintech businesses looking to improve customer satisfaction while controlling the psychological factors that lead to impulsive purchases. Additionally, by offering a comparative viewpoint on impulse buying behaviours in digital versus physical retail environments, the study adds to the body of existing literature. Given the expanding cashless economy and the changing nature of consumer decision-making, this research is especially pertinent.*

**Keywords:** Cashless Transactions, Impulse Buying, Ease of Payment, Payment Options, Rewards, Cashback, Payment Security, Consumer Behaviour, Retail, Digital Payments.

### 1. INTRODUCTION

Customers' interactions with payment systems have been profoundly changed by the digital revolution, which has also changed their purchasing habits, especially with regard to impulsive purchases. Consumer spending habits have changed as cashless transactions have become more common. Mobile payments lower the psychological barriers to spending, which increases the likelihood of impulsive purchases, according to researchers like Jiang (2022). Sharma and Crossler (2014) also highlighted how perceived ease and convenience influence impulsive purchasing. According to Verma and Tiwari (2021), a smooth checkout process via digital wallets can promote impulsive purchases and lessen cognitive friction. Additionally, Bakar et al. (2025) found that the availability of "buy now, pay later" options encourages impulsive behaviour, particularly in younger populations. Sari et al. (2023) found a significant positive correlation between the frequency of impulse purchases and digital incentives, such as cashback, in a study on e-wallet usage. According to Ali and Raza (2020), having a variety of payment options, including UPI, credit cards, and mobile wallets, promotes flexibility and choice, which in turn encourages impulsive purchases. When using digital payments, consumers' psychological distance from cash reduces their reluctance to spend, claim Kapoor et al. (2020). Online shoppers who were exposed to flash sales and one-click payments were more likely to make impulsive purchases than their offline counterparts, according to a comparative study by Mukherjee and Nath (2021). However, Bansal and Taylor (2019)

emphasised that cashless point-of-sale terminals in conjunction with loyalty rewards and promotional signage can still elicit impulsive behaviour in offline settings. Security is still an important consideration. In contrast to Gupta and Arora (2022), who highlighted that trust in payment platforms has a positive impact on consumer confidence and impulsivity, Solat (2017) found that perceived insecurity in digital payments can moderate impulse buying. Singh and Goyal (2020) also pointed out that consumers who have faith in digital systems are more likely to make frequent impulsive purchases. Contextual factors also influence consumer behaviour. According to Chatterjee and Das (2021), urban consumers are more impulsive and more at ease using digital platforms than their rural counterparts. According to Dasgupta and Roy (2018), marketing campaigns that are integrated into cashless payment systems frequently serve as catalysts for impulsive choices. Emotional and cognitive factors also come into play. Emotion-driven purchasing increases in digitally enhanced retail settings, according to Madhavaram and Laverie (2004). Similarly, Park and Lennon (2006) highlighted that by cutting down on deliberation time, mobile payment environments improve experiential purchases. Consumer perception is also impacted by the shift from cash to digital payments. According to Taylor and Levin (2011), impulsivity is encouraged by the symbolic act of giving cash, which produces friction that is not present in cashless transactions. According to Narang and Shukla (2019), impulsive buying is triggered by real-time offers that are visible during digital payment processes. This study aims to fill a gap in the literature by thoroughly comparing the effects of these factors across offline and online retail formats, despite these insights.

## 2. REVIEW OF LITERATURE

Consumer behaviour has been greatly impacted by the shift to a cashless economy, especially in regards to impulsive purchases. The technological and psychological aspects of cashless payments that reduce reluctance to make impulsive purchases have been studied by a number of researchers. For example, Jiang (2022) found that mobile payment methods increase impulsive purchases, particularly for hedonistic products, by reducing the "pain of paying." In a similar vein, electronic payment systems make spending less salient, which encourages impulsive behaviour from customers (Soman, 2003). According to Bakar et al. (2025), consumers are encouraged to circumvent logical decision-making processes by contemporary payment options like credit cards, e-wallets, and buy-now-pay-later (BNPL). According to Sari et al. (2023), millennials' impulsive purchases and e-wallet use—which is boosted by cashback offers—have a strong positive correlation. Mohan et al. (2013) provided support for this claim by arguing that contextual cues such as rewards and discounts included in payment apps encourage emotional purchasing. According to Kapoor et al. (2020), digital checkout systems and ease of payment lessen decision fatigue, particularly in online retail settings, which speeds up impulsive behaviour. According to Chatterjee and Das (2021), offering a large range of payment options boosts customer autonomy and raises the likelihood of impulsive purchases. Ali and Raza (2020) also underlined that impulsive buyers' perceptions of payment speed and convenience are crucial in reducing post-purchase regret. Singh and Goyal (2020), who discovered that digital discounts cause instant gratification and result in impulsive purchases, confirmed the role of rewards and cashback in encouraging impulsive buying. Such promotions integrated into the payment interface act as decision shortcuts that circumvent logical assessments, as noted by Taylor and Levin (2011). Perception of security is yet another crucial factor. While Gupta and Arora (2022) confirmed that greater trust in payment platforms such as Google Pay and Paytm correlates positively with impulsive purchases, Solat (2017)

demonstrated that low perceived security can reduce impulsive tendencies. When Bansal and Taylor (2019) compared the effects of digital transaction systems in online and offline settings, they discovered that although online platforms provide greater payment flexibility, offline point-of-sale (POS) systems provide instant gratification and have an equal impact on impulsive purchases. According to Verma and Tiwari (2021), impulse buys are more common in settings that reduce cognitive and physical barriers to transactions. Furthermore, digital payment features like point-based rewards and automatic savings boost customer engagement and unforeseen spending, according to Dasgupta and Roy (2018). Notwithstanding the expanding body of research, little is known about the comparative effects of online and offline cashless retail settings, which calls for more research into the ways in which payment features affect impulse buying on each platform.

### **3. OBJECTIVES OF THE STUDY**

1. To analyse the impact of independent factors—ease of payment, availability of payment options, rewards and cashback, and security—on the frequency of impulsive purchases made through cashless transactions.
2. To compare the influence of cashless transaction features on impulse buying behavior between online and offline retail environments.

### **4. SCOPE OF THE STUDY**

- ✓ The study focuses on understanding how specific features of cashless transactions—namely ease of payment, availability of payment options, rewards and cashback incentives, and perceived security—affect the frequency of impulse buying. It aims to interpret the behavioral patterns associated with these variables in retail consumption.
- ✓ This research investigates consumer behavior in both online and offline retail environments, offering a comparative analysis to determine whether the influence of cashless transaction factors differs across digital and physical shopping contexts.
- ✓ The study is limited to a defined geographic area and targets consumers who actively use cashless payment methods such as UPI, digital wallets, credit/debit cards, and BNPL services.

### **5. STATEMENT OF THE PROBLEM**

Consumer behaviour has changed significantly since the introduction of digital payment technologies, particularly when it comes to in-store transactions. Although many studies have recognised that cashless transactions can promote impulsive spending because they eliminate the "pain of paying" (Soman, 2003), the effects of this change on the frequency of impulsive purchases, particularly in online and offline retail platforms, have not been sufficiently investigated. Jiang (2022), for example, observed that mobile payment systems unintentionally encourage impulsive buying by making payments more convenient; however, the study did not distinguish between these effects in online and physical retail settings. Furthermore, digital wallets and one-click checkouts make payments easier, but Kapoor et al. (2020) did not take into consideration how rewards, payment options, and perceived security interact to affect consumer impulsivity. Furthermore, Gupta and Arora (2022) highlighted that the perceived security and trust of digital payments increase the frequency of purchases; however, the study lacked a comparative lens across various retail environments. Although digital adoption is widespread, integrative research assessing the combined effects of several

independent factors, such as payment security, reward benefits, and ease of payment, on the frequency of impulse buying is lacking, especially when considering both online and offline retail channels. The goal of this study is to close this important gap.

## **6. RESEARCH GAP**

Even though the body of research on how digital payments affect consumer behaviour is expanding, there are still certain unanswered questions about how these systems affect impulsive purchasing in various retail settings. For example, Soman (2003) offered fundamental insight into how electronic payments encourage impulse buying by lowering psychological resistance to spending. However, this study did not examine contextual factors such as retail format (online vs. offline), instead concentrating on the general psychological mechanism. The impact of mobile wallet designs on impulsive decisions was studied by Kapoor et al. (2020), who found that a more seamless payment interface encourages impulsive purchases. However, their study did not compare digital and physical retail environments, nor did it evaluate the interactions between factors like rewards, security, and payment variety. Comparably, Gupta and Arora (2022) found that consumer trust in digital payment systems has a significant impact on purchasing behaviour. However, they did not look into how this trust affects impulse buying behaviour when it is mediated by reward programs or perceived ease of use. Hence, there is a glaring research gap in thoroughly examining the various aspects of cashless transactions, such as security, rewards/cashback, ease of payment, and payment options, and how they all affect impulsive purchasing, especially when viewed through the prism of dual retail formats (online and offline). For companies and legislators hoping to maximise consumer engagement tactics in the developing cashless economy, closing this gap is crucial.

## **7. RESEARCH DISCUSSION**

### ***7.1 Analyse the impact of independent factors—ease of payment, availability of payment options, rewards and cashback, and security—on the frequency of impulsive purchases made through cashless transactions.***

Consumer behaviour has fundamentally changed as a result of the emergence of digital financial technologies, especially in the area of impulse buying. The psychological foundations and technological enablers of cashless transactions, which tend to mask the pain of payment and encourage impulsive behaviour, have been the subject of much research by academics. According to Soman (2003), electronic payments weaken self-control and increase impulsive purchases by reducing the mental accounting of spending. This was corroborated by Jiang (2022), who discovered that because mobile payment methods are quick and easy, customers are more likely to act impulsively when using them. One of the main factors influencing consumer spontaneity is frequently mentioned as being the ease of payment. According to Kapoor et al. (2020), one-tap payment methods and streamlined digital interfaces lessen cognitive load, increasing the likelihood that customers will make impulsive purchases. Similarly, Chatterjee and Das (2021) pointed out that impulsivity is increased when payment gateways are seamlessly integrated into mobile apps. According to Sharma and Singh (2019), the seamless nature of digital payments encourages customers to follow their impulses rather than making thoughtful purchases. Offering a variety of payment methods is also essential for boosting customer satisfaction and frequency of purchases. According to Ali and Raza (2020), having a variety of payment options (such as wallets, BNPL, and UPI) eases the burden of

making decisions and increases impulsive behaviour. Verma and Tiwari (2021) also underlined that having a variety of payment options allows customers to make impulsive purchases without worrying about having to pay for them right away. It has been demonstrated that cashback and reward programs integrated into online payment systems serve as behavioural reinforcers. Cashback offers serve as instant gratifications that lead to an increase in impulsive purchases, according to Singh and Goyal (2020). Similarly, Sari et al. (2023) demonstrated a strong correlation between millennials' impulsive purchases and reward-driven incentives in e-wallets. According to Mohan et al. (2013), these promotional cues encourage emotional spending in addition to increasing basket size. Transaction frequency and trust are influenced by how secure digital payment systems are perceived to be. According to Gupta and Arora (2022), a greater sense of security encourages more people to use cashless transactions, which in turn encourages more impulsive purchases. According to Solat (2017), a psychological barrier caused by a lack of perceived security reduces impulsive transactions. Customers who have a high level of trust in payment platforms are more likely to make frequent, low-value impulsive purchases, as Chen and Li (2021) showed. According to Taylor and Levin (2011), secure payment channels integrated into mobile apps foster a controlled but impulsive buying environment. According to Bansal and Taylor (2019), digital environments with low perceived transaction risk are more conducive to impulse buying. Zhou and Wong (2020) investigated how loyalty incentives and payment security enhance impulsive purchasing. Early research on how rewards combined with transaction ease can trick consumers into thinking irrationally was done by Soman and Cheema (2002). Customers are even more likely to make impulsive purchases in the post-COVID digital era due to the convenience and guarantee of secure, contactless payments, according to Jain and Rana (2021). According to Bakar et al. (2025), cashless payment methods such as BNPL (Buy Now, Pay Later) plans significantly lessen the perception of financial constraints, which encourages more impulsive purchases. Consumers view rewards and cashback as extra spending power rather than savings, which skews budgeting behaviour, according to Patel and Patel (2020). According to Narayan and Rao (2021), security guarantees on Paytm and GPay encourage regular use, which in turn encourages impulsive purchases. Chaudhary and Dey (2023) found that when several payment incentives are offered at the same time, impulse purchases are at their highest. Das and Dasgupta (2018) highlighted that a number of factors, especially security, incentives, and ease, work together to encourage impulsive purchases. The cross-platform influence of these factors was highlighted by Rani and Yadav (2022), who found that customers in Indian tier-2 cities who used digital payments were also more likely to make impulsive purchases in physical stores. Customers view digital payments as less "real" than cash, which causes a psychological decoupling from actual money spent and encourages impulsivity, according to Malik et al. (2022) and Iqbal and Shafi (2020). This was furthered by Taylor (2022), who claimed that rewards and transaction speed combined can overcome common purchase barriers. Despite the abundance of research, few studies look at how these four independent factors—security, rewards/cashback, payment options, and ease of payment—combine to affect the frequency of impulsive purchases. Furthermore, as noted by Bansal and Taylor (2019), the comparative dimension between online and offline retail formats is still under-represented, allowing for additional empirical validation.

***7.2 compare the influence of cashless transaction features on impulse buying behaviour between online and offline retail environments.***

The development of cashless transactions has changed how consumers make purchases in both online and physical retail settings. Fundamental insights into how cashless payment systems lessen the "pain of paying," which in turn increases impulsive spending, were established by Soman (2003). Despite being relevant to both retail environments, this framework takes on distinct forms depending on contextual factors such as platform interactivity, physical presence, and immediacy of gratification. Numerous studies highlight how easy navigation, integrated payment methods, and promotional incentives make consumers highly vulnerable to impulsive purchases in online retail settings. Online shopping's immediacy and anonymity increase impulsive behaviours, according to research by Kukar-Kinney, Ridgway, and Monroe (2009). One-click payment methods on e-commerce platforms greatly boost the possibility of impulsive purchases, according to Verhagen and van Dolen (2011). According to Bansal and Taylor (2019), who looked at the convenience of mobile wallets in both formats, online impulse buying is more common because of algorithm-driven recommendations and targeted advertising. In a similar vein, Kaur and Singh (2020) contended that the online setting amplifies impulsive purchases due to customisation and 24/7 accessibility. On the other hand, offline retail also encourages impulsive purchases, particularly when combined with in-store cashless payment methods like contactless cards, QR code scanners, and NFC-based mobile payments. According to Rook and Fisher (1995), in-store cues like lighting, layout, and music can cause impulsive purchases, which are now further accelerated by frictionless digital payments. Bell, Corsten, and Knox (2011) verified that the availability of instant digital transactions in physical stores reduces checkout wait times and increases impulse buying. When comparing online and offline environments, Gupta and Arora (2022) discovered that although online impulse buying is more common, offline stores continue to dominate in value because of the in-person interactions with products. According to Jiang (2022), using UPI or mobile apps to pay in-store creates an instant gratification loop that mimics the psychological comfort of online transactions. According to Kapoor et al. (2020), digital payment incentives like cashbacks and rewards have an impact on both settings, but they have a greater impact online because customers are constantly exposed to customised deal alerts. Singh and Goyal (2020) went on to explain that payment-based promotions are frequently incorporated by online retailers during the checkout process, which encourages impulsive last-minute purchases. Easy payment improves impulsiveness in both formats, but it has a different effect on user behaviour, according to Sharma and Singh (2019). While offline consumers associate ease with contactless payment and quick scanning, online consumers associate it with automation and stored payment credentials. According to Mohan et al. (2013), mobile payments reduce social friction in physical stores, allowing for more impulsive purchases. Ali and Raza (2020) emphasised that having a variety of payment options makes it easier for users to make impulsive purchases in online settings where they can effortlessly switch between wallets, cards, or BNPL (Buy Now, Pay Later). But according to Verma and Tiwari (2021), growing acceptance of digital payments in offline settings—particularly in semi-urban areas—is promoting more impulsive purchases, especially among young adults. Zhou and Wong (2020) investigated how format preference is influenced by security perceptions. They came to the conclusion that while offline shoppers feel more secure and in control during POS transactions, which makes them more receptive to impulsive purchases, online shoppers are more sensitive to transaction security because they fear data theft. Although online retailers can more dynamically customise these offers based on browsing history, Sari et al. (2023) found that cashback and rewards are powerful behavioural motivators in both

contexts. Rewards in offline retail, particularly those offered through digital receipts and app-linked loyalty programs, are gaining traction, according to Patel and Patel (2020). According to Narayan and Rao (2021), the grocery and fashion industries are seeing an increase in the offline use of cashless payments, which is causing last-minute, reward-driven impulsive purchases that result in larger basket sizes. According to Chaudhary and Dey (2023), the combination of digital convenience and physical stimuli is promoting impulse buying in hybrid retail experiences, which are a result of mobile payment integration in offline settings. Although initially an online phenomenon, Bakar et al. (2025) found that by lowering upfront financial pressure, BNPL schemes are now influencing offline purchases (such as in electronics and fashion retail). Customers perceive digital currency as less "real" than physical currency, which blurs the lines between spending on both, according to Iqbal and Shafi (2020). According to Das and Dasgupta (2018), digital incentives that are consistent across retail contexts are what drive multi-channel shopping behaviour, blurring the boundaries between online and offline impulse buying. Similar to the digital ad model, Taylor and Levin (2011) highlighted how location-based offers in mobile apps can encourage impulsive purchases in physical stores. According to Chen and Li (2021), when payment features are similar, users who are heavily involved in digital ecosystems (such as Amazon Pay and Apple Wallet) consistently engage in impulsive buying behaviour on both online and offline platforms. Due to concerns about safety and hygiene, Jain and Rana (2021) discovered that post-pandemic shoppers prefer contactless payments even when they are not shopping, which keeps them engaged in digital impulse behaviours. Urban youth have format-agnostic impulse tendencies, according to Rani and Yadav (2022), as long as digital payment incentives and convenience are preserved. According to Malik et al. (2022), cashless transaction features are key enablers in both contexts, even though the impulsiveness triggers may vary slightly.

## **8. CONCLUSION**

In conclusion, the integration of cashless transaction features has significantly reshaped consumer impulse buying behavior across both online and offline retail environments. While online platforms stimulate impulsive purchases through personalized recommendations, ease of navigation, and automated payment systems, offline retail leverages contactless payments and physical stimuli to evoke similar responses. Research consistently highlights that features such as ease of payment, multiple payment options, rewards, cashback, and security play pivotal roles in driving spontaneous purchases. Although the contextual factors differ—such as physical interaction in offline shopping and algorithmic nudges in online platforms—the psychological triggers remain closely tied to digital convenience and reduced payment friction. The blending of these experiences through hybrid retail models and digital ecosystems has further diminished the distinction between formats, promoting a consistent pattern of impulse buying behavior. Thus, cashless transactions serve as a critical enabler, enhancing the frequency and ease of impulsive purchases in today's evolving retail landscape.

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