



UNDERSTANDING POST-PURCHASE REGRET IN THE ERA OF FINTECH: THE ROLE OF BUY NOW PAY LATER AND IMPULSIVE BUYING BEHAVIOUR

Saman Ismail¹, Ahmar Aleem², Tahira Tariq³

DOI: <https://doi.org/10.63544/jbii.v5i7.105>

Affiliations:

¹ Lecturer, Department of business administration, Salim Habib University, Karachi
Email: samanizhar@hotmail.com, saman.izhar@shu.edu.pk

² Lecturer, Dept. Of Economics and Management Sciences, NEDUET, Karachi
Email: ahmaraleem@cloud.neduet.edu.pk

³ Assistant Professor, Department of Social Sciences, Salim Habib University, Karachi
Email: tt.tahiratariq@gmail.com, tahira.tariq@shu.edu.pk

Corresponding Author's Email:

¹ samanizhar@hotmail.com

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Article History:

Received: 22.06.2026

Accepted: 10.07.2026

Published: 21.07.2026

Abstract

Purpose: With digital payment technologies rapidly evolving, including the rise of Buy Now Pay Later services, the purchasing habits of consumers have changed, leading to new psychological dynamics of digital transactions. This study aimed to explore the effect of Buy Now Pay Later (BNPL), Digital Financial Literacy (DFL), and Spendception on the Impulsive Buying Behaviour (IBB) and Post Purchase Regret (PPPR) of young consumers. In addition, the mediating effect of impulsive buying and the moderating effect of contextual factors in these relationships are explored.

Design/methodology/approach: This study was of quantitative type and primary data was collected using a structured questionnaire from 300 young consumers (university students, alumni and early career employees) of selected universities and private organizations of Pakistan. The measurement items were derived from previously developed measures on 5-point Likert scale. Partial Least Squares Structural Equation Modelling (PLS-SEM) was used to analyse the collected data by using SmartPLS software.

Findings: BNPL, digital financial literacy, and Spendception are found to be significant positive factors towards impulsive buying behaviour. The findings also showed that impulsive buying had a strong relationship with post-purchase regret, providing evidence that people's spontaneous purchases can lead to a negative post-consumption emotion. The mediation analysis revealed that impulsive buying is a significant mediator between the relationships of BNPL, digital financial literacy, Spendception and post-purchase regret. Furthermore, the high moderating effects suggest that the effects of factors associated with digital payments on impulsive buying depend on certain individual and contextual factors.

Implications: The results offer significant policy implications for both the policymakers and fintech service providers, e-commerce platforms and educational institutions, as they highlight the importance of fostering responsible digital payment habits, enhancing digital financial literacy, making digital payments more transparent, and building awareness among consumers about the dangers of excessive impulse spending and post-purchase regret.

Originality/value: This piece of research falls into the growing body of literature exploring digital consumer behaviour, as it brings together BNPL, digital financial literacy, and the novel Spendception, into one framework to clarify the concept of impulsive buying and regret following a purchase. This study sheds light on both mediating and moderating pathways and contributes to our understanding of the financial and psychological consequences for young consumers of digital payment innovations beyond the scope of the behavioural finance and consumer behaviour theories that have been previously studied.

Keywords: Buy Now Pay Later (BNPL); Digital Financial Literacy; Spendception; Digital Payments; Impulsive Buying Behaviour; Post-Purchase Regret



1. Introduction

1.1 Background

With the swift development of financial technology (FinTech), both consumers and financial services are changing their interactions and approach to purchasing decisions. The advent of digital payment systems, mobile banking apps, electronic wallets, and instalment financing has made financial transactions much easier. One of the most rapidly evolving types of digital consumer financing is Buy Now Pay Later (BNPL), which lets consumers buy products now and pay for them in instalments with no interest or low interest (Guttman-Kenney et al., 2022). The rising trend of BNPL is transforming the consumer buying habits by providing greater flexibility, convenience and accessibility, as compared to conventional credit facilities.

BNPL has surged in popularity globally and is particularly popular among younger consumers who prefer to buy something without having to go through the process of applying for a loan or using a credit card. The introduction of BNPL into e-commerce has also boosted the growth of the market by allowing consumers to make purchases effortlessly at the point of sale (Nusir et al., 2026). Recent research found that the ease and convenience of instalment financing have shifted consumer spending habits, leading to increased spending frequency and amount, especially for digitally engaged consumers (Furqan et al., 2025).

This trend is especially relevant in countries with less formal credit, such as in developing economies. In this aspect, Pakistan is a special case. In the last 10 years, digital financial services, e-commerce, and smartphones have seen significant growth in Pakistan, a lower-middle income country with a large young population. While there is a growing desire among consumers, a large number of people are not served by the traditional banking system. This means that for many consumers, mainstream credit financing is hard for big-ticket items like smartphones, laptops, household appliances, and lifestyle items.

To fill this funding deficit, fintech businesses have developed BNPL options that enable customers to pay in instalments over the course of a few months. In Pakistan, QisstPay, Qist Bazaar, KalPay, and Yeylo are among the prominent players in the BNPL segment, providing customers with easy instalment payment options. These platforms offer increased consumer access to products which would otherwise be difficult for middle class consumers to afford, due to a reduction in upfront payment requirements. These services can also have negative repercussions for financial inclusion, consumption flexibility and future financial health.

One of the benefits of BNPL is that it lowers the psychological strain of spending. Now, consumers do not have to pay a huge amount of money at the point of sale. Instead, the cost of a product is divided into smaller instalments, so that the expenditures do not seem to be as psychologically meaningful. This trend has taken on greater significance in digital payment systems where payments are made in real-time via mobile app and online channels.

According to the recent research on consumer behaviour, digital payments change consumers' psychological experience of spending with three aspects: the first being reduced spending visibility, the second being higher spending control and the third being the emotional detachment from spending (Faraz & Anjum, 2025). A multi-dimensional construct that explains the change in psychological resistance towards spending is called the spendception, and these changes are collectively conceptualized. The Spendception differs from the perception of costs by concentrating on the internal perception of spending, instead of consumers having the necessary financial resources to make a purchase.

With digital financial ecosystems continually evolving, knowing the psychological impact of Spendception is important. A lack of awareness around spending can lead to impulse buying, especially among younger consumers who are very interested in digital commerce platforms and social media marketing. While the immediate satisfaction of making an impulsive purchase might be there, it can also lead to financial strain and unhappiness, as well as feelings of regret after the fact, when consumers realize the consequences of their purchase.

Digital Financial Literacy (DFL) is another potential factor that could impact these relationships. Digital Financial Literacy is defined as the capacity to comprehend, assess and apply digital financial products and services competently. People who have high DFL tend to have greater knowledge of the requirements for repayments, to assess financial risks, and make informed consumption decisions. This suggests DFL could be



a protective factor that diminishes adverse behavioural outcomes from BNPL use and changing spending beliefs.

The present study is theoretically and practically significant as the relationships between Spendception and the use of BNPL services, Impulsive buying behaviour, Post-purchase regret, and Digital Financial Literacy in Pakistan have gained relevance due to the growth of these services at a rapid pace and their reliance on digital financial platforms.

1.2 Problem Statement

BNPL services have revolutionized the way people buy by allowing customers to buy products now and pay for them later, without having to pay them in full at the moment of purchase. This is an appealing alternative to traditional financing methods to the middle class of Pakistan. Large expenses made up of smaller payments may make people feel like they are not as burdened and can make products that would otherwise be unattainable seem attainable.

As e-commerce platforms and social media marketing are being expanded and embraced at a rapid pace, BNPL products are becoming more accessible to consumers, who are constantly being bombarded with opportunities to purchase these products. Lifestyle, fashion and electronic devices are common products that are advertised online for instalment purchases with a particular emphasis on young consumers. Although BNPL makes consumption more accessible, its seamless design could essentially cause consumers to make impulse and emotional purchases without taking into account their future finances.

There are strong indications that the digital payment context lowers consumers' consciousness of the transaction amount and diminishes the psychological barriers of financial transactions (Faraz & Anjum, 2025). This could lead to consumers being more susceptible to impulsive buying, particularly when buying items can be done quickly online. Consumers experience negative emotions when they are faced with the repayment requirements and understand the implication of their purchase once the purchase has been made impulsively, such as dissatisfaction and post-purchase regret.

Although the BNPL services are becoming commonplace in Pakistan, empirical studies on the psychological and behavioural impacts of BNPL services are still scarce. Previous research has mainly concerned with the uptake and financial inclusion of technology, and less research has been conducted on the psychological processes through which digital payment experiences affect impulsive consumption and post-purchase evaluations. Moreover, the impact of Digital Financial Literacy on these behavioural effects is not widely studied. Hence, the need for a thorough investigation to understand the relationship between Spendception/BNPL and impulsive buying behaviour and post-purchase regret among the Pakistani consumers.

1.3 Research Gap

While the BNPL literature has grown substantially in the last few years, there are several important gaps. Research on BNPL so far has largely centred on the intent to use BNPL, motivations for using BNPL, and financial inclusion outcomes, while the study of psychological outcomes of BNPL-assisted consumption has received limited attention (Nusir et al., 2026). Specifically, the process by which BNPL usage increases impulsive buying and/or post-purchase regret has not yet been fully explored.

Secondly, most of the empirical research is carried out in developed economies and economies of Southeast Asia, hence the findings are not applicable to emerging economies like Pakistan. Pakistani consumers' behaviour is significantly affected by the unique socioeconomic characteristics, cultural values, and financial infrastructure conditions in Pakistan, which are not found in the developed countries.

Third, the concept of Spendception, which has come into use recently, has not been much explored in the scholarly field despite its relevance in addressing consumer spending behaviours in the context of digital payments (Faraz & Anjum, 2025). Spendception has been explored in existing studies mainly in the context of digital payments but its impact on impulsive purchase behaviour in BNPL contexts is not explored.

Fourth, the existing literature has mainly focused on financial literacy as a direct determinant of financial behaviour. There is relatively limited research that explores the moderating effect of Digital Financial Literacy between the behavioural consequences of BNPL use and Spendception. Knowing about



the vulnerability of digitally financially literate consumers to the impulse buying is an important theoretical and practical contribution.

Given these gaps, the present study tackles these issues by organizing all the variables under the same umbrella in a conceptual framework comprising Spendception, BNPL usage, impulsive buying behaviour, post-purchase regret, and Digital Financial Literacy in the context of Pakistan's developing fintech environment.

1.4 Research Objectives

The study will aim at achieving the following objectives:

- To explore the impact of Spendception on Impulsive Buying Behaviour of Pakistani consumers.
- To examine how the adoption of BNPL affects the impulsive buying.
- To investigate how impulsive buying affects post purchase regret.
- To explore the moderating effect of Digital Financial Literacy between Spendception and Impulsive buying behaviour.
- To explore the moderating effect of Digital Financial Literacy between BNPL usage and impulsive buying behaviours.

1.5 Significance of the Study

This study has a number of significant contributions to the literature.

First, the new concept of 'Spendception' is brought to the field of BNPL services and consumer financing. Existing research studies have explored the concept of Spendception in digital payment scenarios, but it is not well-studied in the context of BNPL-facilitated purchase behaviour.

Secondly, the study combines consumer behaviour and fintech research aspects, considering psychological and technological aspects of impulsive buying behaviour. This multi-disciplinary perspective offers a better understanding of the current digital consumption practices.

Thirdly, the study contributes to the current body of knowledge on BNPL by identifying post-purchase regret as a behavioural consequence of impulsive purchase. Existing studies have mainly investigated adoption and usage intentions, but few studies have examined the post-purchase psychological outcomes.

Fourth, the study proposes that Digital Financial Literacy can be used as a buffering factor that can diminish consumers' vulnerability to impulsive spending behaviour. This contribution gives useful indications on the role of financial education and digital skills to contribute to responsible consumption.

Lastly, the study is applied to the Pakistan case to provide empirical evidence from an under-researched emerging market where fintech is being adopted at a fast rate, e-commerce is growing and digital financial services are becoming increasingly important. The results are expected to offer policy implications for policy makers, fintech providers, consumer protection organizations and financial educators to encourage responsible Digital Financial Behaviour.

2. Literature Review

2.1 Theoretical Foundation

The relationships between Spendception, Buy Now Pay Later (BNPL) usage, impulsive buying, post-purchase regret and Digital Financial Literacy were explained by embedding three complementary theoretical perspectives in this study. In particular, the study is based on Pain of Paying Theory (Prelec & Loewenstein, 1998), Theory of Planned Behaviour (Ajzen, 1991) and Cognitive Dissonance Theory (Festinger, 1957). Together, these theories provide a thorough framework for investigating how digital payment contexts impact consumption perceptions, decision-making, and post-consumption evaluations..

2.1.1. Pain of Paying Theory (Payne & Loewenstein, 1998) the consumers feel the pain every time they pay their money. This suffering is different in various payment methods. Consumers' minds react strongly to the traditional cash transactions, as they can see the money leaving their hands. On the other hand, digital payment systems decrease the salience of the payment, by making it more difficult for consumers to link the payment to the consumption, which makes them more unaware of the cost of money.



Recent studies indicate that cashless payment reduces the visibility of spending and raises spending willingness due to the decreased psychological resistance while using these payments (Faraz & Anjum, 2025; Schomburgk et al., 2024). This is exacerbated by BNPL services, which can break up big purchases into smaller instalments, decreasing up-front costs and making the purchase feel less expensive from a psychological standpoint. As a result, consumers can be tempted to spend in ways that they otherwise wouldn't if they were clearly aware of all their payments at the time of their purchase. In the context of this study, Spendception and BNPL usage are the key factors that explain the impact of "Pain of Paying Theory" on impulsive buying behaviour. The theory states that a reduction in payment pain increases the consumers' susceptibility to spontaneous buying decisions.

2.1.2 Theory of Planned Behaviour: The Theory of Planned Behaviour (TPB) suggests that the intention to perform a behaviour, which is influenced by attitude and subjective norm, and perceived behavioural control are what determine human behaviour (Ajzen, 1991). Highly favourable attitudes toward a behaviour combined with a perceived level of control over action are more likely to result in the behaviour.

In digital payment settings, consumers can form positive attitudes regarding BNPL services due to its convenience, flexibility, and attractiveness to buy the desired items. Also, the growing uptake of digital payment and instalment lending helps to establish social norms that encourage BNPL adoption. Consumers also might feel they have more control over the total expenditure due to the instalment structure being "financially more accessible" and "manageable."

The recent research has shown that positive attitudes towards digital financial services have a significant impact on the intentions of purchases and consumption behaviours (Aisjah et al., 2024; Furqan et al., 2025). Hence, the TPB is the suitable theory to understand consumers' adoption of BNPL services and their impulsive purchasing.

According to the 2.1.3 Cognitive Dissonance Theory, cognitive dissonance is a state of psychological discomfort when people make decisions that violate their beliefs, expectations or personal values (Festinger, 1957). After making a purchase, consumers may assess if the purchased product is a good value for the resources given. Cognitive dissonance may occur when the purchase does not turn out as expected and/or causes financial difficulty.

Post purchase dissonance is especially likely to occur for impulsive purchases, which are typically bought without a thorough consideration of alternatives. When the excitement has died down, the purchasing consumer may rethink what they have done and realize that this purchase was unnecessary or not a wise financial decision. These assessments often leave customers with post purchase regrets.

The results of consumer behaviour studies over the past few years have consistently shown that impulsive buying is positively associated with the feeling of regret after purchase, especially when buying in a digital environment where purchases are made quickly and with less consideration (Nusir et al., 2026; Rashid et al., 2024). Based on this, we draw out the theoretical framework of the study from Cognitive Dissonance Theory. Therefore, the theoretical framework of the study is provided by Cognitive Dissonance Theory.

2.2 Concept of Spendception

The growing adoption of digital payment systems has revolutionized the way consumers spend. Digital payments create a different sense of the physicality and visibility of financial outflows, which can impact consumer perceptions of spending, unlike traditional cash payments. To address these psychological shifts, Faraz and Anjum (2025) came up with the term Spendception.

Spendception is the reduced 'mental barrier' to spending that occurs in digital payment environments. It aims to measure the degree of distancing of consumers from financial outcomes of their spending activities, as a result of decreased visibility of spending, perceived control over spending, and emotional distance from spending. Spendception is different from perceived affordability, which is about consumers' perception of whether they can afford the purchase financially, to the Spendceptive, which is about the experience they have when spending.

There are three dimensions of the construct.



2.2.1. Psychological Visibility of Spending: means the consumers' conscious awareness of spending money in a transaction. The immediate and tangible feedback from cash payments is that the consumers, as tangible objects, see the money leaving their hands. However, this process is hidden by digital transactions and leads to a lack of awareness about the real cost of the transactions (Schomburgk et al., 2024).

2.2.2. Perceived Spending Control: consumer's own perception that he or she controls his or her spending. Digital payment systems may make it seem like one is financially manageable due to the speed and ease of the transactions. Reduced salience of spending could also lead to increased spending (Davydenko & Peetz, 2024), as consumers might feel like they are in control while they are spending money.

2.2.3. Easy Digital Payment and Emotional Detachment: Digital payment systems reduce the amount of work that is required to be done by the parties to make the payment. Emotional distance between consumers and their purchasing decisions is fostered by features like one-click purchasing, mobile wallets, automated payment mechanisms, etc. This emotional detachment increases the likelihood of spontaneous spending and reduces the psychological cost of spending (Ly & Ly, 2024).

2.3. Spendception and Impulsive Buying

Impulsive buying is defined as buying without prior planning or thought and is an impulsive and emotional purchase process (Rook & Fisher, 1995). Existing studies indicate that payment methods have great impact on the impulsive buying behaviour, as they affect consumer's awareness of spending.

If consumers are not aware of the financial impact of their spending, they tend to focus less on it and more on the benefits they can get from the product itself. Likewise, the belief that spending is being controlled and that they are not emotionally attached lowers their self-regulatory mechanisms in controlling unnecessary spending. With this, the consumers are more prone to impulsive buying.

Faraz and Anjum (2025) found that Spendception has a significant role in predicting purchase behaviour by using impulse-driven decision-making processes. Similarly, research on digital payment systems has shown that increased payment salience leads to a decrease in spontaneous purchasing and an increase of spending restraint (Schomburgk et al., 2024; Ly & Ly, 2024).

H1: There is a significant effect between the variable spendception and impulsive buying behaviour

2.4. Use of BNPL and impulsive buying.

BNPL is one of the fastest-growing digital credit options that enables consumers to buy something now and pay for it later. BNPL services decrease the financial commitments for the initial purchase of a product or service, making it easier for people to decide on purchases. Psychologically, BNPL usage will decrease the salience of payment, as the consumer will only see how much they are to pay per instalment and the total cost of purchase will be blurred. Payment divisibility encourages quick gratification and erodes financial discipline.

According to recent studies, BNPL users are found to have a higher impulsive purchasing behaviour compared to the consumers who are not using it (Furqan et al., 2025; Nusir et al., 2026). Instalment plans have the benefit of being perceived as 'flexible' and 'reasonable' and this can help lead consumers to buy items that they may otherwise delay or not buy at all. In Pakistan, where financial constraints are common among middle-income consumers, BNPL can have a profound impact on consumer purchasing habits, creating the perception of affordability and greater access to products. This will therefore be expected to boost impulsive buying behaviours when using BNPL.

H2: BNPL usage positively influences impulsive buying behaviour.

2.5. Impulsive Buying and Post-Purchase Regret

Impulsive purchases often generate immediate satisfaction because they fulfill consumers' emotional desires and provide instant gratification. However, the absence of careful evaluation frequently results in unfavorable outcomes after the purchase is completed.

Post-purchase regret refers to a negative emotional state that occurs when consumers believe that an alternative decision would have produced a more desirable outcome. Regret emerges when consumers recognize that a purchase was unnecessary, excessively expensive, or inconsistent with their financial goals.



Research consistently demonstrates that impulsive buying increases post-purchase regret because spontaneous decisions are typically associated with lower information processing and weaker consideration of long-term consequences (Rashid et al., 2024; Nusir et al., 2026). Consumers who make impulse purchases frequently reassess their decisions after emotional excitement diminishes, leading to dissatisfaction and self-blame.

The financial obligations associated with BNPL purchases may further intensify regret because consumers continue to encounter repayment commitments long after the initial excitement of acquisition has disappeared.

H3: Impulsive buying positively influences post-purchase regret.

2.7. Concept of Digital Financial Literacy

Digital Financial Literacy (DFL) refers to an individual's ability to understand, evaluate, and effectively utilize digital financial products and services. It encompasses knowledge related to mobile banking, digital payments, online lending, financial security, and fintech applications.

The growing complexity of digital financial ecosystems has elevated the importance of DFL in promoting responsible financial behaviour. Consumers possessing high levels of DFL are more capable of evaluating repayment obligations, comparing financial alternatives, and recognizing potential risks associated with digital credit products.

Recent studies have identified DFL as a critical determinant of financial decision-making quality and consumer well-being (Morgan et al., 2019; Setiawan et al., 2024). Individuals with stronger digital financial competencies are generally less vulnerable to financial manipulation and impulsive consumption behaviours.

2.7.1 Moderating Role of Digital Financial Literacy. Digital Financial Literacy may serve as a protective mechanism that weakens the influence of Spendception and BNPL usage on impulsive buying behaviour.

Consumers with high DFL possess greater awareness of repayment obligations and financial consequences. Consequently, they are less likely to be influenced by reduced spending visibility, perceived spending control, and emotional detachment associated with digital payment systems. These consumers are more capable of recognizing spending biases and evaluating purchases rationally.

Similarly, highly financially literate consumers are more likely to understand the long-term implications of BNPL financing and therefore exercise greater caution when making purchasing decisions. Prior research indicates that financial literacy strengthens self-regulation and reduces impulsive spending tendencies (Furqan et al., 2025; Setiawan et al., 2024). Therefore, Digital Financial Literacy is expected to attenuate the positive relationships between Spendception, BNPL usage, and impulsive buying behaviour.

H4: Digital Financial Literacy negatively moderates the relationship between Spendception and impulsive buying behaviour such that the relationship becomes weaker at higher levels of Digital Financial Literacy.

H5: Digital Financial Literacy negatively moderates the relationship between BNPL usage and impulsive buying behaviour such that the relationship becomes weaker at higher levels of Digital Financial Literacy.

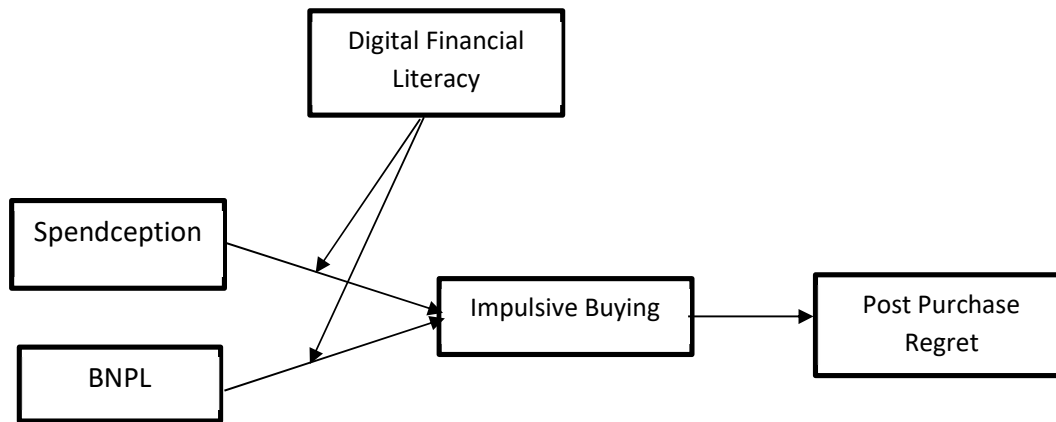
2.8 Conceptual Framework

Based on the theoretical foundations and empirical evidence discussed above, this study proposes a conceptual framework in which Spendception and BNPL usage function as antecedents of impulsive buying behaviour. Impulsive buying subsequently influences post-purchase regret. Digital Financial Literacy serves as a moderating variable that weakens the effects of Spendception and BNPL usage on impulsive buying behaviour.

The framework integrates consumer psychology, fintech adoption, and financial capability perspectives to explain how digital payment experiences and instalment-based financing shape purchasing behaviour and post-consumption evaluations among consumers in Pakistan's rapidly evolving digital financial environment.



Figure 1
Conceptual Model



3. Research Methodology

3.1 Research Design

This research uses quantitative and cross-sectional research design, as the researcher examines the effect of Buy Now, Pay Later (BNPL) use on post-purchase regret mediated by impulsive buying and moderated by digital financial literacy. A survey method was chosen as it allows to gather a structured set of data from many respondents and is commonly applied in research of consumer behaviour and fintech. For purposes of testing causal relationships of latent constructs through Structural Equation Modelling (SEM) quantitative survey designs are especially appropriate (Hair et al., 2024).

3.2 Research Framework

The conceptual framework suggests that the use of BNPL and the concept of spendception can affect the post-purchase regret via impulsive buying behaviour. Moreover, the link between the use of BNPL and impulsive buying is mediated by the level of financial literacy that consumers have, with financially literate consumers potentially having more control over their impulsive purchasing decisions. The model proposed is based on the literature related to consumer decision-making and financial behaviour.

3.3 Target Population

The target group is university students and young working population at Pakistan. In particular, the following elements are included:

- Under graduate and post graduate students in public and private Universities of Pakistan.
- Students from the University who have completed their studies in the last 3 years or young employees with less than 5 years of experience.
- Both male and female respondents.
- People who have experience of digital payment platforms and/or BNPL services.

The population was chosen as they are the biggest users of fintech, digital wallets and BNPL platforms. They are important to consider in the context of their frequent online shopping habits and their propensity to experience post-purchase regret.

3.4 Sampling Technique and Sample Size

Purposive sampling method was used, which is a non-probability sampling method. Eligible respondents were university students, recent graduates, or employees with prior experience and knowledge of digital financial services in the early career stage.

Data were gathered by distributing online surveys via university networks, alumni associations, social media, and professional networks. Online surveys are deemed to be effective in reaching digitally active population segments who are often using fintech services.



This study used 350 respondents. This sample size is greater than the minimum that is generally recommended for Partial Least Squares Structural Equation Modelling (PLS-SEM) which provides sufficient power and parameter estimation (Kock & Hadaya, 2018).

3.5 Data Collection Instrument

The data were gathered by using a structured questionnaire to get the primary information from the respondents. First, there were two sections in the questionnaire. The information regarding the demographic characteristics of the participants such as sex, age, education, occupation and income was collected in section A. The measurement items adapted to the existing scales reported in the literature in section B were used for ensuring the reliability and validity of the constructs under investigation. Each of the measurement items was rated on a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The five point Likert scale was chosen because it is one of the most commonly used measurement scales in consumer and marketing research used to measure an individual's attitudes, perceptions, opinions and behavioural intentions.

3.6 Pilot Testing

A pilot study of about 30-40 respondents was carried out before the pilot study, which examined the clarity, reliability and comprehensiveness of the questionnaire. The feedback from participants was utilized to tweak wording, enhance clarity of items, and remove ambiguities. The internal consistency reliability was judged as acceptable if the Cronbach's Alpha is 0.70 or higher.

3.7 Data Analysis Technique

SmartPLS 3 software was used to analyze the data obtained. PLS-SEM is especially suitable for predictive research models with mediation and moderation relationships and can be used to create complex research models with many latent variables (Hair et al., 2024).

3.8 Ethical Considerations

The study followed current research ethics guidelines. Responses were voluntary and respondents were told the purpose of the study before answering the questionnaire. Confidentiality and anonymity will be adhered to at all stages of the research process and respondents have the right to withdraw from the research at any time without penalty. There will be no sharing of personally identifiable information.

4. Results

4.1. Internal Consistency Reliability

4.1. Internal Consistency Reliability Internal consistency reliability is determined by checking whether the indicators of a latent construct are measuring the same concept. The researchers are encouraged to report Cronbach's Alpha, rho_A, and Composite Reliability in PLS-SEM. Composite Reliability is generally considered as the preferred measure of reliability as it does not require equal indicator loadings (Hair et al., 2022). Cronbach's Alpha of greater than 0.70 shows satisfactory reliability and 0.80-0.90 shows good reliability. Numbers greater than 0.95 could indicate redundancy among the measurement items. Multi-item constructs have internal consistencies with all items having an α index greater than the recommended 0.70.

Table 1

Reliability and Convergent Validity Analysis

Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
0.934	0.953	0.950	0.794
0.903	0.936	0.933	0.745
0.897	0.899	0.925	0.712
1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000
0.905	0.908	0.930	0.729
0.874	0.943	0.962	0.749

As the lack of tau-equivalence assumption of rho_A brings it closer to true construct reliability than Cronbach's alpha, and usually yields estimates between Cronbach's alpha and Composite Reliability in PLS-SEM, it is generally regarded as a more accurate and consistent measure of construct reliability in PLS-SEM



than Cronbach's alpha. The analysis reveals that composite Reliability (CR) is regarded as the best indicator of reliability in SmartPLS due to the fact that it takes into account the different outer loadings of the indicators (Hair et al., 2022).

The Composite Reliability of all multi-item constructs is very high. Construct 7 ($CR = 0.962$) is a little higher than the recommended upper limit of 0.95. Hair et al. (2022) indicate that values of Composite Reliability greater than 0.95 could indicate that some of the items on the questionnaire are very similar and may be redundant. However, if the indicators are conceptually separate facets of the construct and have reasonably high factor loadings these can also be regarded as acceptable.

4.2. Convergent Validity

It is the degree to which indicators of the same construct have a large amount of common variance. The Average Variance Extracted (AVE) values should be greater than 0.50, which indicates that the construct has more than half of the variance of the indicators. All constructs are above the recommended cut-off of 0.50. The AVE values ranging from 0.712 to 0.794 for the multi-item constructs indicate that between approximately 71% and 79% of the variance in the indicators is explained by their respective latent constructs. These values have good convergent validity (Fornell & Larcker, 1981).

4.3. Discriminant Validity

The HTMT (Heterotrait–Monotrait ratio) values presented in the table are used to test the discriminant validity for the study constructs: Buy Now Pay Later (BNPL), Digital Financial Literacy (DFL), Impulsive Buying (IB), Moderating Effect 1, Moderating Effect 2, Post Purchase Regret (PPR), and Spendception. In general, the results show that the most constructs have adequate discriminant validity; the majority of HTMT values are below the strict criterion of 0.85 and the liberal criterion of 0.90. This implies that in general the constructs are empirically independent and measure different underlying theoretical concepts (Henseler et al., 2015). In particular, Buy Now Pay Later has high values of HTMT with other constructs from 0.624 to 0.861. The majority of these values are within the acceptable range, but the highest one (0.861) is just over the strict value of 0.85, meaning there is a moderate level of conceptual similarity with one construct, possibly Impulsive Buying or Digital Financial Literacy. However, the discriminant validity of BNPL is still acceptable (0.90) under the more commonly used criterion. The Digital Financial Literacy exhibits generally acceptable discriminant validity as 0.809, 0.795 and 0.818, but the relatively strong correlation with some constructs suggests conceptual overlap, which is not considered to constitute a serious problem. The value of Impulsive Buying is moderate to high with other constructs, with up to 0.769, suggesting the theoretical closeness with the behavioural outcome variables (Post Purchase Regret and BNPL usage).

However, these values are still less than the 0.90 critical value, indicating acceptable, but similar constructs. For both Moderating Effect 1 and 2, the HTMT values are in the range of 0.601 to 0.749, indicating good discriminant validity as the constructs of Moderating Effect 1 and 2 are well discriminated from the underlying latent variables in the model. The HTMT values of Post Purchase Regret range from 0.625 to 0.836, revealing acceptable discriminant validity, with the higher end of the range suggesting that there is some conceptual overlap with at least one predictor construct which is theoretically plausible based on the behavioural dependency of Post Purchase Regret with respect to impulsive purchasing patterns. Finally, the lowest values of HTMT of Spendception (between 0.601 and 0.625) clearly demonstrate the strong discriminant validity and distinctive conceptual space for Spendception in the model. Overall, the data of the HTMT test showed that the measurement model had acceptable discriminant validity for most of the constructs with no items obtained more than the critical value of 0.90. A few moderately high values (mainly about 0.861 and 0.836) suggest some conceptual similarity between behavioural constructs, but these are not a serious violation. Thus, the measurement model can be seen as having acceptable general reliability and appropriateness for subsequent analysis of the structural model, albeit with caution for the existence of overlapping behavioural constructs.



Table 2

HTMT Test (Discriminant Validity)

Buy Now Pay Later	Digital Financial Literacy	Impulsive Buying	Moderating Effect 1	Moderating Effect 2	Post Purchase Regret	Spendception
0.861						
0.829	0.809					
0.624	0.670	0.704				
0.726	0.759	0.769	0.749			
0.788	0.818	0.745	0.674	0.745		
0.836	0.795	0.652	0.639	0.601	0.625	

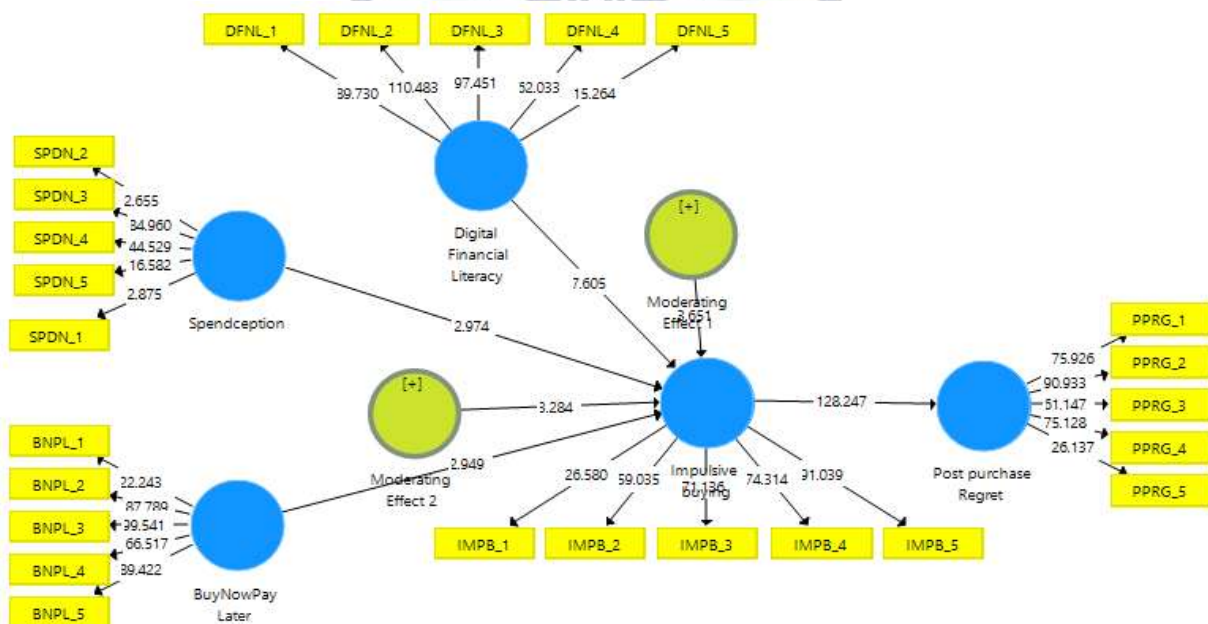
4.4. Structural Equation Model

SEM is a multivariate statistical analysis method that is designed to analyze complicated relationships between observed variables and latent (unobserved) variables in one single analysis. It combines factor analysis and regression-based methods, allowing the researcher to evaluate the relations among the indicators of the constructs and the relations among the constructs themselves. The combination of this is especially useful in behavioural, marketing, and social science research that frequently includes multiple interdependent constructs within a theoretical model (Kline, 2023). The use of measurement error in SEM allows for more precise and unbiased estimates of parameters than are obtained by the standard regression methods. It also allows for the estimation of several dependent relationships simultaneously, which makes it applicable in complex behavioural models like those of consumer's financial decision making, impulse purchasing behaviour, post purchase cognitive responses, etc. In such a context, SEM offers a strong structure to understand the interaction of different latent psychological and behavioural constructs (Byrne, 2024).

The model assessment of the structural model was performed by applying bootstrapping technique in PLS-SEM to test the significance and strength of the hypothesized model. The results of recent PLS-SEM guidelines would imply that the t value is considered to be statistically significant if it is greater than 1.96 and the p value is less than 0.05 at the 95% level of confidence (Hair et al., 2022). The results of the path coefficient analysis are discussed below.

Figure 2

SEM Analysis





The impact of Buy Now Pay Later (BNPL) on impulsive buying: The results show that impulsive buying has a positive and significant effect on Buy Now Pay Later (BNPL) ($\beta = 0.214$, $t = 2.949$, $p = 0.003$). This suggests that greater usage and accessibility of BNPL services increase consumers' tendency to make spontaneous and unplanned purchases. The deferred payment option helps to remove immediate financial pressures and make a product seem affordable, thereby making it easier to do impulse buying by youth.

The impact of Digital Financial Literacy on Impulsive Buying : The results show that Digital Financial Literacy is significantly and positively influenced impulsive buying ($\beta = 0.531$, $t = 7.605$, $p < 0.001$). This suggests that digitally financial literate consumers are more likely to interact with digital financial services platforms and could become more likely to visit online shopping environments, leading to faster purchase decisions. The coefficient value indicates that digital financial literacy is a strong predictor of impulsive buying in the model).

The impact of Spendception on Impulsive Buying: The results of the analysis show that Spendception has a positive and significant effect on impulsive buying ($\beta = 0.128$, $t = 2.974$, $p = 0.003$). The findings suggest that consumers' perception and psychological assessment of their consumption behaviour are factors that lead to an impulse buying tendency. If consumers think they can afford something or that it won't cause as much emotional stress, they are more inclined to make impulsive purchases.

The influence of impulsive buying on post-purchase regret: Post-purchase regret as a consequence of impulsive buying. The results reveal a very strong positive and statistically significant relationship between impulsive buying and post-purchase regret ($\beta = 0.941$, $t = 128.247$, $p < 0.001$). That means that an increase in impulsive purchases significantly raises the chance that consumers will feel bad about their purchases. Impulse buying is often linked with either a lack of consideration for alternatives or emotional buying, and can result in dissatisfaction and remorse after the thrill of the buy fades.

Moderating Effect 1 on Impulsive Buying: The first moderating effect is positive and statistically significant with the coefficient of $\beta = 0.099$, $t = 3.651$, $p < 0.001$ in the case of impulsive buying. As for the significant interaction effect, it would mean that the moderator has a strong effect on the relationship between the independent variable related to it and impulsive buying. This means that the more the moderating variable increases, the more intense the effect of the predictor on impulsive buying will be. In the moderation theory, the strength or direction of relationships are influenced by certain contextual factors (Hair et al., 2022). The moderating effect of IMPULSIVE BUYING was not observed in this study. Also, the second moderating effect showed the positive and significant effect on impulsive buying with a value of $\beta = 0.099$, $t = 3.284$, $p = 0.001$. Based on the results, it is found that the moderating variable will increase the effect of the independent variable to impulsive buying behaviour. Despite the relative small size of the effect compared to direct effects, the researchers' findings offer evidence that consumer psychological or contextual factors can impact the magnitude of impulsive buying tendencies, specifically online.

Moderating Effect 2 on Impulsive Buying: the second moderating effect showed the positive and significant effect on impulsive buying with a value of $\beta = 0.099$, $t = 3.284$, $p = 0.001$. Based on the results, it is found that the moderating variable will increase the effect of the independent variable to impulsive buying behaviour. Despite the relative small size of the effect compared to direct effects, the researchers' findings offer evidence that consumer psychological or contextual factors can impact the magnitude of impulsive buying tendencies, specifically online.



Table 3

Path Coefficient

Hypothesized Relationship	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t-Value	p-Value	Decision
Buy Now Pay Later → Impulsive Buying	0.214	0.210	0.073	2.949	0.003	Supported
Digital Financial Literacy → Impulsive Buying	0.531	0.535	0.070	7.605	0.000	Supported
Impulsive Buying → Post Purchase Regret	0.941	0.940	0.007	128.247	0.000	Supported
Moderating Effect 1 → Impulsive Buying	0.099	0.102	0.027	3.651	0.000	Supported
Moderating Effect 2 → Impulsive Buying	0.099	0.096	0.030	3.284	0.001	Supported
Spendception → Impulsive Buying	0.128	0.130	0.043	2.974	0.003	Supported

Note. A path is considered statistically significant when $t > 1.96$ and $p < .05$. All hypothesized direct relationships are statistically significant and therefore supported. This table is formatted in a style suitable for inclusion in a thesis, dissertation, or APA 7th-compliant journal manuscript.

Table 4

Specific Indirect Effect

Hypothesized Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t-Value	p-Value	Decision
Buy Now Pay Later → Impulsive Buying → Post Purchase Regret	0.201	0.197	0.068	2.957	0.003	Supported
Digital Financial Literacy → Impulsive Buying → Post Purchase Regret	0.499	0.503	0.068	7.381	0.000	Supported
Moderating Effect 1 → Impulsive Buying → Post Purchase Regret	0.093	0.096	0.025	3.665	0.000	Supported
Moderating Effect 2 → Impulsive Buying → Post Purchase Regret	0.093	0.091	0.028	3.280	0.001	Supported
Spendception → Impulsive Buying → Post Purchase Regret	0.121	0.122	0.041	2.956	0.003	Supported

Note. Significant at $p < .05$. The indirect effects indicate that Impulsive Buying significantly mediates the relationships between Buy Now Pay Later, Digital Financial Literacy, Moderating Effect 1, Moderating Effect 2, and Spendception with Post Purchase Regret.

Indirect Effect of Buy Now Pay Later (BNPL) on Post-Purchase Regret through Impulsive Buying. As revealed in the results, the direct effect of Buy Now Pay Later (BNPL) on post purchase regret is positive and significant ($\beta = 0.201$, $t = 2.957$, $p = 0.003$) with the intermediary of impulsive buying. The results of this study indicate that the presence and usability of BNPL services enhance consumers' impulsive buying behaviours, which in turn contribute to increased post-purchase regret. The deferred payment



mechanism helps to dampen the impact of the payment and make consumers more likely to make purchases that they subsequently regret.

Indirect Effect of Digital Financial Literacy on Post-Purchase Regret through Impulsive Buying.

The findings show that there is a significant positive indirect effect of Digital Financial Literacy on the post-purchase regret through impulsive buying with a coefficient of 0.499 ($t = 7.381$, $p < 0.001$). This "indirect" relationship is significant, as the magnitude of the relationship is high, indicating that digital financial literacy is important as an intervening factor in consumers' impulsive purchasing behaviour and the post-purchase outcomes. Consumers more used to digital financial technologies and online financial services could interact more often with digital marketplaces, which may provide more opportunities to make a quick purchase and face regretful decisions.

Indirect Effect of Spendception on Post-Purchase Regret through Impulsive Buying. Results of the analysis show that Spendception has a positive and significant influence on the post-purchase regret by impulsive buying ($\beta = 0.121$, $t = 2.956$, $p = 0.003$). This suggests that consumers' perception and psychological attitude in spending affects their impulsiveness in buying, which would lead to the feeling of remorse after the purchase of goods and services.).

Indirect Effect of Moderating Effect 1 on Post-Purchase Regret through Impulsive Buying. The first interaction effect is positive and significant with post-purchase regret as the mediator ($\beta = 0.093$, $t = 3.665$, $p < 0.001$). From this result, it can be seen that the moderating condition does not only increase the relationship between the independent variable related to impulsive buying, but also indirectly increases the level of consumers post purchase regret. For example, if the moderating variable is high, the effect of the predictor on impulsive buying increases and leads to increased post-purchase regret.

Indirect Effect of Moderating Effect 2 on Post-Purchase Regret through Impulsive Buying. Likewise, the indirect effect of the second interaction effect on the post-purchase regret through the impulsive buying is positive and significant ($\beta = 0.093$, $t = 3.280$, $p = 0.001$). This implies that the moderator enhances the indirect relationship between the respective predictor and the post-purchase regret through the higher level of the impulsive buying behaviour. While the size of the coefficient is relatively small compared with the other indirect effects, the relationship is statistically significant, supporting the importance of conditional factors in the context of an explanation of consumer regret in digital purchase environments.

5. Discussion

This study aimed to investigate the effects of Buy Now Pay Later (BNPL), Digital Financial Literacy (DFL), and Spendception on impulsive buying behaviour and post-purchase regret among the youth consumers. The role of impulsive buying was also analysed as a mediating factor between the study variables, and the moderating factors were added to the research model. The findings showed that each of the direct and indirect relationships were positive and significant, with digital payment practices, financial capabilities, and psychological perceptions of spending having a significant impact on consumers' impulsive purchasing behaviour and feelings of regret.

The results showed that BNPL has a positive effect on impulsive buying behaviour to a significant extent. This implies that the ease, flexibility and deferred payment options of BNPL lessen the instant monetary stress and foster impulsive buying choices by customers. The results are consistent with the idea of payment separation, whereby the distance between payment and consumption reduces the psychological costs of payment. The findings align with those of Lia and Natswa (2021), who discovered that the use of BNPL among Gen Z led to higher impulsiveness in purchases and overconsumption tendencies. Likewise, Dwipa and Yuniningsih (2023) found that BNPL payment is able to significantly increase impulsive buying behaviour. Recent research by Raj et al. (2024) and Ardiansari et al. (2025) also provided support on how BNPL services further increase spending freedom and decrease spending restraint, thereby creating unplanned consumption. Furthermore, Bakar et al. (2025) reported that the Pay Later service reduces consumers' pain of payment, leading to impulsive purchases in online commerce settings. Similarly, Igani et al. (2025) stated that psychological aspects of BNPL usage are highly relevant to impulse buying by the Generation Z customers. Nusir et al. (2026) also found through their systematic review that BNPL adoption is associated with impulsive



buying across all studies, and some found that it may have negative post-purchase effects. The present study thus corroborates the emerging evidence that BNPL is an important factor driving impulsive buying in the digital economy.

The study also revealed that the Digital Financial Literacy positively and significantly affected Impulsive Buying Behaviour. While conventional financial literacy has been seen as a tool that can help consumers make better financial decisions and curb financial irrationality, the present results indicate that greater digital financial competence can boost consumers' confidence and interaction with digital payment platforms, online marketplaces, and fintech services, which can lead to increased exposure to impulsive purchasing opportunities. This discovery corroborates the study conducted by Ali et al. (2025), which revealed that digital financial skills can have an impact on impulse buying, especially for them who are more confident in digital financial environment. Likewise, Azzuhurf and Cahyono (2025) believed that in the current digital world of wallets and digital payment services such as PayLater, educated consumers on financial issues can also be more involved in digital financial ecosystems. Additionally, Yahfi et al. 2025 noted that a student's financial literacy and the use of digital payment methods have been seen to raise the student's impulsive buying because of reduced awareness of the consequences of spending by the student. The findings also align with those of Salputri et al. (2025) that financial literacy along with impulsive tendencies together affect the spending behaviour of the Shopee PayLater users. The results of the current study, however, conflict with some previous research that concluded that financial literacy could serve as a protective factor against overconsumption. For instance, Ningtyas and Vania (2022) discovered that the more students were financially literate, the less of an impulsive shoplifter they were when it came to online purchases, and Yani and Sriyatun (2025) discovered that the more financially literate students were, the more responsible they were in their consumption. The findings make us believe that financial literacy might have different effects depending on the digital environment, consumer trust in digital platforms, and ease of use of instant payment systems.

The results also showed that Spendception has a positive effect on impulsive buying behaviour. This shows that consumers' perception of their money spent is different in digital payment scenarios, which can lead to a lack of awareness of real money spent and thereby increase the likelihood of impulsive purchases. The results are in line with the concept of Spendception, which Faraz and Anjum, 2025, explained that the consumer is psychologically further away from the experience of spending money, thus increasing the impulse buying behaviour due to the use of digital payment systems. Focusing on the digital payment technologies and AI-powered financial interfaces, Santoso et al. (2026) also indicated that they can further bolster the sense of illusion in spending and mislead consumers about what they are actually spending. The results also support the theoretical explanation of Kinanti et al. (2026) which explains that the farther away payment is made from the act of consumption, the lesser the pain of payment and the greater the consumption behaviour. Given the current results, the authors would like to offer new empirical evidence on the role played by psychological distortions in relation to buying impulsivity in young consumers' shopping behaviour linked to digital payments.

Another significant finding in this study is the positive correlation between impulsive buying and post purchase regret was high. It means that those persons who have a tendency to make impulsive and emotional buying decisions will be more prone to regrets, remorse, and dissatisfaction after considering the consequences. The results are in line with the study of Aykut (2025), which found that when buying is motivated by emotional arousal, post-purchase regret is heightened when consumers buy impulsively. Likewise, Charles and Immanuel (2025) discovered that when Generation Z consumers experience online impulsive buying, they tend to have post-purchase dissonance and regret as a result of the unnecessary spending. In addition, the systematic review by Nusir et al. (2026) found that the benefits of impulsive buying, as a result of BNPL use, were often linked with negative emotional experiences such as financial stress, dissatisfaction and post-purchase regret. Therefore, current results validate that the impulsive buying is a key psychological process that connects online purchasing behaviour to negative post-consumption emotions.

The mediation analysis also validated the relationships in which impulsive buying plays a significant role between BNPL, Digital Financial Literacy, Spendception, and post-purchase regret. The results suggest



that these digital and psychological aspects do not directly affect feelings of regret, but instead lead to consumers' tendency to make impulsive purchases that eventually lead to feelings of regret. The mediation of impulsive buying of digital payment convenience and reduced payment awareness is consistent with previous research that found that these constructs would lead to spontaneous buying, which would ultimately result in negative emotional consequences. The results especially support the idea of Faraz and Anjum (2025) and Nusir et al. (2026) who stated that the modern digital payment processes create psychological conditions that lead to the increase of impulse buying and post-purchase dissatisfaction.

It was found that the relationships that lead to impulsive buying are moderated by certain individual and/or context-specific factors. This research is in line with recent research which has focused on psychological and behavioural factors in digital consumer decision making. According to Ali et al. (2025), for instance, digital financial literacy serves as a moderator in the relationship between financial optimism and impulse buying whilst Panjaitan et al. (2026) found that psychological characteristics like mindfulness act as the moderator between consumer factors and impulsive buying behaviour among the Gen Z. Similarly, Riyani et al. (2026) found that psychological characteristics like mindfulness also play a modulatory role between consumer factors and impulsive buying behaviour for the Gen Z. Thus, this study builds upon the previous research and validates that impulsive buying is a context-specific behaviour and is driven by psychological and financial factors of the person.

6. Conclusion

This study is a detailed study on psychological and behavioural outcomes of new electronic payment systems to young consumers. The results show that BNPL services, Digital Financial Literacy and Spendception have a highly significant impact on buying in impulse, thereby fostering post-purchase regret. Of all the predictors analysed, Digital Financial Literacy had the most significant impact on impulsive buying, suggesting that greater familiarity and confidence in the use of digital financial technologies can boost consumers' interactions with online shopping platforms and their exposure to the opportunities for impulsive buying.

The findings also show that BNPL and Spendception are associated with impulsive buying as it lowers the psychological resistance to purchasing, which is why it is considered a facilitator to impulsive buying. The ability to pay later and the lack of the pain of such a purchase increase the likelihood of a consumer making an impulsive decision. Such hasty buying actions then become post-buying regrets, when the consumer questions the need for and the impact of the purchase.

In addition, the study's findings validate the central mediating role played by impulsive buying in explaining how digital payment-related factors have an impact on post-purchase regret. The strong moderating effects also highlight the fact that the consumer behaviour in digital markets is not uniform and is different depending on the individual's psychological and financial attributes. Overall, this study contributes to the literature on digital consumer behaviour by bringing together four BNPL, Digital Financial Literacy, Spendception, impulsive buying and post-purchase regret constructs into a single framework. The results help to deepen our understanding of the ways in which new technology can make buying more convenient but can also lead to over-eating and negative emotions among young consumers while simultaneously making that purchasing easier.

7. Implications

7.1. Theoretical Implications

The study offers several significant theoretical contributions to the literature on consumer behaviour, behavioural finance and the adoption of digital payment. First, this adds to the knowledge of BNPL and digital payment technologies and their impact on consumer outcomes by showing their effect on consumer outcomes occurs through the channel of impulsive buying behaviour. The results are congruent with the emerging theories on payment decoupling and psychological perception of payment, as they demonstrated that the lower the pain of paying, the more unplanned purchasing decisions made.

Second, this study is a contribution to the emerging idea of Spendception, supplying empirical evidence that the psychological distortions within e-transactions environments do have a significant impact



on impulsive buying behaviour. Although this study has focused on the conceptual aspects of Spendception, the results further confirm the importance of Spendception as a factor influencing consumer buying behaviour.

The third contribution is related to the debate about digital financial literacy, as the study showed its two-sided aspects. The results also indicate that the promotion of financial literacy is not necessarily predicated on rational purchasing behaviour, but that digital financial literacy can also heighten confidence and involvement in digital financial markets, creating an opportunity for financial impulse purchases.

Finally, the study adds to the existing consumer behaviour theories by introducing the concept of impulsive buying as a mediating variable and by confirming the importance of moderating mechanisms in explaining how the DFFT's influence purchasing decisions and emotional outcomes after buying.

7.2. Practical Implications

The findings of this study can have important practical implications for policy makers, financial institutions, fintech firms, BNPL firms, e-commerce companies, educational institutions, and consumers. Stakeholders need to ensure that the ease and accessibility of digital payments are balanced with responsible consumer spending and financial well-being as digital payment solutions continue to evolve and influence consumer spending behaviours.

The research points out the importance for fintech companies and BNPL services to include elements of responsible design in their digital payment applications. Fintech firms should consider implementing these features to improve users' knowledge about purchase history, use budgeting tools, set up repayment reminders, and make better use of spending dashboards. AI and data analysis can also help in detecting spending habits that might be hazardous and make preventive suggestions before the consumers make the unnecessary and excessive purchases. These Fintech practices are responsible practices that can help minimize Spendception and impulsive spending behaviours, which in turn helps lessen the psychological impact.

The results for eCommerce stores and online marketers are clear: there is a need for better marketing and payment practices. Though personalized ads, one-click purchases, limited offers and embedded BNPL can help drive sales, consumers may feel like there was too much of a good thing, when it comes to BNPL. Online retailers, therefore, should consider promoting BNPL responsibly; providing greater clarity around the financial impacts of BNPL transactions, sufficient time to consider BNPL transactions and avoid unethical promotion that may appeal to financially vulnerable consumers.

The results suggest that financial literacy education needs to be extended beyond traditional financial literacy education to overall digital financial capability education for institutions such as financial institutions and educational institutions. These programmes should include educating the person on how to manage their finances, how to use digital payment platforms and even dig into the psychology of paying digitally — how the pain of paying is being reduced through BNPL, how purchasing illusions are being created, emotional buying and the potential risks of excessive BNPL use. Also, there is a particular user base which is actively involved in the use of digital payment apps: students and young adults, which is why universities can organize financial wellness seminars and awareness campaigns.

The results highlight the need to cultivate mindful and responsible purchasing practices among consumers, especially Gen Z and young working class, in the digital sphere. The consumer should be aware of their purchases, stick to their budget, and think about the necessity of the purchases before taking advantage of BNPL facilities and regret their purchase later. Knowing more about the reasons behind digital payments, such as the lowered upfront payment cost, and Spendception, can enable consumers to make better and more responsible purchases.

Finally, the implications of this study are that the future of digital finance has to be not only about making transactions easier but also bring attention to the importance of responsible consumption, financial self-control and consumer well-being. Implementing a collaborative strategy by regulators, fintech firms, e-commerce companies, educational institutions, and consumers is crucial to build a sustainable and healthy digital financial ecosystem that will allow technological innovation to be at the service of economic efficiency and long-term financial health.



7.3. Policy Implications

The findings from this study are important to the policy and regulation of digital financial services, consumer protection and financial literacy. This study's findings on the positive impact of BNPL digital payment system, DFDL and Spendception on impulsive buying suggests that the innovative payment methods might have negative behavioural implications particularly among the youth. Thus, policymakers should create a balance in the regulations so that fintech innovation is encouraged and responsible consumer spending and financial health are maintained.

First, there is a need for increased consumer protection policies by regulators around BNPL services. Regulators should also mandate BNPL providers to clearly state the terms and conditions of repayments, interest rates, penalties and risks associated with failure to repay as this may lead to an increased perception of lower up-front costs and create an impulse to buy. Consumers can be given better financial advice through policies that mandate clear notifications of expenditures, reminders of repayments and affordability checks. Recent research has highlighted the importance of the need for greater regulatory interest regarding BNPL because younger consumers are more prone to use BNPL products, which are associated with increased impulsive consumption and over-spending, as well as financial vulnerability (Lupsa-Tătaru et al., 2023; Raj et al., 2024; Nusir et al., 2026).

Second, the positive correlation between digital financial literacy and impulsive buying demonstrates the importance of not only continuing the traditional financial literacy education, but also introducing digital financial capability education to be part of financial education. These programs should not only help consumers understand how to use digital financial technologies but also raise their awareness of the psychological biases that affect digital payments, such as the decreased pain of paying, spending illusions and the ease of one-click purchasing. This is especially crucial for university students and young adults, as they are the primary group using digital payment apps and BNPL (Azzuhurf & Cahyono, 2025; Yahfi et al., 2025).

Third, government needs to foster participation of fintech companies, e-commerce platforms, and financial institutions in creating responsible digital payment systems. Regulations can encourage the incorporation of consumer-friendly elements like spending trackers, monthly expenditure summaries, spending limits, cooling-off periods before big purchases, and real-time notifications to raise awareness of actual spending. These interventions can help alleviate the impact of Spendception and curb impromptu buying desires (Faraz & Anjum, 2025; Santoso et al., 2026).

Fourth, national financial inclusion policies need to take into account behavioural effects of access to digital financial services. While digital payments and BNPL make transactions more convenient and accessible, unchecked access could contribute to overconsumption and this can result in post-purchase regret. Hence, the use of behavioural insights in fintech governance frameworks is needed to ensure that technology is advanced responsibly and it is accompanied by consumer welfare (Celestin & Sujatha, 2024; Lupsa-Tătaru et al., 2023).

Last but not least, the government should launch awareness programmes for young consumers, including college students and newly hired workers, who are very much involved in online shopping, social media marketing and online payment technologies. The campaigns should highlight responsible borrowing, budgeting, delayed gratification and the psychological effect of electronic payment methods on the spending behaviour. These can support people in making thoughtful purchasing decisions and decrease the risk of impulsive buying and regret after the purchase.

Contribution of Authors

All the authors participated in the ideation, development, and final approval of the manuscript, making significant contributions to the work reported.

Conflict of Interest Statement

The authors declare no conflicts of interest.

Funding Statement

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.



Data Availability

The datasets generated during and analysed during the current study are available from the corresponding author on reasonable request.

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