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Buy Now, Pay Later Adoption Among Generation Z in Pakistan: An Integrated Cognitive, Psychological, and Social Perspective

Waseem Rana[1] **Hannan Afzal**[2] **Inam Ullah Khan**[3] **Ian Mobeen**[4]

[1] PhD Scholar, Department of Business Administration, University of Sialkot, Punjab, Pakistan.
[2] Assistant Professor, Department of Business Administration, University of Sialkot, Punjab, Pakistan.
[3] Assistant Professor, Department of Business Administration, University of Sialkot, Punjab, Pakistan.
[4] PhD Scholar, Department of Business Administration, University of Sialkot, Punjab, Pakistan

Corresponding Author: Hannan Afzal, **Correspondence through:** hannanafzal6@gmail.com

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ABSTRACT

Buy now, pay later (BNPL) is a rapidly expanding form of digitally enabled short-term credit, yet the factors that move young consumers from considering BNPL to actually using it remain insufficiently understood in emerging economies. This study examines cognitive, psychological, and social antecedents of BNPL usage among Generation Z consumers in Pakistan. Financial literacy and digital literacy represent cognitive factors; perceived ownership of borrowed money and perceived pain of payment represent psychological factors; and social media financial influence and financial parenting represent social factors. Intention to use BNPL is specified as the immediate predictor of usage. Data were obtained through a questionnaire survey of 337 Pakistani Gen Z BNPL users selected through convenience sampling and analyzed using partial least squares structural equation modeling. Results show that financial literacy, perceived pain of payment, and financial parenting reduce intention, whereas digital literacy, perceived ownership of borrowed money, and social media financial influence increase it. Intention positively predicts actual BNPL usage, and all seven hypotheses are supported. The study integrates financial capability, payment psychology, and socialization within one intention-based model. It offers guidance for regulators, educators, families, platforms, and retailers seeking to promote informed, transparent, and responsible use of deferred-payment services among young consumers in Pakistan.

Keywords: *Financial literacy, Digital Literacy, Financial Parenting, Social Media Financial Influence, Perceived Pain of Payment, Perceived Ownership of Borrowed Money, BNPL.*

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1. Introduction

Buy now, pay later (BNPL) is a virtually credit-based arrangement that can be embedded digitally, where customers can take possession of goods immediately but pay for them as time passes or in instalments. BNPL can help to make borrowing look like a normal payment option, as it is included in checkout processes. Recent studies reveal that it can boost purchase incidence, order value, online spending, and induce feelings of repayment pressure, risky indebtedness, and financial vulnerability (deHaan et al., 2024; Guttman-Kenney et al., 2023; Kumar et al., 2024; Kumar & Nayak, 2024; Powell et al., 2023). BNPL is thus not just a payment innovation, but a behavior of consumers which is a form of consumer credit which needs explaining beyond its convenience.

Generational Z is in the middle of BNPL development, as individuals are acquainted with the smartphone, electronic trade, social media, and quick payment systems. Research on emerging and developed markets demonstrates that consumer trust, technological preparedness, social connection, and perceived control influence their pay-later decisions (Abed & Alkadi, 2024; Aisjah, 2024; Prasetyani et al., 2024; Raj et al., 2024). The digital-payment landscape in Pakistan is also growing, but having access to financial technology doesn't necessarily mean having an informed view on credit decisions. The need for digital financial literacy and consumer protection in the context of short-term online credit has been highlighted in the national and international policy reports (OECD, 2025; State Bank of Pakistan, 2026).

The model categorises six antecedents to three domains. Cognitive factors are financial literacy and digital literacy. Psychological factors include perceived ownership of borrowed money and perceived pain of payment. Social media financial influence and financial parenting represent social factors. These variables are used to predict intention to use BNPL, and intention predicts BNPL usage. Financial literacy can expose the costs of repayment, while digital literacy can diminish the barriers to operations. Transformation of ownership perceptions can make borrowing money for purchase feel like your own money, and paying back emphasizes future sacrifice. While social media can normalize deferred consumption, financial parenting can promote financial prudence (Aisjah, 2024; Al-Shami et al., 2024; deHaan et al., 2024; Koskelainen et al., 2023; Kumar et al., 2026).

The existing studies on BNPL primarily focus on technology acceptance, convenience, trust, privacy, impulsiveness, risky debt, spending, and financial well-being (Filotto et al., 2024; Gallo Cordoba et al., 2024; Kumar & Nayak, 2024; Relja et al., 2024). There are also other explanations including financial parenting, social media intensity and financial socialization but they are scattered in different models (Aisjah, 2024; Donou-Adonsou & Leslie-Piper, 2026; Kumar et al., 2026). To the best of the authors' knowledge, no empirical study has simultaneously tested the relationships between financial literacy, digital literacy, perceived ownership of borrowed money, perceived pain of payment, social media financial influence and financial parenting with BNPL intention among Pakistani Gen Z users. The proposed paths with the exception of the established intention-to-usage relationship, are what makes the study's core empirical novelty.

A multi-dimensional investigation is required as there is likely to be a conflict of principles in the BNPL decisions. Financial knowledge can be a good reason to be careful, and digital competence can be a good reason to be able to access. A change in payment difficulty can lead to an increase in consumption, and a forecast of repayment pain can limit consumption. While social media can encourage installment buying, parental guidance can encourage budgeting and debt discipline. While recent studies highlight the benefits for both consumers and businesses, such as increased spending and reduced payment salience, BNPL can also lead to debt accumulation and financial stress (deHaan et al., 2024; Donou-Adonsou & Leslie-Piper, 2026; Kumar et al., 2024; Threadgold et al., 2025). Analyzing these factors collectively allows the identification of drivers and constraints of adoption.

The study assumes that BNPL usage evolves through a process of financial capability, psychological interpretation, social learning, intention and action. It's based on 337 Pakistani Gen Z consumers who have experienced BNPL

usage. Convenience sampling and questionnaire survey were used to collect data, and then analyzed with partial least squares (PLS) structural equation modeling. The model does not estimate the indirect effects from the six antecedents to intention or from intention to reported BNPL usage. Empirical scope does not directly include provider pricing, merchant strategy, credit scoring, regulation, and longitudinal repayment outcomes. It provides a level of analysis for individual-level behavior without ignoring the significance of other institutional factors (Abed & Alkadi, 2024; Filotto et al., 2024; OECD, 2025).

The theory of planned behavior (TPB) predicts behavioral intention as being determined by personal beliefs, social information and perceived control, and then behavioral intention determines behavior (Ajzen, 1991). BNPL involves knowledge and digital competence impacting on the understanding and manageability of the service, ownership perceptions impacting on evaluation of borrowing, and normative cues from social media and parental guidance. In recent years, intention-based models have been used in the study of BNPL security and trust (Aisjah, 2024), privacy (Aji et al., 2024), ethics (Raj et al., 2024), financial self-efficacy (Simiyu et al., 2025), and social influence. This logic is extended in the present model via 6 direct intention-to-antecedents and a direct intention to usage path.

The importance of the study. The research brings together three aspects of financial research—cognitive capability, payment psychology, and financial socialization—into a single intention-based explanation of BNPL use and is based on a data set from an underrepresented emerging-market setting. The results can be a catalyst for financial literacy, repayment awareness and family financial communication. Providers and retailers can create interfaces that are informative and easy to understand, without depending on social pressure or digital ease to keep the total cost salient. The model also sheds light on the fact that digital competence does not equate with "financial prudence" – consumers can be competent in using an application without fully considering its credit aspects (Al-Shami et al., 2024; Anwar, 2025; Islam & Khan, 2024; Koskelainen et al., 2023; OECD, 2025).

2. Literature Review

2.1 Theoretical Understanding

Theory of planned behavior (TPB), helps to understand how beliefs get translated into action via "behavioral intention." According to Ajzen (1991), attitudes towards a behavior, perceived social norms, and perceived behavioral control all influence an individual's intention which is the most immediate cognitive determinant of behavior. Since the use of deferred payment is a conscious consumer decision that includes calculations of affordability, convenience, social acceptability and anticipated returns, it is appropriate for BNPL. The financial literacy and digital literacy are considered in the present model as the cognitive resources affecting the process of evaluation and control. The psychological interpretations of credit and repayment are captured by perceived ownership of borrowed money and perceived pain of payment. Social and normative information are captured by social media financial influence and financial parenting. These six factors are indicated as direct antecedents of intention to use BNPL, while intention is indicated as a direct antecedent of BNPL usage. The findings align with recent intention-based BNPL research which link personal beliefs, social influences, trust and perceived control to adoption or use (Aisjah, 2024; Raj et al., 2024; Simiyu et al., 2025). This analysis accounts for direct relationships in this sequence but does not estimate indirect effects. Hence, TPB offers a parsimonious explanation of how its constructs contribute to the formation of a stronger or weaker intention and the extent to which these intentions translate to actual consumption among Pakistani Gen Z consumers.

2.2 Buy Now, Pay Later Usage and Intention to Use BNPL

BNPL usage is the number of consumers who actually utilize a deferred-payment facility to buy items in one go and then pay for them at a later time or in installments. Unlike a typical card transaction, BNPL is often integrated at checkout, made up of smaller payment amounts, and with low friction. Such design elements may boost purchase intentions and spending since the actual acquisition of the product is removed from the psychological and monetary effects of the payment (deHaan et al., 2024; Kumar et al., 2024).

Therefore, the usage is not just determined by the availability of goods or services, but also consumers' perceptions of convenience, risk, control, cost and repayment responsibility (Kumar & Nayak, 2024; Relja et al., 2024). "Intention to use BNPL" is the consumers' intentional use or decision to use BNPL for future transactions. According to intention-based theories, the motivational antecedent to actual action that is closest to willingness is behavior (Ajzen, 1991). The studies conducted on BNPL also found that behavior intention is positively correlated with the adoption, continued use, and borrowing behavior of BNPL users (Aisjah, 2024; Raj et al., 2024; Simiyu et al., 2025). However, wills are not deeds, since the number of merchants available, the credit limits available, the needs of the purchase, and self-control may impact enactment. In this study, intention and usage are therefore considered as separate constructs and tested directly to explore the relationship between stronger intention and more reported BNPL usage.

2.3 Cognitive Factors

2.3.1 Financial Literacy

Financial literacy is the knowledge and skill to comprehend financial concepts, evaluate options, consider costs and risk and make sound financial decisions. In a digital-credit context, it means understanding that affordability of the installments does not mean that there is no debt, analyzing repayment plans, and looking at the aggregate of digital purchases. Modern studies see financial literacy as a key element of responsible financial conduct and consumer resilience (Koskelainen et al., 2023; OECD, 2025). The evidence from BNPL consumers indicates that both financial responsibility and financial wellbeing are correlated, and the influence of the lack of monitoring on the financial wellbeing of younger consumers may be more significant (Powell et al., 2023). These factors, among others, can be magnified if there is greater attention to opportunity costs, cash flow concerns, and late fees, which can diminish the appeal of seemingly painless credit. On the other hand, low literacy levels can tempt the consumer to pay the minimum amount, rather than the full amount. Financial literacy is assumed to act as a protective cognitive resource and moderate the intention to use BNPL as it brings about the consumption and short-term borrowing.

2.3.2 Digital Literacy

Digital literacy is the ability to access, understand, assess and safely navigate through digital technologies and the online world. In financial applications, this involves navigating applications, identifying digital risks, understanding interface details, and efficiently completing transactions. In today's digital age, financial literacy is becoming more crucial as consumers are increasingly using mobile devices for borrowing, making payments, and accessing financial information (Al-Shami et al., 2024; Islam & Khan, 2024; Koskelainen et al., 2023). Greater digital literacy can help minimize confusion for Gen Z on things like registration, identity verification, installment tracking, and facilitating repayment within apps. It can also enhance ease, control and compatibility perceptions, thus enhancing the adoption intention generally. The results of digital payment and fintech acceptation research confirm that technological competence and confidence helps in the willingness to use platform-based financial services (Abed & Alkadi, 2024; Al-Qudah et al., 2024). But, digital literacy isn't the same as financial savvy: a consumer could be very proficient at using an application and not be that careful about the debt repercussions. In the current model, digital literacy is expected to boost intention to use BNPL by reducing operational and informational barriers.

2.4 Psychological Factors

2.4.1 Perceived Ownership of Borrowed Money

Perceived ownership of borrowed money refers to consumers' sense of treating the money they borrowed from outside as though it were their own money that they have at their disposal. BNPL can reinforce this sense, as it gets approved quickly, the product arrives as soon as you get approval, and you're postponed to the future when paying it back. The interface can thus give the impression of increased buying power without an obligation. The research on payment framing reveals that partitioning and deferring payments can diminish the perception of the link between acquisition and sacrifice of financial resources, as in deHaan et al., 2024 and Relja et al., 2024. If debt is perceived as debt, then consumers are less likely to turn to

existing cash difficulties and are more likely to make purchases even if they are unable to cover them in the current cash flow. This perception also has implications for mental accounting; small future payments may be viewed as a less salient mental account than a single immediate payment. Based on the recent studies done by BNPL, there is a correlation between credit-limit misunderstandings, impulsiveness and subjective control with increased adoption levels (Kumar & Nayak, 2024). Therefore, it is hypothesized that perceived ownership of borrowed money will be expected to increase the intention to use BNPL.

2.4.2 Perceived Pain of Payment

When money is spent or a financial commitment is made, there is a negative emotional reaction that is felt, referred to as perceived pain of payment. It renders the difficulty of consuming salient and might discourage unneeded and unaffordable acquisitions. BNPL is built on the principle of temporal and numerical separation, for example, consumers can buy the product today and pay for it later in smaller amounts. This decoupling may lessen the immediate pain of payment, which can drive consumers to spend (deHaan et al., 2024; Kumar et al., 2024). However, people vary in their expectations of the level of discomfort from anticipated repayment. When a consumer has a strong sense of future installments as an expense and the checkout process is simple, they might have a less positive perception of BNPL. Recent studies connect psychological vulnerability to BNPL use (Donou-Adonsou & Leslie-Piper, 2026) and financial stress (Powell et al., 2023) to BNPL decisions, with psychological interpretations being a key factor in understanding BNPL decisions, as demonstrated by Relja et al. (2024). If perceived pain of payment does indeed dampen intention, then "deferred-payment" interfaces should make the cost more salient to restore attention to the cost that they might obscure.

2.5 Social Factors

2.5.1 Social Media Financial Influence

Social media financial influence includes the influence of content, influencers, peers, advertising, and conversations that occur on social media platforms on financial attitudes, preferences and consumption decisions. Social media is for Gen Z a medium of communicating, as well as a market in which life style consumption and payment alternatives are exhibited over and over. Exposure can help normalize BNPL as a budgeting tool, and offer social proof that BNPL is common or accepted. Aisjah (2024) indicates that social media intensity is related to BNPL intentions among university students, and Prasetyani et al. (2024) shows that social and trust-related factors are related to BNPL preferences of Gen Z. This effect can be potentially stronger if promotional material highlights the opportunity to access the product immediately and to pay off in small chunks, but not to highlight any ongoing obligations to pay back the product. There is also recent evidence that exposure to social media and BNPL can exacerbate financial strain (Donou-Adonsou & Leslie-Piper, 2026). Thus, the higher the social media financial influence, the higher the intention to use BNPL in terms of strengthening normative approval, familiarity, and desire of using social media.

2.5.2 Financial Parenting

Financial parenting is the parenting of financial knowledge, values, rules, routines and models that are passed on to children by parents through teaching, watching and talking. It can affect how to allocate your budget, how to save, your attitude to debt, your delayed gratification, and your responsible use of credit well into your young adult years. Aisjah (2024) claims that financial parenting is significant for students' financial self-beliefs and deferred-payment services intention. However, wider financial-socialization research also suggests that family communication and modelling is a factor in the development of financial attitudes and behavior (Kumar et al., 2026). Good financial parenting can help raise more mindful consumers when it comes to paying within their means, keeping the momentum of repayments, and the discrepancy between what people earn and what they borrow. It can also neutralize promotional messages by making comparisons, planning and restraint. As BNPL provides immediate consumption and delayed cost, parental norms about the importance of saving and the importance of taking debt with caution should dampen willingness to use BNPL. Based on this, the present study conceptualizes financial parenting as a negative social factor that is negatively associated with the intention to use BNPL among Gen Z consumers in Pakistan.

2.6 Hypothesis Development

2.6.1 Cognitive Factors and Intention to Use Buy Now, Pay Later

Financial literacy will help consumers recognize the credit characteristics of BNPL, the total of commitments and understand if they will be able to afford the installments in the future. A financially literate user is more likely to think about the finance regarding BNPL as they will be more aware of the concept of debt; when to pay back; whether they will have to pay penalties; and whether the idea of making little repayments might lead them to overspend. Both Powell et al. (2023) and OECD (2025) associate responsible financial practices to the financial well-being of the BNPL users, and literacy is seen as a protective factor in the context of short-term online credit. The study on risky indebtedness also shows that a lack of awareness towards the consequences of borrowing can also facilitate the adoption of BNPL (Kumar & Nayak, 2024). Therefore, financial literacy should increase the salience of the costs and constraints associated with deferring payment, reducing intention.

H1: *Financial literacy is negatively related to intention to use buy now, pay later.*

Digital literacy, by contrast, enhances the user's proficiency in understanding the interface, onboarding, comparing options, managing applications and tracking repayments. These features minimize effort and uncertainty, and can provide a more sense of control over digital credit. The digital capability has been found to be a facilitator of the use of fintech and digital payments in various studies (Abed & Alkadi, 2024; Al-Qudah et al., 2024; Islam & Khan, 2024). However, this does not mean that the digital-savvy Gen Z consumer is likely to be a mindful borrower of BNPL; he or she is more likely to make firm commitments to BNPL use.

H2: *Digital literacy is positively related to intention to use buy now, pay later.*

2.6.2 Psychological Factors and Intention to Use Buy Now, Pay Later

When consumers think they are borrowing their own money, they may perceive the BNPL money as being their own. When people can have the product and get approved quickly, and then pay later, the distinction between these two types of income becomes less clear. Consumers feel that they have more personally available money when they are making a purchase that they perceive is more affordable and are more likely to use BNPL. The research on payment decoupling and BNPL psychology shows that deferred and partitioned payments can decrease the focus on the total financial commitment (deHaan et al., 2024; Relja et al., 2024). Misconceptions regarding credit capacity and subjective financial control also had associations with higher BNPL tendencies, consistent with previous studies (Kumar & Nayak, 2024).

H3: *Perceived ownership of borrowed money is positively related to intention to use buy now, pay later.*

The perceived pain of payment should have the opposite effect. When consumers expect discomfort as installments take a bite out of their future ability to pay, they are more likely to realize that BNPL is indeed a financial cut than a usability improvement. Deferred payment may reduce immediate costs, but people who have greater cost sensitivity can move the real cost of their current spending to the future when they will pay it back. This is supported by evidence showing that the use of BNPL leads to greater spending due to decreased salience of paying (deHaan et al., 2024; Kumar et al., 2024). Thus, higher perceived payment pain should lead to lower perceived intention.

H4: *Perceived pain of payment is negatively related to intention to use buy now, pay later*.

2.6.3 Social Factors and Intention to Use Buy Now, Pay Later

Social media can impact BNPL intention in six ways: through repeated exposure, peer endorsement, influencer promotion, targeted advertising, and lifestyle comparison. BNPL can be viewed as the normal, convenient and accepted route for buying when observed by users. Social media also can reduce the time between product knowledge and checkout, leaving the promoted product and installment option salient at the same time. Aisjah (2024) asserts that there is a relationship between social media intensity and intention to use BNPL, while Prasetyani et al. (2024) suggest that social and trust factors influence the preferences of Gen Z in using BNPL. Recent studies are also recommending that

exposure to social media may exacerbate the financial burden of using BNPL (Donou-Adonsou & Leslie-Piper, 2026). Findings indicate that the stronger the financial influence of social media, the stronger the intention.

H5: *Social media financial influence is positively related to intention to use buy now, pay later.*

Financial parenting can establish a countervailing norm. Helping Gen Z consumers think more carefully about deferred payment may be helped by parents who talk about budgets, demonstrate good credit use, teach them to save for what is important, and remind them to avoid unnecessary debt. Financial parenting is identified as one of the elements of BNPL decision-making by Aisjah (2024) and family-financial-socialization studies indicate that parental guidance influences financial attitudes and behaviors (Kumar et al., 2026). Therefore, strong financial parenting should make a difference in the desire to spend now rather than pay for it in the future.

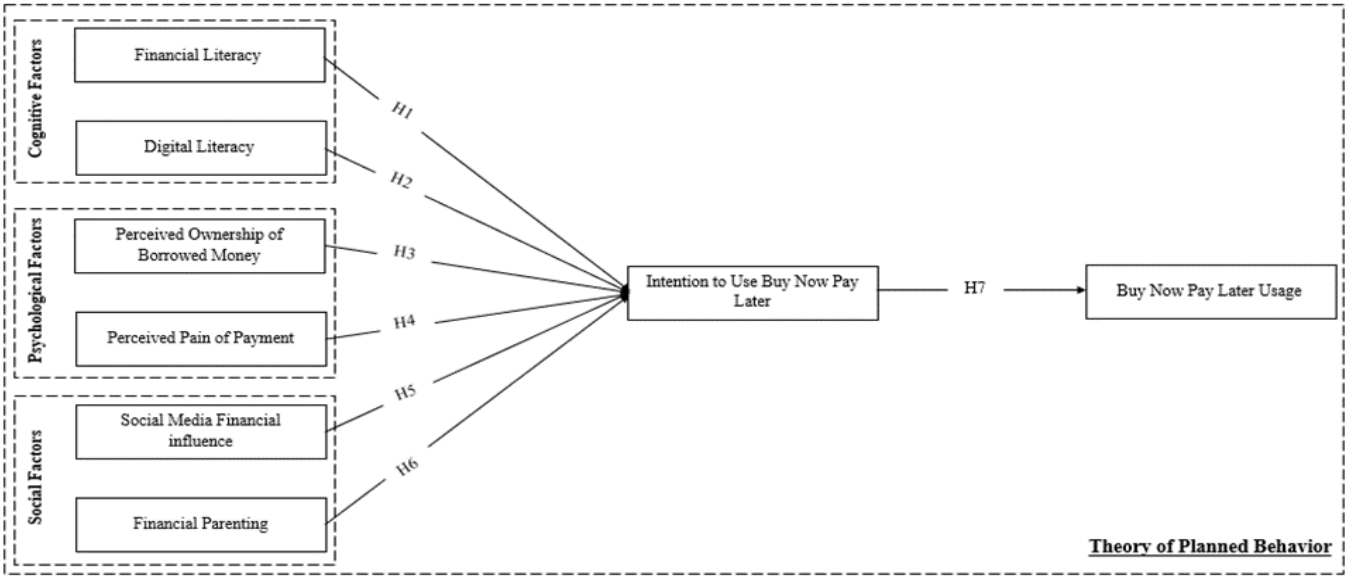
H6: *Financial parenting is negatively related to intention to use buy now, pay later.*

2.6.4 Intention to Use Buy Now, Pay Later and BNPL Usage

Behavioral intention is a consumer's preparedness and intention to engage in a specific behavior. According to the theory of planned behavior, intention is the most immediate motivational determinant of behavior as it measures the individual's perceived effort that he will put into behaviour (Ajzen, 1991). For the BNPL, intention also encompasses the desire to choose the offering when making a purchase, agree to pay later, and to come back for additional purchases. Empirical BNPL studies also validate the significance of intention for adoption, reuse, and actual borrowing (Aisjah, 2024; Raj et al., 2024; Simiyu et al., 2025). A powerful intent ought to boost the odds customers see BNPL availability, finish provider sign-up and choose installments when a matching purchase chance arises. While constraints may hinder enactment, the Gen Z consumers who say they have a higher level of willingness to use BNPL are likely to say they use BNPL more.

H7: *Intention to use buy now, pay later is positively related to buy now, pay later usage.*

Figure 1: *Theoretical Framework*



3. Research Methodology

This study aims to examine how cognitive factors, including financial literacy and digital literacy; psychological factors, including perceived ownership of borrowed money and perceived pain of payment; and social factors, including social media financial influence and financial parenting, affect Generation Z consumers' intention to use Buy Now, Pay Later (BNPL) services and their actual BNPL usage in Pakistan. Data were collected from Generation Z respondents between November 2025 and February 2026 through face-to-face, paper-based questionnaires. The researchers approached potential respondents at

universities, colleges, and cafés located in Lahore, Gujranwala, Gujrat, Sialkot, and Narowal districts of Punjab, Pakistan. Considering the geographically dispersed nature of the target population, time constraints, and accessibility limitations, convenience sampling was considered an appropriate sampling technique. Although convenience sampling is a non-probability method that may introduce selection bias and restrict the generalizability of the findings (Etikan et al., 2016; Taherdoost, 2016), it was suitable for the present study because of the practical challenges involved in reaching Generation Z consumers with a strong inclination toward mobile shopping. Moreover, convenience sampling has been widely used in online shopping research, particularly when a complete sampling frame is unavailable.

Before participating in the survey, all respondents provided verbal consent. A screening procedure was used to ensure the relevance and validity of the sample. Only respondents who were familiar with BNPL services and had previously used them were invited to complete the questionnaire. A total of 400 questionnaires were distributed, of which 337 complete and usable responses were retained for data analysis.

Regarding the demographic characteristics of the sample, 206 respondents (61.1%) were female. The largest age group consisted of respondents aged between 22 and 25 years, representing 151 participants (44.8%). In terms of educational attainment, 126 respondents (37.4%) held a graduate-level qualification. A detailed summary of the respondents' demographic characteristics is presented in Table 1

Table 1: *Respondents' Characteristics (N= 337)*

Demographic Characteristics	Code	Frequency	Percentage of Total
Gender	Male	131	38.9
	Female	206	61.1
Age	18-21	83	24.6
	22-25	151	44.8
	26-29	103	30.6
Education	Matric	31	9.2
	Intermediate	77	22.8
	Graduate	126	37.4
	Post Graduate	103	30.6

3.1 Measures

Data were collected through a structured questionnaire accompanied by a cover letter explaining the purpose, scope, and relevant details of the study. Respondents were informed that their participation was anonymous and were requested to complete the questionnaire accordingly. All constructs were measured using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Established measurement instruments from previous studies were adopted or adapted to assess the study variables.

Financial literacy was measured using six items adopted from Garman et al. (1999), while digital literacy was assessed through five items adopted from Gunathilaka et al. (2022). Perceived ownership of borrowed money was measured using five items adopted from Pierce et al. (2001), and perceived pain of payment was assessed with a five-item scale adopted from Rick et al. (2008). Social media financial influence was measured through five items adapted from Djafarova and Rushworth (2017). Financial parenting was assessed using four items adopted from Jorgensen and Savla (2010). The intention to use buy now, pay later services was measured with three items adopted from Amin et al. (2011), whereas actual BNPL usage was measured using a single item adopted from Schomburgk and Hoffmann (2023).

Before the main data collection, a pilot study was

conducted with 70 respondents to evaluate the reliability and clarity of the adopted measurement scales. The pretest results demonstrated satisfactory internal consistency, as the Cronbach's alpha values for all multi-item constructs exceeded the recommended threshold of 0.70.

3.2 Data Analysis Procedure

For data analysis, Partial least squares (PLS) was chosen due to the following considerations. To begin with, complex model analysis is a good fit for PLS-SEM. Secondly, the need that data from samples have normal distribution is relaxed. Lastly, several statisticians advise using PLS-SEM when a research model incorporates reflective constructs since its estimation findings are accurate under construct specifications (Hair et al., 2019; Attiq et al., 2026). The complicated research approach used in this study includes five first-order constructs. Smart-PLS 4.0 was used to assess the measurement and structural models in light of the previously listed factors. The convergent validity, discriminant validity, and reliability of the measurement model were evaluated using fitness indices. We looked into each hypothesis's pathways and applicability to the structural model.

4. Results

4.1 Common Method Bias Analysis

Examining common method bias (CMB) is crucial in cross-sectional studies. According to the results of the single factor analysis, the highest explained variance is 36.1 that is below the 50% threshold (Hair et al., 2019). These results showed that CMB is not a serious problem.

4.2 Measurement Model Analysis

The reliability, validity, and fitness indices results are displayed in Table 2. For every observed variable, the outside loadings and indicator reliability are measured. According to the results, all of observed variables have outer loadings greater than 0.60 and indicator reliabilities greater than 0.40 (Hair et al., 2019). Both composite reliability and Cronbach's alpha assess how effectively latent components are measured by observable variables (Hair et al., 2019). The reliability is confirmed by all values being greater than 0.708. When AVE is examined for convergent validity, all constructs meet the threshold, or are over 0.50, indicating no validity problems. Both fit index and explanation power were taken into account while evaluating the model. The entire model fit was evaluated using SRMR, and a value of 0.041 satisfied the requirement of <0.08 (Hair et al., 2019). Moderate variation explained by model for intention to use BNPL (i.e., 0.359) and weak variance explained by model for buy now pay later usage (i.e., 0.180) which is shown by R2 values. These results validate the model's significant explanatory power and appropriate fit.

Table 2: *Reliability and Validity Analysis*

Constructs	**Item Code**	**Outer Loading**	**Cronbach's Alpha**	**Composite Reliability**	**Average Variance Extracted**	**R square**	**SRMR**	**NFI**
Threshold		***> 0.708***	***> 0.708***	***> 0.708***	***> 0.50***		***< 0.08***	***> 0.80***
							0.041	0.879
Financial Literacy	FLT1	0.799	0.878	0.883	0.621			
	FLT2	0.791						
	FLT3	0.766						
	FLT4	0.787						
	FLT5	0.793						
	FLT6	0.791						
Digital Literacy	DLT1	0.752	0.846	0.864	0.616			
	DLT2	0.823						
	DLT3	0.781						
	DLT4	0.792						
	DLT5	0.775						
Perceived Ownership of Borrowed Money	OBM1	0.732	0.847	0.859	0.618			
	OBM2	0.808						
	OBM3	0.792						
	OBM4	0.793						
	OBM5	0.804						
Perceived pain of payment	PPY1	0.763	0.850	0.856	0.624			
	PPY2	0.808						
	PPY3	0.796						
	PPY4	0.776						
	PPY5	0.805						
Social Media Financial Influence	SMF1	0.811	0.864	0.870	0.647			
	SMF2	0.764						
	SMF3	0.821						
	SMF4	0.813						
	SMF5	0.809						
Financial Parenting	FPT1	0.790	0.804	0.808	0.629			
	FPT2	0.790						
	FPT3	0.775						
	FPT4	0.816						
Intention to Use Buy Now Pay Later	IBL1	0.846	0.793	0.794	0.708	0.359		
	IBL2	0.841						
	IBL3	0.836						
Buy Now Pay Later Usage	BNPL1	1.000				0.180		

4.3 Discriminant Validity

Discriminant validity was evaluated to establish whether the latent constructs represented conceptually and empirically distinct phenomena. In accordance with Hair et al. (2019), the assessment was conducted using the Fornell–Larcker criterion and the heterotrait–monotrait ratio (HTMT). The Fornell–Larcker results showed that the square root of the average variance extracted for each construct, presented along the diagonal, was greater than its correlations with the remaining constructs. As shown in Table 3, this condition was fulfilled for all constructs. Furthermore, the HTMT values reported above the diagonal were below the recommended cut-off value of 0.85. Collectively, these findings confirm that discriminant validity was satisfactorily established across all constructs in the measurement model (Hair et al., 2019).

Table 3: *Discriminant Validity Analysis*

Constructs	FLT	DLT	OBM	PPY	SFI	FPN	IBL	BNPL
Financial Literacy (FLT)	0.79	0.05	0.06	0.06	0.04	0.05	0.30	0.10
Digital Literacy (DLT)	-0.04	0.78	0.05	0.07	0.06	0.06	0.29	0.18
Perceived Ownership of Borrowed Money (OBM)	0.03	-0.02	0.79	0.05	0.06	0.06	0.20	0.09
Perceived Pain of Payment (PPY)	-0.05	-0.05	0.04	0.79	0.04	0.05	0.27	0.09
Social Media Financial Influence (SFI)	0.01	-0.03	-0.03	0.01	0.80	0.04	0.28	0.11
Financial Parenting (FPN)	-0.01	0.00	0.00	0.03	-0.02	0.79	0.39	0.19
Intention to Use Buy Now Pay Later (IBL)	-0.25	0.25	0.17	-0.22	0.23	-0.31	0.84	0.48
Buy Now Pay Later Usage (BNPL)	-0.10	0.17	0.08	-0.08	0.10	-0.17	0.42	1.00

4.4 Hypothesis Testing

The variance inflation factor (VIF) was assessed to detect potential multicollinearity among the study variables. The results indicated no multicollinearity concerns, as all VIF values were below the recommended threshold of 3.3 (Hair et al., 2019). The significance of the hypothesized relationships was evaluated using the corresponding t-values and p-values, as reported in Table 4. A hypothesis was considered supported when the absolute t-value exceeded 1.96 at the 5% significance level (Haenlein & Kaplan, 2004). H1 proposed that financial literacy negatively influence intention to use buy now pay later, which is accepted as β= -0.269, t value= 8.465, with $p < 0.000$ and with weak effect size i.e., 0.112, result demonstrating that high financial literacy will minimize the intention to use buy now pay later services among Gen-Z. H2 proposed that digital literacy positively influence intention to use buy now pay later, which is accepted as β= 0.235, t value= 7.368, with $p < 0.000$ and with weak effect size i.e., 0.086, result demonstrating that high digital literacy will enhance the intention to use buy now pay later services among Gen-Z. H3 depicted that perceived ownership of borrowed money positively influence intention to use buy now pay later, which is accepted as β= 0.192, t value= 6.490, $p < 0.000$, and f2= 0.057 which is weak, result is showing that high perceived ownership of borrowed money amplify the intention to use buy now pay later services among Gen-Z. H4 proposed that perceived pain of payment negatively influence intention to use buy now pay later, which is accepted as β= -0.227, t value= 7.774, with $p < 0.000$ and with weak effect size i.e., 0.080, result demonstrating that high perceived pain of payment will minimize the intention to use buy now pay later services among Gen-Z. H5 depicted that social media financial influence positively influence intention to use buy now pay later, which is accepted as β= 0.243, t value= 8.103, $p < 0.000$, and f2= 0.092 which is weak, result is showing that high social media financial influence amplify the intention to use buy now pay later services among Gen-Z. H6 proposed that financial parenting negatively influence intention to use buy now pay later, which is accepted as β= -0.303, t value= 10.128, with $p < 0.000$ and with weak effect size i.e., 0.143, result demonstrating that high financial parenting will minimize the intention to use buy now pay later services among Gen-Z. H7 proposed that intention to use buy now pay later

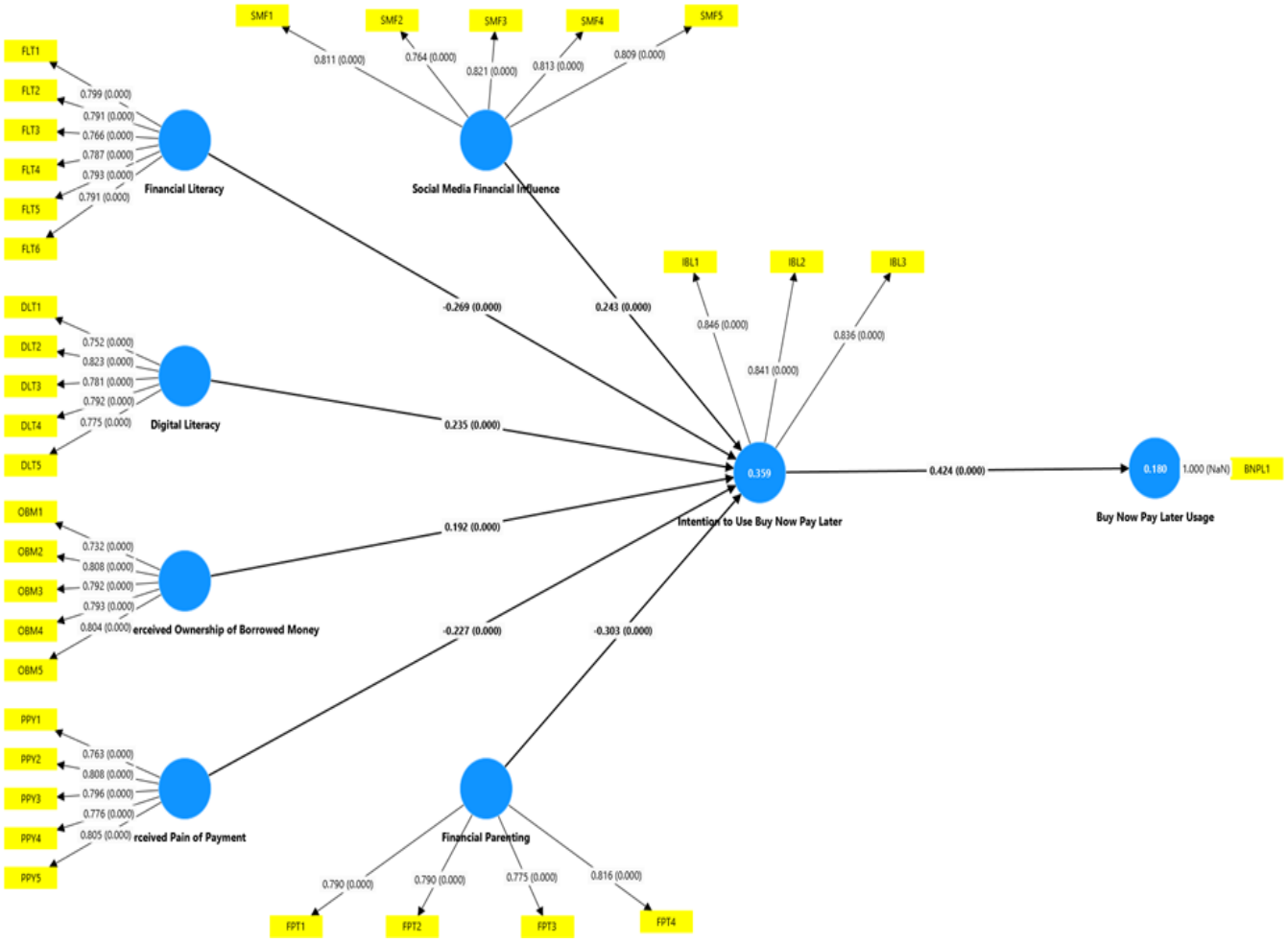
positively influence buy now pay later usage, which is accepted as β= 0.424, t value= 13.613, with p < 0.000, and f2= 0.219 that indicates moderate effect size, result depicted that high intention to use buy now pay later increase the buy now pay later usage. The structural model results are also illustrated in Figure 2.

Table 4: *Path Analysis*

No.	Hypotheses	B	Mean	Standard Deviation	T Value	P Value	VIF	Effect Size (f^2)	Confidence interval		Decision
									2.5%	97.5%	
H1	FLT → IBL	-0.269	-0.271	0.032	8.465	0.000	1.006	0.112	-0.333	-0.210	Accept
H2	DLT → IBL	0.235	0.236	0.031	7.368	0.000	1.005	0.086	0.178	0.297	Accept
H3	OBM → IBL	0.192	0.195	0.030	6.490	0.000	1.004	0.057	0.137	0.253	Accept
H4	PPY → IBL	-0.227	-0.229	0.029	7.774	0.000	1.008	0.080	-0.286	-0.172	Accept
H5	SFI → IBL	0.243	0.244	0.030	8.103	0.000	1.002	0.092	0.184	0.304	Accept
H6	FPN → IBL	-0.303	-0.303	0.030	10.128	0.000	1.001	0.143	-0.361	-0.244	Accept
H7	IBL → BNPL	0.424	0.425	0.031	13.613	0.000	1.000	0.219	0.364	0.483	Accept

Where; FLT- Financial Literacy, DLT- Digital Literacy, OBM- Perceived Ownership of Borrowed Money, PPY- Perceived Pain of Payment, SFI- Social Media Financial Influence, FPN- Financial Parenting, IBL- Intention to Use Buy Now Pay Later, BNPL- Buy Now Pay Later Usage, VIF- Variance Inflation Factor

Figure 2: *Structural Model*



5. Discussion

Based on the results, this study shows that financial capability, digital competence, payment psychology, and social learning are the factors that precede the use of BNPL among the Gen Z consumers of Pakistan. The first hypothesis was supported: Financial literacy decreased intention to use BNPL (β = −0.269). This indicates that those who have a better comprehension of the

debt, affordability, and the responsibility for repayment are less inclined to be drawn to the deferred payment option. The discovery is consistent with the calls for BNPL to be used as a safeguard against poor short-term financial outcomes (OECD, 2025; Powell et al., 2023). It also supports research indicating that credit factors are not considered when choosing BNPL products and risky borrowing practices can incentivize BNPL uptake (Kumar & Nayak, 2024; Guttman-Kenney et al., 2023).

The findings were in line with the H2 that digital literacy enhances intention.H2 was supported by the findings that digital literacy enhances intention ($\beta = 0.235$). Users who are adept at using digital tools can more easily navigate through apps, assess interfaces, and facilitate installation. This finding aligns with the findings of fintech research that draws digital capability as an adoption facilitator (Al-Shami et al., 2024; Islam & Khan, 2024) and Gen Z payment studies which accentuate ease, control, and technological readiness (Abed & Alkadi, 2024; Al-Qudah et al., 2024). Theoretically, the juxtaposed aspects of financial and digital literacy are important: being digitally competent can motivate access, and being financially competent can motivate saving, which can reduce the likelihood of borrowing. Similarly, recent scholarship in digital finance cautions that digital participation and prudent financial decision-making are not synergies, but separable skills (Anwar, 2025; Koskelainen et al., 2023).

The results confirmed that perceived ownership of borrowed money was positively related to intention ($\beta = 0.192$) which supported H3. The BNPL purchasing power can be psychologically felt as a personal purchase as it happens all in one go and is deferred in payment. This interpretation aligns with studies that demonstrate that BNPL can decouple consumption from payment and influence consumer behavior (de Haan et al., 2024; Kumar et al., 2024). It is also aligned with studies that found that credit misconceptions, impulsiveness, and perceived control are associated with BNPL practices (Kumar & Nayak, 2024). H4 was supported by perceived pain of payment ($\beta = -0.227$). But even if the cost salience at checkout is reduced, consumers who are sensitive to future repayment sacrifice appear less willing to undertake deferred payment. The results align with the psychological explanation of BNPL adoption (Relja et al., 2024; Yadav et al., 2026) and the link between BNPL and financial stress and vulnerability (Donou-Adonsou & Leslie-Piper, 2026; Gallo Cordoba et al., 2024).

The relationship between social media financial influence and intention was supported by the result of the hypothesis, that is, intention ($\beta = 0.243$). Continue to "normalize" installment consumption through repeated promotional exposure, peer endorsement, and lifestyle comparison, while simultaneously making the installment known. Continue to make the installment "normal" through repeated promotional exposure, peer endorsement, and lifestyle comparison, while simultaneously making the installment familiar. The outcome echoes the findings of Aisjah (2024), Prasetyani et al. (2024), and latest studies showing that social media exposure can exacerbate the financial impact of BNPL (Donou-Adonsou & Leslie-Piper, 2026). Financial parenting was the only antecedent effect that was statistically significant, with a negative $\beta = -0.303$, which supports H6. Parents can provide their children with the tools they need to resist pressure to consume and to recognize the difference between money they earn and money they take out on loan. This paper builds on the existing knowledge on financial parenting in BNPL decisions and overall family financial socialization (Aisjah, 2024; Kumar et al., 2026; Powell et al., 2023). Finally, intention strongly predicted usage ($\beta = 0.424$) which supported H7 and thus confirmed the sequence of the TPB from willingness to action (Ajzen, 1991). It is in line with other recent BNPL adoption and borrowing studies (Raj et al., 2024; Simiyu et al., 2025) and confirms that the six antecedents are important as they help to shape a proximal intention which is closely related to actual use.

6. Theoretical Implications

This research adds three contributions to the BNPL literature. First, it uses the theory of planned behavior as an integrated model, one that includes cognitive, psychological, and social precursors, instead of viewing the use of the technology as an acceptance of, or convenience with, the technology. Second, contrary impacts of financial and digital literacy fine-tune consumer capability. The links between digital competence

and access, and financial competence and debt consequences, can have the effect of enhancing access and intention, while the other link can have a negative effect, reducing intention. Third, the results add two different psychological processes to the literature: one is the perceived increase in one's spending power when borrowing money, the other the perceived reduction in financial sacrifice when repaying it. The negative impact of financial parenting and positive impact of social media influence also indicate that socialization sources can work against each other. The findings of the study validate the intention-to-usage relationship in Pakistan and validate the general TPB sequence, with the addition of a digitally embedded consumer credit form among an under examined group in the emerging market.

7. Practical Implications

Regulators and financial educators should consider BNPL as credit and create programs for Gen Z to teach them the total obligations, the timing of repayments, and the implications of late payments, as well as the risks of having multiple BNPL plans at once. Financial literacy should be paired with digital literacy as digital literacy is likely to raise the desire to use BNPL, if they are implemented together. Rather than focusing on just small amounts each period, providers and retailers should highlight the total cost, a timeline of payments, the outstanding balance and the implications of late payments. The design of interfaces should continue to be pain and salience-based, with clear prompts for affordability prior to purchase, and with live debt statements. Standardised risk disclosures are required for social media promotions and there is a risk of misleading claims from the use of BNPL for influencers. Families can also act protectively by talking with young adults about credit, budgeting and putting off needs until they can be met. Such measures would ensure continued payment options without raising the risk of the convenience, the sense of ownership or social pressure from peers online, fostering the borrowing of information without any careful consideration.

8. Limitations and Future Research Recommendations

There are some caveats for interpretation and future studies. The cross-sectional design does not provide temporal or causal ordering and longitudinal studies should monitor the change in intentions, repayments, and usage over time. Convenience sampling and a sample size of 337 Pakistani Gen Z users restricts the statistical generalizability, and a probability-based sampling and a regionally stratified sampling would enhance the representativeness of the respondents. Self-reported use might be subject to either recall or social-desirability bias, with future research potentially a mix between surveys and verified transactions/repayments. Only six individual-level antecedents are analyzed in this study, and neither the type of merchant, fluctuations in income, credit limits, fees, trust in the platform, impulsivity, materialism, nor regulatory awareness are examined. Comparative studies might be conducted to examine the differences between the model of students and employed persons in various countries and provinces, as well as gender and income groups. Future studies could also explore moderators, alternative theoretical approaches, and indirect pathways, if these would be specific and rigorously analyzed and statistically evaluated.

9. Conclusion

This study explains BNPL usage among Pakistani Generation Z consumers through an integrated set of cognitive, psychological, and social factors. Based on questionnaire data from 337 BNPL users and PLS-SEM analysis, all seven hypotheses were supported. Financial literacy, perceived pain of payment, and financial parenting reduced intention to use BNPL, whereas digital literacy, perceived ownership of borrowed money, and social media financial influence increased intention. Intention, in turn, was positively associated with reported BNPL usage. The findings show that BNPL behavior cannot be understood solely as technology adoption. It also reflects debt knowledge, the psychological framing of borrowed purchasing power, sensitivity to repayment, online social influence, and family financial socialization. The study contributes evidence from Pakistan and demonstrates that digital competence and financial prudence can lead to different behavioral outcomes. Responsible BNPL ecosystems should therefore combine transparent platform design, consumer-credit safeguards, digital financial education, and constructive family and social

communication to help young consumers use sustainably. deferred-payment services deliberately and

Conflict of Interest

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