Buy Now, Pay Later Usage and Spending Behaviour Among Young Adults in Malaysia: The Roles of Financial Literacy and Financial Self-Control

Norsuzelawaty Ismail

UNIRAZAK

DOI: https://doi.org/10.47772/IJRISS.2026.101000383

Received: 16 October 2026; Accepted: 21 October 2026; Published: 03 November 2026

ABSTRACT

Buy Now, Pay Later (BNPL) has become a prominent form of digitally embedded consumer credit that enables consumers to acquire goods and services immediately while spreading payment across future instalments. Its rapid integration into e-commerce and mobile platforms has increased convenience and short-term liquidity, but it has also intensified concern about overspending, fragmented repayment obligations and financial vulnerability, particularly among younger consumers. This conceptual paper develops an integrative framework explaining how BNPL usage may shape spending behaviour among young adults in Malaysia and why this relationship may differ according to financial literacy and financial self-control. The paper synthesises recent BNPL, fintech, consumer-behaviour and financial-well-being literature, with emphasis on studies published from 2021 to 2026 and on emerging Malaysian evidence. The framework is grounded in the Theory of Planned Behaviour and behavioural-economics concepts concerning payment salience, payment decoupling and the pain of paying. It proposes that BNPL usage can increase spending by lowering the perceived expensiveness of purchases and shifting attention from total price to smaller instalment amounts. Financial literacy and financial self-control are conceptualised both as direct protective factors and as moderators that may weaken the positive relationship between BNPL usage and excessive spending. The paper contributes by moving beyond the dominant adoption-intention perspective, distinguishing post-adoption spending outcomes from impulsive buying alone, and integrating cognitive financial capability with behavioural self-regulation. The framework offers a basis for future empirical testing and has implications for Malaysia's evolving consumer-credit regulation, financial education and responsible BNPL product design.

Keywords: Buy Now, Pay Later; BNPL; spending behaviour; financial literacy; financial self-control; young adults; Malaysia

INTRODUCTION

Digital financial services have changed not only how consumers transfer money but also how they experience the act of paying. Mobile wallets, one-click checkout, embedded finance and platform-based credit have reduced transaction friction and made purchasing increasingly immediate. Among these innovations, Buy Now, Pay Later (BNPL) has attracted particular attention because it combines payment convenience with short-term credit. Consumers receive a product or service immediately while paying the amount later, commonly through several instalments. Although many BNPL arrangements are promoted as interest-free, the economic commitment remains a form of deferred payment and may include late-payment charges or other consequences when repayment obligations are not met.

The Malaysian context makes this development especially relevant. BNPL has expanded alongside e-commerce, mobile payments and digitally mediated consumption. Khazanah Research Institute reported 29 million BNPL transactions worth RM2.3 billion in the first quarter of 2024, while outstanding BNPL balances increased from RM1.06 billion at the end of 2023 to RM1.42 billion at the end of the first quarter of 2024 (Hishamudin, 2024). The majority of active account holders reported in that analysis were between 21 and 45 years old. Malaysia has subsequently moved toward a more comprehensive consumer-credit regime. The Consumer Credit Act 2025

came into force in 2026, and BNPL providers are among the credit providers subject to licensing and conduct requirements under the Consumer Credit Commission (Suruhanjaya Kredit Pengguna [SKP], 2026a, 2026b).

The policy concern is not that BNPL is inherently harmful. Deferred payment can help consumers smooth cash flow, manage necessary expenditure and avoid a large one-time payment. The concern is behavioural: the design of instalment payments may alter how consumers evaluate price and affordability. Recent transaction and experimental evidence indicates that BNPL can increase spending. Kumar et al. (2024), using online retail data, found higher spending following BNPL adoption, with stronger effects among younger and lower-income customers. Ashby et al. (2025) further showed that instalment-price presentation can reduce perceived expensiveness and increase spending relative to other payment modes. These findings are consistent with long-standing behavioural research showing that payment timing, transparency and salience can influence willingness to spend (Prelec & Loewenstein, 1998; Raghubir & Srivastava, 2008; Soman, 2001).

The issue is particularly important for young adults. Early adulthood is a period in which individuals increasingly make independent decisions about credit, budgeting, saving and discretionary consumption. At the same time, young adults are heavily exposed to digital retail interfaces, social-media marketing, personalised promotions and frictionless checkout. Recent research on fintech credit products shows that affordability, flexibility, perceived usefulness, social influence and platform characteristics shape young consumers' attitudes and intentions (Aisjah, 2024; Behera & Dadra, 2024). Malaysian studies likewise increasingly examine BNPL adoption, impulsive buying, debt management and financial risk (Alias et al., 2025; Izham et al., 2025; Sarifuddin, 2025; Tay & Tan, 2026).

Yet an important conceptual distinction remains underdeveloped. Much of the BNPL literature asks why consumers intend to adopt or continue using BNPL. Adoption intention is important, but it is not the same as post-adoption spending behaviour. A consumer may adopt BNPL for convenience without overspending, whereas another may use it frequently, maintain several concurrent repayment plans and increase discretionary expenditure. Likewise, impulsive buying captures spontaneous or unplanned purchases but does not fully represent broader spending behaviour, which includes purchase frequency, amount spent, budgeting discipline, expenditure allocation and the management of needs versus wants.

This paper therefore develops a conceptual framework focused on the relationship between BNPL usage and spending behaviour among young adults in Malaysia. It proposes two individual-level boundary conditions: financial literacy and financial self-control. Financial literacy represents the cognitive capacity to understand credit terms, repayment schedules, cumulative obligations and financial consequences. Financial self-control represents the behavioural capacity to resist immediate consumption when it conflicts with longer-term financial goals. These constructs are related but not interchangeable. A consumer may understand the financial consequences of BNPL yet still struggle to regulate purchasing impulses; conversely, a disciplined consumer may avoid overspending despite only moderate financial knowledge.

The paper makes three principal contributions. First, it shifts the unit of explanation from pre-adoption intention to post-adoption spending consequences. Second, it integrates payment psychology with financial capability by combining behavioural-economics mechanisms with the Theory of Planned Behaviour (TPB). Third, it proposes that financial literacy and financial self-control do more than directly predict responsible behaviour: they may change the strength of the relationship between BNPL usage and spending. This conditional perspective provides a more nuanced account of why the same payment technology may produce different outcomes across young consumers.

BUY NOW, PAY LATER (BNPL) AND THE MALAYSIAN CONSUMER-CREDIT CONTEXT

BNPL is best understood as digitally embedded short-term credit rather than merely a neutral payment button. SKP defines BNPL as a scheme that allows consumers to purchase goods or services now and pay later, either in a single deferred payment or through instalments (SKP, 2026b). This definition is important because the user experience can make the transaction feel like a payment method even when it creates a future financial obligation. Cook et al. (2023) describe this broader cultural shift as the normalisation of credit consumption:

BNPL branding and interfaces can present debt as an ordinary and even pleasurable "way to pay." Aalders (2023) similarly shows how BNPL platforms frame users as responsible consumers while embedding credit into everyday consumption.

Malaysia's rapid BNPL expansion has occurred in an environment of high digital-payment adoption and persistent cost-of-living pressures. Hishamudin (2024) notes that BNPL can function as a short-term financial lifeline, especially where consumers face liquidity constraints, but warns that using deferred credit repeatedly for basic needs can create unsustainable obligations. Malaysia's National Strategy for Financial Literacy 2026–2030 also identifies the "painless payment" phenomenon: digital payments reduce the physical and psychological salience of money leaving the consumer, potentially making impulsive expenditure easier (Financial Education Network [FEN], 2025).

Regulatory developments have therefore become central to the Malaysian BNPL landscape. The Consumer Credit Act 2025 was gazetted on 31 December 2025 and came into force on 1 March 2026, with licensing and registration provisions taking effect on 1 June 2026 (SKP, 2026a). BNPL is included among the credit activities regulated in the first phase. The regulatory direction is consistent with a broader international concern that innovation should not obscure affordability, disclosure and responsible-lending issues. Malaysian regulators now explicitly warn that multiple small BNPL commitments can accumulate, blur the consumer's actual financial position and affect future creditworthiness (SKP, 2026b).

The changing regulatory environment strengthens the relevance of behavioural research. Regulation can improve disclosure and provider conduct, but consumer outcomes also depend on how information is processed and how individuals regulate spending. A technically clear repayment schedule may still be interpreted through the psychologically attractive lens of a small instalment. Similarly, a consumer may understand that BNPL is credit but discount future repayment burdens in favour of immediate consumption. This makes financial literacy and self-control particularly important in explaining heterogeneous outcomes.

YOUNG ADULTS AND SPENDING BEHAVIOUR

Spending behaviour is broader than purchase intention or impulsive buying. In this paper, it refers to patterns through which individuals allocate financial resources to consumption, including expenditure amount, purchase frequency, discretionary spending, budgeting consistency, purchase planning and the tendency to spend beyond current means. This multidimensional view is important because BNPL may influence spending through several channels. It can increase order value, encourage more frequent purchases, facilitate higher-priced choices or enable simultaneous obligations across providers.

Young adults are a theoretically important group because financial independence and digital consumption develop at the same time. Malaysian evidence shows that financial behaviour plays a central role in young adults' financial well-being. Sabri et al. (2024) found that financial behaviour mediated relationships involving financial literacy, self-control, financial technology and financial well-being among Malaysian young adults. This suggests that access to technology is not sufficient to explain outcomes; the behavioural practices surrounding technology matter.

International BNPL evidence points in the same direction. Powell et al. (2023) found that younger BNPL users were less likely to plan and budget for BNPL purchases and displayed lower financial well-being than older users. Guttman-Kenney et al. (2023) showed that BNPL transactions charged to credit cards were particularly prevalent among younger consumers and consumers in more deprived areas, raising concerns about debt refinancing and repayment capacity. Kumar et al. (2024) found that the spending effect of BNPL adoption was stronger for younger and lower-income consumers.

Young adults should nevertheless not be treated as uniformly financially vulnerable. Their responses to BNPL are likely to differ according to income, experience, financial knowledge, self-efficacy, self-control, social influence and the purpose for which BNPL is used. This heterogeneity motivates a conditional framework rather than a simple assumption that BNPL automatically produces excessive spending.

THEORETICAL FOUNDATION

The proposed framework combines the Theory of Planned Behaviour with behavioural-economics insights on payment salience and the pain of paying. The theories operate at different but complementary levels. TPB explains how attitudes, social norms and perceived behavioural control shape intentional behaviour, whereas payment psychology explains how the architecture of the transaction itself can alter the subjective experience of price.

4.1 Theory of Planned Behaviour

Ajzen's (1991) TPB proposes that behaviour is proximally shaped by behavioural intention, which reflects attitude toward the behaviour, subjective norms and perceived behavioural control. BNPL research frequently uses TPB or related technology-adoption frameworks to explain intention. Tay and Tan (2026), for example, use TPB to examine financial literacy, perceived risk, credit attitude and economic vulnerability in relation to BNPL intention in Klang Valley. Aisjah (2024) shows that financial parenting, financial self-efficacy and social-media intensity are relevant to students' BNPL intentions. Ackert et al. (2024) demonstrate that perceived social norms can also support BNPL borrowing choices.

For the present framework, the most relevant TPB component is perceived behavioural control. Consumers differ in whether they believe they can manage repayment commitments, budget effectively and resist unnecessary purchases. Financial literacy can strengthen informed control by improving understanding of obligations, while self-control can strengthen behavioural control by enabling the consumer to act consistently with longer-term financial goals. The framework therefore extends TPB beyond adoption intention to post-adoption behaviour.

4.2 Payment Salience, Decoupling and the Pain of Paying

Behavioural economics provides a more direct explanation for why BNPL may change spending. Prelec and Loewenstein (1998) argue that payment and consumption can be psychologically coupled or decoupled. When payment is immediate and salient, the act of paying can reduce consumption utility. When payment is delayed or less transparent, this "pain of paying" is weakened. Soman (2001) similarly shows that payment mechanisms affect spending through rehearsal and immediacy.

BNPL combines several features that can reduce payment salience. First, payment is temporally separated from consumption. Second, the total price may be reframed as a sequence of smaller instalments. Third, digital checkout reduces physical cues associated with money leaving the consumer. Ashby et al. (2025) provide direct evidence for the instalment-price mechanism: presenting the instalment amount lowers perceived expensiveness and increases spending. This is highly relevant to BNPL because the small instalment is often the most visually prominent price cue.

The two theoretical perspectives therefore complement one another. Payment architecture can increase the behavioural temptation to spend, while financial literacy and self-control influence the consumer's ability to recognise and regulate that temptation.

LITERATURE REVIEW

5.1 BNPL Usage

BNPL usage should be distinguished from adoption intention. Usage refers to actual engagement with BNPL, which may be reflected in frequency of transactions, reliance on BNPL relative to other payment methods, number of active plans, number of providers used and share of discretionary purchases financed through BNPL. This distinction matters because post-adoption effects emerge only after the consumer begins using the service.

Research increasingly documents behavioural consequences of actual usage. Kumar et al. (2024) found a 6.42% increase in online spending among customers adopting BNPL in their retail setting. Ashby et al. (2025) found greater spending with BNPL than with other payment modes and identified perceived expensiveness as a

mechanism. Powell et al. (2023) connect BNPL-related financial behaviours with financial well-being, while Guttman-Kenney et al. (2023) show how BNPL can interact with other forms of credit.

Malaysian studies are growing but remain fragmented. Alias et al. (2025) develop a conceptual account of financial knowledge and impulsivity in shaping BNPL attitudes. Izham et al. (2025) examine BNPL and impulsive buying among Generation Z in Shah Alam. Sarifuddin (2025), using qualitative interviews with Generation Z consumers in Klang Valley, identifies instant gratification, FOMO, social influence, repayment difficulty and limited financial literacy as important themes. Tan et al. (2026) examine BNPL usage and debt management among Malaysian university students, while Tay and Tan (2026) focus on determinants of intention. Together, these studies establish the relevance of BNPL but leave room for a broader post-adoption spending model.

5.2 BNPL and Spending Behaviour

The strongest argument for a direct BNPL-spending relationship comes from payment architecture. A consumer who sees "RM100 today" rather than "RM400 total" may encode affordability differently, even when total cost is known. Ashby et al. (2025) show that instalment framing lowers perceived expensiveness. Kumar et al. (2024) demonstrate that the effect is observable in actual retail spending rather than only stated intentions.

Spending behaviour should not be equated with irresponsible behaviour in every instance. A higher order value may reflect planned consumption, liquidity smoothing or the purchase of durable goods. The conceptual concern arises when BNPL systematically increases expenditure beyond planned budgets, encourages unnecessary purchases or fragments obligations to the point that consumers lose visibility over total commitments. SKP (2026b) explicitly warns that several small BNPL repayments can accumulate into a burdensome total.

5.3 Financial Literacy

Financial literacy generally refers to the knowledge and capability required to understand financial concepts and make informed financial decisions. In the BNPL context, relevant knowledge includes recognising BNPL as credit, understanding repayment schedules and late-payment consequences, calculating cumulative commitments and assessing affordability relative to income and existing debt.

Recent evidence suggests that the role of financial literacy is not straightforward. Tay and Tan (2026) report a positive relationship between financial literacy and BNPL intention in their Klang Valley sample, which may indicate that knowledgeable consumers are also more confident using financial products. By contrast, recent U.S. evidence finds that higher financial literacy is negatively associated with BNPL use, although the relationship weakens under financial vulnerability and cash-flow constraints (Economics Letters, 2026). These apparently different findings illustrate why financial literacy should not be treated simply as a determinant of adoption.

For post-adoption spending, literacy may operate as a protective capability. A financially literate user may still choose BNPL but be more likely to compare total cost, consolidate repayment obligations and recognise when instalment framing makes a purchase appear cheaper than it is. Sabri et al. (2024) further show that financial literacy works through financial behaviour in shaping well-being among young Malaysians. Knowledge becomes consequential when translated into budgeting and disciplined action.

5.4 Financial Self-Control

Financial self-control concerns the ability to resist immediate consumption and remain aligned with longer-term financial goals. It is conceptually distinct from knowledge. A person can know that a purchase is unnecessary and still make it; another person with modest technical knowledge may maintain strict spending rules.

BNPL creates a setting in which self-control is likely to matter because it lowers immediate payment friction. Sarifuddin (2025) identifies instant gratification and FOMO among Malaysian Gen Z BNPL users, while recent Malaysian conceptual work on comfort spending highlights financial self-control as a key determinant of youth

BNPL behaviour. Broader young-adult research also links self-control to financial behaviour and well-being (Sabri et al., 2024).

Self-control is therefore proposed as both a direct predictor of restrained spending and a moderator. High self-control may reduce the behavioural effect of instalment framing because the consumer applies pre-existing rules such as waiting periods, spending limits or needs-versus-wants criteria. Low self-control may allow the convenience and reduced pain of payment to translate more strongly into additional spending.

SYNTHESIS OF RECENT LITERATURE

Table 1 summarises representative recent studies that directly inform the proposed framework. The pattern is clear. The literature has progressed from questions of adoption and attitude toward evidence of actual spending, debt management and financial well-being. However, Malaysian work remains concentrated on intention, impulsive buying and specific subgroups, while international spending studies do not necessarily capture Malaysia's regulatory, cultural and financial-literacy context. This creates space for a framework that explains post-adoption spending among Malaysian young adults and explicitly models individual financial capability as a boundary condition.

Table 1. Representative recent literature informing the conceptual framework

Authors	Context	Focus	Key finding	Relevance
Kumar, Salo, & Bezawada (2024)	International; online retail	Actual BNPL adoption and online spending	BNPL adopters spent more; effect stronger among younger/lower-income customers	Establishes post-adoption spending effect
Ashby et al. (2025)	Transaction data + experiments	BNPL, instalment prices, spending	Instalment framing lowered perceived expensiveness and increased spending	Supports payment-framing mechanism
Powell et al. (2023)	Australia; BNPL users	Responsible financial behaviours and well-being	Planning/budgeting and compulsive buying linked to financial well-being; younger users more vulnerable	Supports role of financial behaviour
Guttman-Kenney et al. (2023)	United Kingdom	BNPL transactions charged to credit cards	Use concentrated among younger and more deprived consumers	Highlights repayment and refinancing risk
Aalders (2023)	Australia; platform/interface analysis	BNPL affordances and responsible consumption	Platforms frame BNPL as responsible everyday consumption	Shows normalisation of credit
Cook et al. (2023)	Australia; qualitative/multi-method	BNPL marketing and credit consumption	BNPL presented as a way to pay rather than debt	Supports reduced credit salience
Behera & Dadra (2024)	Young consumers	Fintech credit attitudes	Affordability, flexibility, usefulness and trust shape attitudes	Explains young-consumer attraction
Aisjah (2024)	University students	BNPL intention	Financial self-efficacy, parenting and social-media intensity matter	Shows social/capability antecedents
Izham et al. (2025)	Shah Alam, Malaysia; Gen Z	BNPL and impulsive buying	BNPL characteristics associated with impulsive buying	Malaysian behavioural evidence
Sarifuddin (2025)	Klang Valley; Gen Z	BNPL adoption and financial risks	Instant gratification, FOMO, repayment difficulty and low literacy emerged	Malaysian qualitative evidence

Tay & Tan (2026)	Klang Valley, Malaysia	Determinants of BNPL intention	Financial literacy, credit attitude and vulnerability related to intention	Shows adoption focus in Malaysia
Tan et al. (2026)	Malaysian university students	BNPL usage and debt management	Financial-management capability and behavioural factors relevant	Links BNPL with debt management
Sabri et al. (2024)	Malaysian young adults	Financial behaviour and well-being	Financial behaviour mediates effects of literacy, self-control and fintech	Supports literacy/self-control pathways
Ackert et al. (2024)	Young adults; experiment	social norms, indebtedness	BNPL choice supported by perceived social norms	Highlights social context

RESEARCH GAP AND NOVELTY

The novelty of this paper does not rest on claiming that BNPL and spending have never been studied. That claim would no longer be defensible. Instead, the contribution lies in how the literature is integrated and where the explanatory focus is placed.

First, there is an outcome gap. A substantial stream of BNPL research remains adoption-centric, examining perceived usefulness, ease of use, attitude, social influence, trust, risk and intention. These studies explain whether consumers are likely to use BNPL, but they do not fully explain what happens to spending after adoption. Actual use can produce consequences that are not visible in an intention model.

Second, there is a construct gap. Malaysian studies increasingly examine impulsive buying, yet impulsive buying is only one component of spending behaviour. A consumer can overspend through planned purchases, repeated small transactions or higher-value product choices without those purchases being impulsive. By conceptualising spending behaviour more broadly, the proposed framework captures purchase amount, frequency, budgeting discipline and discretionary expenditure.

Third, there is a boundary-condition gap. Existing studies often model financial literacy as an antecedent of adoption or intention. The present paper instead asks whether literacy changes the strength of the BNPL-spending relationship. This is theoretically meaningful because knowledgeable consumers may adopt BNPL for convenience while still constraining its spending effect through better affordability assessment.

Fourth, there is a capability-versus-control gap. Financial literacy and financial self-control are frequently discussed together as signs of financial responsibility, but they represent different mechanisms. Literacy concerns what the consumer understands; self-control concerns whether the consumer can act consistently with longer-term goals. Modelling both provides a more precise explanation of heterogeneity among young adults.

Fifth, there is a contextual and regulatory gap. Malaysia entered a new consumer-credit regulatory phase in 2026. The Consumer Credit Act 2025 and the establishment of SKP create a timely context in which responsible BNPL usage, disclosure and consumer capability have heightened policy relevance. A Malaysian conceptual framework developed after these changes can connect behavioural evidence with an evolving regulatory environment.

The paper's novelty is therefore an integrative post-adoption model: BNPL usage is proposed to influence spending behaviour through payment-framing mechanisms, while financial literacy and financial self-control operate as protective resources that may directly reduce excessive spending and weaken the BNPL-spending association. This moves the discussion from the binary question of whether BNPL is "good" or "bad" toward the more useful question of when, why and for whom BNPL is more likely to change spending.

CONCEPTUAL FRAMEWORK AND PROPOSITION DEVELOPMENT

8.1 BNPL Usage and Spending Behaviour

BNPL lowers the immediate cash requirement of a purchase and can make the transaction appear more

affordable. Instalment framing directs attention toward the periodic payment rather than the total price, while payment deferral separates consumption from the full financial sacrifice. Recent empirical work supports a spending effect (Ashby et al., 2025; Kumar et al., 2024). In young adults, who may have lower incomes and shorter financial histories, the apparent affordability created by instalments may be especially influential.

H1: BNPL usage is positively associated with spending behaviour among young adults in Malaysia.

8.2 Financial Literacy and Spending Behaviour

Financial literacy can support more accurate evaluation of affordability, total repayment commitments and the consequences of missed payments. Although financially literate consumers may still use BNPL, they should be better equipped to incorporate BNPL obligations into a budget and resist misleading affordability cues.

H2: Financial literacy is negatively associated with excessive spending behaviour among young adults in Malaysia.

8.3 Financial Self-Control and Spending Behaviour

Self-control allows consumers to maintain spending limits, delay gratification and resist promotional or social cues. In a low-friction BNPL environment, this capacity should reduce unnecessary or excessive consumption.

H3: Financial self-control is negatively associated with excessive spending behaviour among young adults in Malaysia.

8.4 Moderating Role of Financial Literacy

The same BNPL interface may not have the same effect on all consumers. A user who understands cumulative repayment obligations may mentally reconstruct the total price rather than focus on the instalment amount. Financial literacy should therefore weaken the translation of BNPL usage into increased spending.

H4: Financial literacy moderates the positive relationship between BNPL usage and spending behaviour, such that the relationship is weaker at higher levels of financial literacy.

8.5 Moderating Role of Financial Self-Control

BNPL reduces immediate payment friction, but self-control can restore behavioural friction through internal rules and deliberate decision-making. Consumers with stronger self-control should be less responsive to the temptation created by small instalment amounts, instant checkout and delayed payment.

H5: Financial self-control moderates the positive relationship between BNPL usage and spending behaviour, such that the relationship is weaker at higher levels of financial self-control.

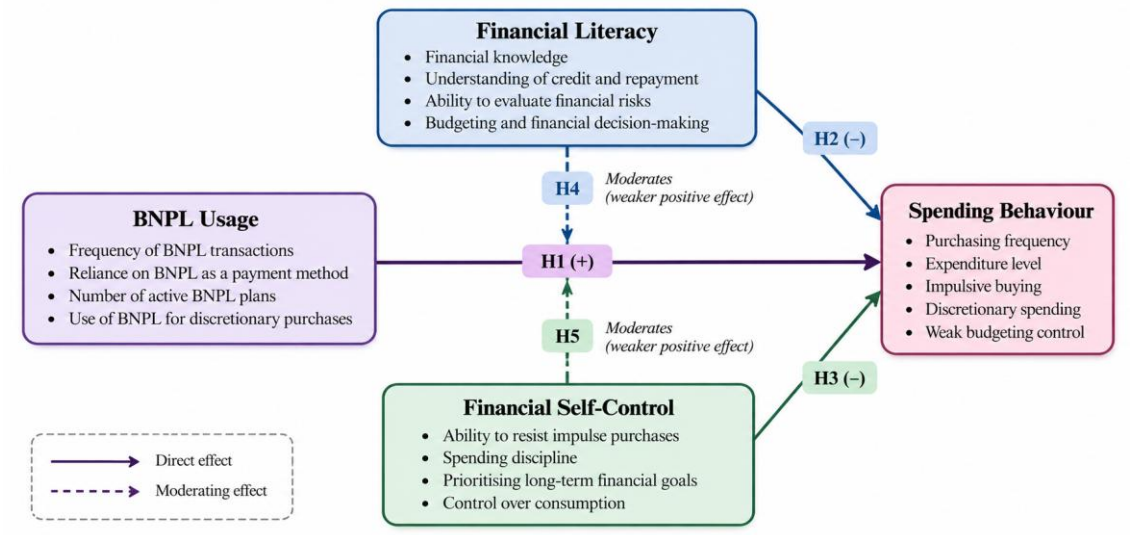

Figure 1. Proposed conceptual framework

THEORETICAL CONTRIBUTIONS

The framework contributes to BNPL scholarship in four ways. First, it treats BNPL as both a credit product and a payment architecture. This dual perspective is necessary because spending effects can arise even when the nominal cost of credit is low or zero; the behavioural mechanism may operate through price presentation and payment timing.

Second, the paper extends TPB-oriented BNPL research from intention to post-adoption behaviour. Perceived control is not only relevant to whether a person believes they can use BNPL; it is also relevant to whether they can manage spending once BNPL becomes routinely available.

Third, the framework integrates cognitive and behavioural financial capability. Financial literacy and self-control are not substitutes. Their simultaneous inclusion can explain why information-based interventions may be insufficient for some consumers and why behavioural discipline can matter even among knowledgeable users.

Fourth, the paper offers a conditional rather than deterministic account of BNPL. BNPL is not assumed to produce overspending in every user. The proposed moderators explicitly recognise heterogeneous consumer responses, making the framework more consistent with the mixed purposes for which BNPL is used.

PRACTICAL AND POLICY IMPLICATIONS

The framework has implications for regulators, educators, providers and consumers. For regulators, the key issue is not only disclosure of fees but also the salience of total obligations. If instalment presentation lowers perceived expensiveness, responsible design may require that total purchase cost and aggregate outstanding BNPL commitments remain visible at the point of decision.

For financial educators, the framework suggests that knowledge and behaviour should be addressed together. Teaching consumers what BNPL is may not be enough if they lack practical self-regulation strategies. Education can include cumulative-debt calculation, budgeting for future instalments, waiting-period rules and methods for distinguishing needs from discretionary wants.

For BNPL providers and merchants, responsible product design can include transparent total-cost presentation, clear repayment calendars, consolidated outstanding-balance dashboards, affordability prompts and friction before opening multiple simultaneous plans. Such measures need not eliminate convenience; they can improve informed choice.

For young consumers, the framework highlights a simple but important principle: affordability should be evaluated using the total obligation and the combined burden of all repayments, not merely the size of the next instalment.

DIRECTIONS FOR FUTURE EMPIRICAL RESEARCH

The framework is designed for empirical testing. A future Malaysian study could survey young adults who have used BNPL within a defined recent period. BNPL usage should be measured behaviourally rather than only through intention, using indicators such as transaction frequency, number of active plans, number of providers, approximate monthly BNPL expenditure and reliance on BNPL for discretionary purchases.

Spending behaviour should likewise be operationalised broadly. Possible indicators include unplanned expenditure, frequency of discretionary purchases, spending beyond a planned budget, purchase amount, tendency to choose more expensive alternatives and difficulty tracking cumulative commitments. Researchers should distinguish ordinary spending from “excessive” spending carefully and avoid assuming that every increase in expenditure is harmful.

Financial literacy can combine objective knowledge items with perceived knowledge, while financial self-control can be measured using established self-control or financial-management scales. Structural equation modelling could test the direct and interaction effects proposed here. A longitudinal design would be even

stronger because it could examine whether spending changes after BNPL adoption rather than relying only on cross-sectional associations.

Future work should also examine mediating mechanisms. Perceived expensiveness, perceived affordability, payment salience and psychological distance are plausible mediators between BNPL usage and spending. Additional moderators may include income volatility, financial vulnerability, FOMO, materialism, social-media intensity and purpose of purchase. Comparisons between students, early-career workers and more established young adults could further clarify whether life stage changes the effect.

Finally, future Malaysian research should take account of the post-2026 regulatory environment. Consumer understanding and provider practices may change as licensing and conduct standards become embedded. Studies conducted before and after regulatory implementation could offer valuable evidence on whether stronger disclosure and affordability practices alter BNPL-related spending outcomes.

Future studies should pre-specify whether the outcome is total spending, discretionary spending or problematic spending, as these outcomes need not move together. In addition to testing the five central hypotheses, researchers may explore complementary financial-capability profiles, non-linear responses to BNPL intensity, and the joint moderating role of literacy and self-control. Inflation, income adequacy and necessity-driven purchases should be incorporated as contextual variables to avoid attributing financially constrained consumption entirely to individual decision-making.

CONCEPTUAL BOUNDARIES AND METHODOLOGICAL IMPLICATIONS

12.1 Defining BNPL Usage and Purchase Purpose

For future empirical testing, BNPL usage should be defined as the intensity and composition of actual deferred-payment activity within a specified observation window, rather than a binary indicator of adoption. Researchers could record the number of transactions during the previous three months, number of active instalments plans and providers, aggregate monthly repayments, outstanding balances, and the proportion of purchases financed through BNPL. Transaction counts and monetary values should be measured separately because frequent small purchases and occasional high-value purchases represent different exposure patterns. Where possible, participants should classify purchases as essential or discretionary and as planned or unplanned. These dimensions should not be conflated: a planned discretionary purchase is not necessarily problematic, and an unplanned essential expense may reflect a genuine emergency. Self-reports can be triangulated with voluntarily shared redacted transaction records, subject to consent and data-protection safeguards.

12.2 Distinguishing Increased Spending from Problematic Spending

The outcome requires an explicit distinction between spending volume and spending quality. Increased expenditure is a descriptive change in purchasing activity; excessive or financially problematic spending is a normative and context-dependent judgement that requires additional evidence. Future studies should operationalise problematic spending through indicators such as repeated budget overruns, discretionary purchases made primarily because instalments appear affordable, missed or delayed essential payments, inability to meet scheduled BNPL instalments, and accumulation of repayment commitments beyond available disposable income. Conversely, using BNPL for a previously budgeted durable good, necessary household expenditure, or temporary liquidity smoothing should not automatically be coded as irresponsible. Researchers should measure the original purchase intention, necessity, alternative payment options, disposable income, and subsequent repayment performance. A multi-item index of problematic spending could be examined separately from total expenditure and purchase frequency, with item content assessed for validity and contextual appropriateness before aggregation. This distinction also clarifies H1: its positive association concerns overall spending behaviour, whereas H2 and H3 specifically predict lower excessive spending.

12.3 Operationalising Financial Literacy and Financial Self-Control

Financial literacy should be measured using distinct objective and subjective components. Objective knowledge items could ask respondents to calculate the total amount due across several instalment plans, identify late-

payment consequences, distinguish zero-interest marketing from total borrowing cost, and evaluate whether repayments are affordable given income and existing commitments. Such items should have verifiably correct answers and an explicit scoring procedure. Subjective literacy should be measured separately through perceived confidence in interpreting credit terms, budgeting, and comparing financing alternatives; it should not substitute for demonstrated knowledge. Financial self-control should capture the ability to delay discretionary purchases, follow predetermined spending limits, resist promotional urgency, and prioritise future obligations. Items should refer to actual behaviour or specific recent situations rather than moral labels. Researchers should pilot the measures, examine content validity and discriminant validity, and test whether knowledge, confidence, and self-control remain empirically distinguishable. Self-reported responsible behaviour may be affected by social desirability and recall error; confidential administration, bounded recall periods and objective corroboration can reduce, though not eliminate, these limitations.

12.4 Joint Capability, Interaction and Non-linear Effects

Although the central framework specifies financial literacy and financial self-control as separate protective moderators, their relationship may be complementary rather than merely additive. High financial literacy without sufficient self-control may enable a consumer to recognise cumulative repayment risk without consistently resisting attractive purchases. Conversely, strong self-control with limited financial knowledge may restrain unnecessary purchases while leaving the consumer exposed to misunderstood credit terms. A dual-capability profile—high on both dimensions—may therefore be associated with more consistent budgeting than either capability alone. Future research could compare four profiles (high/high, high/low, low/high and low/low), using substantively justified cut-offs or empirically derived profiles. It could also estimate a literacy × self-control interaction predicting problematic spending. A more demanding exploratory extension would test BNPL usage × literacy × self-control to assess whether the moderating role of one capability depends on the other. This three-way interaction is not part of H1–H5 and should be labelled exploratory, assessed with adequate statistical power, and interpreted using conditional marginal effects. Researchers should additionally examine possible non-linearity: the protective association of literacy may plateau at high levels, while self-control may become particularly consequential when BNPL exposure is intensive. Quadratic terms or flexible specifications could test these possibilities without presuming their existence.

12.5 Macroeconomic Pressures and Financial Vulnerability

The association between BNPL use and spending also depends on the economic environment in which purchases occur. Inflation and cost-of-living pressures may increase reliance on deferred payment for groceries, transport, education, or other necessities, even among financially knowledgeable and self-disciplined consumers. Such use may reflect constrained liquidity rather than an impulsive response to instalment framing. Empirical studies in Malaysia should therefore capture perceived cost-of-living pressure, real disposable income or income adequacy, employment insecurity, household responsibilities, existing debt-service commitments, and recent financial shocks. Where feasible, survey waves can be linked to contemporaneous macroeconomic indicators, with care not to infer individual-level effects from aggregate trends. Purchase-purpose categories and interactions between financial vulnerability and BNPL intensity can help distinguish necessity-driven borrowing from discretionary consumption. These contextual factors should be treated as potential confounders or additional boundary conditions rather than evidence that literacy or self-control is ineffective.

12.6 Research Design, Analytical Strategy and Limitations

A cross-sectional survey could provide an initial test of H1–H5, but it cannot establish that BNPL caused changes in spending: consumers with pre-existing spending tendencies may be more likely to adopt BNPL. A stronger design would follow users before and after adoption or compare repeated observations across users with different exposure levels. An experiment could vary the prominence of total price, instalment amount, and repayment reminders to isolate the proposed payment-salience mechanism. Analytically, researchers should assess measurement reliability and construct validity before estimating direct and moderation effects, report effect sizes and confidence intervals, and probe significant interactions rather than relying solely on p-values. Potential overlap between BNPL usage, purchase frequency and spending outcomes requires particular attention to avoid tautological measurement. Common-method bias, self-selection, omitted variables and reverse causality should

be discussed explicitly. Exploratory interaction and non-linear models require additional sample-size planning and independent replication.

12.7 Population Boundaries and Transferability

The framework is tailored to young adults in Malaysia and should not be assumed to generalise automatically to adolescents, older consumers, households with different financial responsibilities, or markets with different credit-reporting systems, consumer protections and BNPL business models. Even within Malaysia, students, salaried workers, gig workers and financially dependent young adults may face substantially different liquidity constraints. Future studies should define the young-adult age range explicitly, document recruitment and sampling procedures, and compare demographic and employment subgroups where sample sizes permit. Cross-country or cross-age comparisons would require assessment of measurement equivalence and attention to differences in regulation, credit access and payment norms. The conceptual mechanisms may be transferable, but the magnitude and direction of observed associations remain empirical questions.

CONCLUSION

Buy Now, Pay Later (BNPL) has transformed digital consumer finance by offering greater payment flexibility while potentially encouraging increased spending through reduced payment salience and instalment framing. This conceptual paper proposes that financial literacy and financial self-control play important protective roles in shaping spending behaviour among young adults in Malaysia. By integrating the Theory of Planned Behaviour (TPB) with behavioural economics, the framework provides a clearer understanding of post-adoption spending behaviour and the conditions influencing responsible BNPL usage.

Nevertheless, increased spending does not necessarily indicate financial irresponsibility, as BNPL may also support planned purchases and short-term liquidity needs. The interaction between financial literacy, self-control and cost-of-living pressures further highlights the complexity of consumer financial decisions. Future empirical research is therefore needed to validate the proposed relationships. Overall, this study contributes to the growing BNPL literature and offers valuable implications for financial education, responsible lending practices and consumer-credit regulation in Malaysia.

REFERENCES

1. Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T
2. Aalders, R. (2023). Buy now, pay later: Redefining indebted users as responsible consumers. Information, Communication & Society, 26(5), 941–956. https://doi.org/10.1080/1369118X.2022.2161830
3. Ackert, L. F., Khayati, A., & Kelani, Z. (2024). Buy now, pay later loans, social norms, and consumer indebtedness. Journal of Behavioral Finance. https://doi.org/10.1080/15427560.2024.2385898
4. Aisjah, S. (2024). Intention to use buy-now-pay-later payment system among university students: A combination of financial parenting, financial self-efficacy, and social media intensity. Cogent Social Sciences, 10(1), 2306705. https://doi.org/10.1080/23311886.2024.2306705
5. Alias, A. A., Zaidi, F. Z., & Mohd Fauzey, N. F. S. (2025). Buy now, think later? A conceptual take on Malaysian BNPL choices. International Journal of Management, Finance and Accounting, 6(2), 200–218. https://doi.org/10.33093/ijomfa.2025.6.2.7
6. Ashby, R., Sharifi, S., Yao, J., & Ang, L. (2025). The influence of the buy-now-pay-later payment mode on consumer spending decisions. Journal of Retailing, 101(1), 103–119. https://doi.org/10.1016/j.jretai.2025.01.003
7. Barone, M., Bussoli, C., & Fattobene, L. (2024). Digital financial consumers' decision-making: A systematic literature review and integrative framework. International Journal of Bank Marketing. https://doi.org/10.1108/IJBM-07-2023-0405
8. Behera, C. K., & Dadra, R. (2024). Understanding young consumers' attitude formation for new-age fintech credit products: An SOR framework perspective. Journal of Financial Services Marketing, 29(3), 964–978. https://doi.org/10.1057/s41264-023-00247-3

9. Cook, J., Davies, K., Farrugia, D., Threadgold, S., Coffey, J., Senior, K., Haro, A., & Shannon, B. (2023). Buy now pay later services as a way to pay: Credit consumption and the depoliticization of debt. Consumption Markets & Culture, 26(4), 245–257. https://doi.org/10.1080/10253866.2023.2219606
10. Financial Education Network. (2025). Malaysia National Strategy for Financial Literacy 2026–2030. https://www.fenetwork.my/
11. Furqan, F., Pangaribuan, C. H., Tjhin, S., & Luhur, C. (2025). Buy now, pray later? Demystifying unrestrained spending in the age of BNPL. Jurnal Siasat Bisnis, 29(1), 15–26. https://doi.org/10.20885/jsb.vol29.iss1.art2
12. Guttman-Kenney, B., Firth, C., & Gathergood, J. (2023). Buy now, pay later (BNPL) … on your credit card. Journal of Behavioral and Experimental Finance, 37, 100788. https://doi.org/10.1016/j.jbef.2023.100788
13. Hishamudin, S. H. (2024). Buy now, pay later: A new form of financial lifeline for consumers? Khazanah Research Institute. https://www.krinstitute.org/publications/buy-now-pay-later-a-new-form-of-financial-lifeline-for-consumers
14. Islami, D. A., Supriadi, Y. N., & Suciati, R. (2026). Buy Now, Pay Later and Generation Z financial well-being: A systematic literature review. Journal of Humanities and Social Studies, 10(2), 992–996. https://doi.org/10.33751/jhss.v10i03.291
15. Izham, H. I. B., Poon, K. Y. P., Aw, Y. C., Chong, K. L., & Hansaram, S. K. (2025). The impact of Buy Now, Pay Later services on the impulsive buying behavior of Generation Z in Shah Alam, Malaysia. International Journal of Research and Innovation in Social Science. https://doi.org/10.47772/IJRISS.2025.909000769
16. Kumar, A., Salo, J., & Bezawada, R. (2024). The effects of buy now, pay later (BNPL) on customers' online purchase behavior. Journal of Retailing, 100(4), 602–617. https://doi.org/10.1016/j.jretai.2024.09.004
17. Ma, L., & Yao, K. (2023). Investigating young adults' use of Internet credit services: A reflective-impulsive dual-process model. International Journal of Consumer Studies, 47(4), 1434–1448. https://doi.org/10.1111/ijcs.12918
18. Mohammad, C. N. A., Othman, N. A., & Mohamed, M. (2025). From intention to indebtedness: A narrative review on behavioral, financial, and Islamic finance determinants of Buy Now Pay Later (BNPL) usage in Malaysia. Management and Information Technology Journal, 1(1), 51–75.
19. Nik Azmi, N. N., & Mohd Zahari, N. H. (2024). Buy now pay later mechanism trigger impulsive purchase behaviour among Malaysian millennials generation. International Journal of Business and Technology Management, 6(1). https://doi.org/10.55057/ijbtm.2024.6.1.4
20. Powell, R., Do, A., Gengatharen, D., Yong, J., & Gengatharen, R. (2023). The relationship between responsible financial behaviours and financial wellbeing: The case of buy-now-pay-later. Accounting & Finance, 63(4), 4431–4451. https://doi.org/10.1111/acfi.13100
21. Prelec, D., & Loewenstein, G. (1998). The red and the black: Mental accounting of savings and debt. Marketing Science, 17(1), 4–28. https://doi.org/10.1287/mksc.17.1.4
22. Raghubir, P., & Srivastava, J. (2008). Monopoly money: The effect of payment coupling and form on spending behavior. Journal of Experimental Psychology: Applied, 14(3), 213–225. https://doi.org/10.1037/1076-898X.14.3.213
23. Sabri, M. F., Anthony, M., Law, S. H., Abdul Rahim, H., Burhan, N. A. S., & Ithnin, M. (2024). Impact of financial behaviour on financial well-being: Evidence among young adults in Malaysia. Journal of Financial Services Marketing, 29, 788–807. https://doi.org/10.1057/s41264-023-00234-8
24. Sarifuddin, S. (2025). Buy now, pay later or pain later? A qualitative study on the adoption of BNPL and financial risks among Generation Z consumers in Klang Valley. International Journal of Social Policy and Society, 21.
25. Soman, D. (2001). Effects of payment mechanism on spending behavior: The role of rehearsal and immediacy of payments. Journal of Consumer Research, 27(4), 460–474. https://doi.org/10.1086/319621
26. Suruhanjaya Kredit Pengguna. (2026a). Enforcement of the Consumer Credit Act 2025 and the establishment of the Consumer Credit Commission. https://www.skp.gov.my/
27. Suruhanjaya Kredit Pengguna. (2026b). Buy now, pay later (BNPL) scheme. https://www.skp.gov.my/en/industries/buy-now-pay-later-bnpl-scheme

28. Tan, L. H., Mohd Yusof, A. S., Ong, A. L. L., Suthib, A., Rosmira, A. A. I., & Kee, D. M. H. (2026). Buy Now Pay Later (BNPL) usage and its impact on debt management among Malaysian university students. International Journal of Accounting and Finance in Asia Pacific, 9(1), 90–103.
29. Tay, W. Z., & Tan, C. H. (2026). Analysis of the determinants of Buy-Now-Pay-Later payment mode among Malaysians in Klang Valley. International Journal of Management, Finance and Accounting, 7(2), 171–192. https://doi.org/10.33093/ijomfa.2026.7.2.6
30. Wong, H. S., Abdull Manaf, A. W., & Indriani, S. (2025). The regulatory landscape of Buy-Now-Pay-Later (BNPL) in Malaysia: Challenges and opportunities. Pena International Journal of Modern Law, Policy and Governance, 2(1), 25–34.
31. Abu Seman, S. A. (2025). Convenience over cash: Understanding why Gen Z embrace Buy Now Pay Later services. Journal of Information and Knowledge Management, 15(2). https://doi.org/10.24191/jikm.v15i2.8980
32. Raj, V. A., & Rai, A. K. (2025). Why stay loyal? Exploring the role of consumption values, satisfaction, and alternative attractiveness in buy now pay later services. Journal of Financial Services Marketing. https://doi.org/10.1057/s41264-025-00305-y
33. Hassan, M. F., Mohd Zain, F. A., Ghazali, M. S., & Mansor, F. (2025). Reconstructing Buy-Now-Pay-Later (BNPL) through Maqasid al-Shariah: A conceptual paper. E-Journal of Islamic Thought & Understanding, 8(2). https://doi.org/10.24191/ejitu.v8i2.9056
34. Ismail, A. R., et al. (2025). Exploring platform trust, borrowing intention, and actual use of PayLater services in Indonesia and Malaysia. Journal of Risk and Financial Management, 18(5), 255. https://doi.org/10.3390/jrfm18050255
35. Economics Letters. (2026). Financial literacy, financial vulnerability, and buy now, pay later use. Economics Letters, 267, 113080. https://doi.org/10.1016/j.econlet.2026.113080