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From Risky Indebtedness to Long-Term PayLater Adoption: The Mediating Roles of Attitude, Usage, and Impulsive Buying

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Abstract:

The emergence of PayLater has brought significant changes to consumer consumption patterns, including the decision to adopt PayLater. This study expands the PayLater literature by exploring the impact of risky indebtedness behavior on long-term PayLater adoption. Unlike previous research, which predominantly examines PayLater as a trigger for financial distress, based on the theory of planned behavior, this study aims to analyze the role of risky indebtedness behavior and the mediating role of attitudes toward PayLater, PayLater use, and impulse buying on long-term PayLater adoption. Integrating behavioral factors into an adoption model can provide a more comprehensive understanding of consumer decision-making. Using a purposive sampling method, data from 256 Indonesian college students were obtained and analyzed using PLS-SEM. The results indicate a direct relationship between risky indebtedness behavior, attitudes toward PayLater, and PayLater use on long-term PayLater adoption. However, no direct relationship or mediating role was found for impulse buying. Practically, this study suggests that PayLater service providers should provide responsible lending practices and monitor consumer behavior to reduce excessive borrowing, while policymakers need to strengthen consumer financial literacy initiatives to avoid harmful lending practices.

Keywords: *PayLater, Risky Indebtedness Behavior, Attitude, Impulsive Buying, Adoption*

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1. Introduction

Mobile connectivity has advanced rapidly, enabling the majority of the global population to stay connected. Many use mobile internet access for more than just talking, but also for work, study, digital connectivity, shopping, and even financial solutions (GSMA, 2025; Ritchie et al., 2023). The increasing use of digital technology has enabled the emergence of more flexible, platform-based alternative financial services (Punwatkar & Verghese, 2018) such as digital payments. Alongside the growth of digital payments, e-commerce and social commerce have also experienced significant growth, both of which have changed consumer consumption patterns (Nabila et al., 2025). The emergence of digital payments and their integration into e-commerce and social commerce have led to a decline in consumer cash use in

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transactions, as many rely on instant payments (Bakar et al., 2022; Zhu et al., 2022). The widespread use of instant payments has led to the emergence of a new financing scheme, namely buy now, pay later (BNPL), also known as PayLater.

PayLater is a credit scheme that offers consumers the convenience of delaying payments with low or no interest (Berg et al., 2025). Several large companies offer PayLater payment schemes, such as Klarna, Afterpay, Paidy, and Clearpay to provide easy-to-manage and faster credit access without complex administrative procedures like conventional credit services (Abu Seman, 2025; Tijssen & Garner, 2021). According to Juniper Research (2022), the number of PayLater service users has reached 360 million in 2022 and will continue to increase to 900 million by 2027. In Indonesia, PayLater service users as of February 2025 had reached 17.26 million (The Leap, 2025). Disbursements reached IDR 36.24 trillion, growing ~27.65% YoY, with the largest number of users being Millennials (~48.27%), Generation Z (~39.94%), and the remaining generations above them (Candika et al., 2025; Kontan, 2025). PayLater's growth in Indonesia is faster than credit card growth (Untari, 2025).

PayLater is a credit scheme that allows consumers to defer payments until a later date (Zhu, 2025), allowing them to purchase products even if they don't have the full funds. A survey of millennials and Generation Z in Indonesia also found that PayLater can help manage monthly expenses, enable transactions even when they don't have enough money, and enable them to utilize PayLater for promotions and other offers (Katadata, 2024). Payments made in installments, especially those with interest or even without interest, create a perception of low cost (Maesen & Ang, 2025). This indicates that PayLater provides consumers with easy, fast credit access for transactions. Furthermore, Cindy et al. (2024) also emphasized that some productive age groups in Indonesia, including college students, frequently use PayLater for online shopping, reflecting a strong trend of fintech service adoption among this group.

Studies of students who take out loans show a tendency toward present bias, prioritizing short-term financial gains over long-term repayment obligations (Barr et al., 2021), including long-term use of PayLater. In the context of educational loans, overconfidence can trigger risky debt behavior and increase reliance on long-term loans (Raj, 2023). This suggests that college students who perceive themselves as capable of meeting their loan obligations and perceive debt as providing short-term financial benefits often engage in risky behavior. Aisjah (2024) also emphasized that students' financial experiences shape their attitudes toward PayLater, where positive evaluations of credit services decrease when they have had negative financial experiences. Easy access to digital credit can cause psychological stress that influences students' attitudes toward these credit services (Geriadi & Dwijayanthi, 2024). Furthermore, fear of missing out was found to be a factor influencing students' evaluations of online loans (Noor & Fatihat, 2025; Putri Permatasari & Yuhertiana, 2025), which impacts the use of online loans, such as PayLater. In a digital environment, students are highly engaged, resulting in faster and less rational decision-making (Qi, 2025). In this regard, PayLater simplifies the decision-making process by reducing the direct payment hurdle (Coelho et al., 2023).

However, PayLater not only offers benefits but also carries risks that consumers must face. PayLater can increase consumers' risk of getting trapped in loan stacking, a condition where individuals take out installments simultaneously, resulting in mounting debt (Consumer Financial Protection Bureu (CFPB), 2022). Previous research on individuals' decisions to use PayLater shows that PayLater users tend to make impulsive purchases (Keil & Burg, 2023) because they perceive that the products purchased using PayLater are cheaper (Hartanto, 2022). Overall, PayLater can provide benefits to its users, but it is important to emphasize that these benefits are not without risks. These potential risks clearly influence the level of PayLater adoption by consumers.

Research on consumers in Poland regarding the decision to use PayLater as a payment option found that individuals' decisions to choose PayLater were driven by a propensity for debt and a history of frequent borrowing (Waliszewski et al., 2024). Other studies also emphasize that individuals are more willing to take on debt when they have a propensity for risk (Flores & Vieira, 2014). This risky behavior fosters individuals' dependence on repeated borrowing (Davidsson & Eriksson, 2025; Hamid, 2025). Hamid (2025) stated that dependence on credit is driven by individuals' inability to assess their ability to repay obligations. Temporal orientation due to excessive debt also leads individuals to focus on short-term obligations and encourages the use of loans for survival (Davidsson & Eriksson, 2025). Consequently, PayLater is currently a widely used credit alternative.

Risky indebtedness behavior (Davidsson & Eriksson, 2025; Hamid, 2025; Waliszewski et al., 2024) is a triggering factor for individuals to take out loans through PayLater. Furthermore, this has prompted discussion regarding other factors influencing consumers' decisions to adopt the service. Edgina et al. (2025) emphasized that attitudes play a role in shaping intentions to use PayLater, which is a result of an individual's perceived trust. The study also explained that subjective norm and individual behavioral control influence the intentions to use PayLater. Similarly, Relja et al. (2024) findings indicate two distinct attitude groups, those with negative sentiments view PayLater as an untrustworthy service, while those with positive sentiments believe PayLater can help them manage their finances. This suggests that attitude is a key determinant of a person's intention to use PayLater.

Keil & Burg (2023) explain that PayLater, which is now integrated into the marketplace, often eliminates individuals' self-control and makes them prone to impulsive behavior due to the availability of financial resources. Other research also shows that PayLater has become a preferred choice for those who use marketplaces to purchase various types of goods, so this convenience encourages impulsive purchases (Parameswari & Ginny, 2022). Even in a study of e-retail consumers who use digital payments when shopping online, it was found that impulsive behavior to fulfill needs and instant gratification drives consumers to adopt PayLater (Kumar & Nayak, 2025).

Despite the growing discussion about PayLater services, most studies on PayLater emphasize psychological factors such as attitudes, trust, and impulse buying as

antecedents of PayLater adoption intention. However, understanding the factors that maintain long-term PayLater adoption after consumers become users of the service remains limited, particularly for users with risky indebtedness behavior. Previous research generally positions risky indebtedness behavior as an indirect predictor operationalized through psychological factors such as impulse buying and attitudes. Therefore, the direct influence of risky indebtedness behavior on long-term PayLater adoption remains insufficiently explored. This study addresses this limitation by examining the direct influence of risky indebtedness behavior on long-term PayLater adoption and testing PayLater use also attitudes toward PayLater both directly and as a mediator. Several studies related to PayLater have been conducted in Asian markets, such as Vietnam, Malaysia, and even Indonesia. Although Indonesia is a significant PayLater market, studies on long-term adoption are limited. Furthermore, existing studies generally examine Millennials and Generation Z samples in general, while college students, as part of Generation Z and Millennials, have distinct characteristics, such as higher exposure to digital financial literacy and relatively low average incomes.

This study further examines how long-term PayLater adoption occurs among college students through three mediation pathways. The purpose of this study is to examine the relationship between attitudes toward PayLater, PayLater use, and impulsive buying in the context of PayLater services, and to explain the risky indebtedness behavior factors mediated by attitudes toward PayLater, PayLater use, and impulsive buying to understand the long-term PayLater adoption decisions by college students. This study contributes to the limited literature on PayLater in the Indonesian context, providing a new perspective on risky indebtedness behavior and long-term PayLater adoption, and practically helping to understand consumer conditions that trigger long-term PayLater adoption to avoid detrimental decisions.

2. Theoretical Background

Risky Indebtedness Behavior: Risky indebtedness behavior is the behavior of individuals who take on repeated, dangerous debts that exceed their financial capabilities (Abrantes-Braga & Veludo-de-Oliveira, 2020). Individuals' inability to assess their own capabilities makes them more susceptible to credit, often leading them to normalize debt-taking. This puts consumers in financial difficulty, leading to anxiety (Amit et al., 2020). Anxiety drives individuals to overspend, which further exacerbates financial difficulties (Cachón-Rodríguez et al., 2025). PayLater, a transaction process that separates purchases and payments, is considered an appropriate instrument for addressing anxiety (Waliszewski et al., 2024). This also occurs because individuals with risky indebtedness behavior have weak financial planning, making them more vulnerable to credit-based purchasing mechanisms (Vieira et al., 2023). Fundamentally, this behavior changes the way individuals evaluate credit products. Consumers experiencing debt stress have a higher sensitivity to risk (Leandro & Botelho, 2022), thus encouraging cognitive and affective evaluations that shape consumer attitudes toward services (Nguyen & Pham, 2024). Furthermore, financial stress resulting from debt exceeding financial capabilities leads

to low self-control. Low self-control encourages impulsive behavior (Schomburgk & Hoffmann, 2023), which shapes the tendency to adopt online credit services due to the instant gratification and encourages instant purchases (Ma & Yao, 2023).

Attitude Toward PayLater: Attitude is defined as a predisposition that determines a positive or negative response to an object or situation (Ajzen & Fishbein, 1970). In this study, attitude toward PayLater represents an individual's positive or negative evaluation of the PayLater service. Attitude plays a crucial role in driving adoption because it is a key determinant of behavior, ultimately impacting actual usage (Ajzen, 2020). Studies related to technology adoption have found that attitude plays a crucial role because it can reduce barriers and accelerate the adoption process (Irimia-Diéguez et al., 2023). This indicates that the convenience offered by a technology or service shapes user attitudes, which can drive adoption. As explained by (Mukherjee, 2025) the drive to adopt PayLater arises from the service's convenience. Previous studies related to PayLater also found that positive attitudes toward the service are formed due to perceived convenience (Raj et al., 2024b) and the absence of immediate pressure because of the reduced pain of paying (Liu, 2020). This increases users' willingness to adopt the service in the long term. These perceived benefits form a good evaluation despite having no previous experience (Dadra et al., 2024).

PayLater Use: PayLater usage contributes to increased adoption through behavioral mechanisms. PayLater usage is a condition where consumers utilize the buy now, pay later option in transactions (Kumar & Nayak, 2025; Relja et al., 2024). The initial user experience serves as a learning process that introduces consumers to the ease of transactions and installment schemes that can increase user engagement (V. A. Raj et al., 2024a). This direct experience contributes to increased trust and reduced user risk perceptions towards the service. Studies related to PayLater emphasize that initial usage can form user habits that strengthen ongoing commitment (Kumar & Nayak, 2023). PayLater usage is often associated with user familiarity with the service, which can strengthen adoption. Previous studies related to financial technology services also revealed that technology use can strengthen user familiarity, reduce risk perceptions, and increase user trust in the service, ultimately encouraging long-term usage (Bergmann et al., 2023). Furthermore, PayLater usage also reduces the psychological financial burden that increases impulse purchases. Unplanned purchases by PayLater users occur because they consider the service as a temporary financial tool, not as risky debt (Relja et al., 2024).

Impulsive Buying: Impulsive buying is a consumer behavior that indicates spontaneous and unplanned purchases (Redine et al., 2023). Studies show that consumers with impulsive tendencies are more likely to adopt PayLater compared to consumers with long-term financial planning (Kumar & Nayak, 2025). This occurs due to low self-control, making it difficult for them to avoid impulsive purchases. Previous studies have emphasized that the inability to resist the temptation to shop indicates low self-control, which ultimately leads to impulsive purchases (Nyrhinen et al., 2024; Xu et al., 2020). Impulsive consumers will find it easier to use payments that provide immediate gratification. For impulsive consumers, PayLater is the right

choice because of its preference for immediate rewards, instant gratification, minimal rational evaluation, and its service that facilitates spontaneous purchases (Keil & Burg, 2023; Ma & Yao, 2023). Based on this, impulsive buying strengthens PayLater's long-term use.

Long-Term PayLater Adoption: PayLater adoption is the willingness of individuals to use PayLater services for future transactions (Kumar & Nayak, 2023, 2025). In this study, long-term PayLater adoption refers to an individual's willingness to continue using the service in the long term. Previous studies in the context of PayLater have shown that adoption is often influenced by factors such as attitude, user familiarity, and impulsivity (Raj et al., 2024a; Tang et al., 2025b). Even in research related to financial technology, the decision to use a service long-term is also driven by attitude and perceived benefits during use (Bergmann et al., 2023). Attitudes, in this case, are formed due to convenience and suitability, which eliminate barriers to the adoption process. Furthermore, usage also strengthens adoption motives through behavioral mechanisms. Successful transaction experiences accelerate the integration of the service into everyday financial practices (Powell et al., 2023). Even previous studies have suggested that impulse buying drives adoption because consumers tend to view PayLater as a consumption tool, not a debt (Kumar & Nayak, 2023). These factors lower perceived psychological barriers to adoption, thus enabling long-term adoption.

3. Methodology

This study uses a quantitative methodology to test theories or hypotheses and systematically measure variables (Creswell, 2009). The population of this study was Indonesian college students who use PayLater, because college students have better financial literacy and often avoid debt (Geriadi & Dwijayanthi, 2024) merits further investigation. Using a purposive sampling technique through an online questionnaire-based survey, respondents must meet the sample criteria, Indonesian college students who have used PayLater at least once and are at least 17 years old. The interpretation of the results of this study is an empirical representation of PayLater student users with similar characteristics to the research sample (Andrade, 2021). Generalizations are made analytically to the target population, not as statistical generalizations of all students in Indonesia. This study adheres to ethical aspects by ensuring that all respondents participate voluntarily and that the researcher provides information about the research objectives, data confidentiality, and the respondent's right to withdraw without consequence.

The sample size calculation is based on the criteria of Hair, et al. (2019) a sample of 256 PayLater student users in Indonesia was obtained who met the criteria. The research instrument was adapted from a scale validated in previous research and then adapted to the research context. The collected primary data were then analyzed using PLS-SEM with SmartPLS 4 software. The questionnaire utilized a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) to capture the extent of respondents' agreement with each statement (Kandasamy et al., 2020). This study focused on psychological factors, risky debt behavior (RIB), and other factors such as

attitudes (ATT), PayLater use (PU), and impulsive buying (IMB), which are believed to influence long-term PayLater adoption (ADP) among Indonesian students. Tests conducted on the data included reliability, validity, and hypothesis testing.

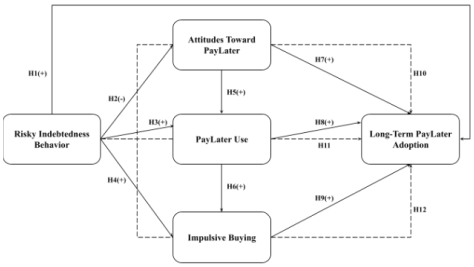

Figure 1. Research Framework

4. Empirical Findings/Result

Respondent Characteristics

The respondents of this study were 256 PayLater college student users in Indonesia who were then classified based on gender, age, education level, and province of origin. Based on gender, there were 65 males (25.4%) and 191 females (74.6%). The majority of respondents were in the 17-22 age group, 156 people (60.9%), then 89 people (34.8%) were in the 23-28 age group, and the remaining 11 people were in the age group over 28 years (4.3%). Educational levels were quite varied: 189 people (73.8%) were undergraduate students, 37 people (14.5%) were applied undergraduate students, 16 people (6.3%) were master's students, and the remaining 14 people (5.5%) were diploma students. Based on province of origin, the study showed that PayLater users were dominated by college students from Java. A total of 78 people (30.5%) came from West Java, 39 people (15.2%) from Central Java, PayLater users from DKI Jakarta and East Java had the same number of 38 people (14.8%), as many as 18 people (7.0%) from DI Yogyakarta, as many as 16 people (6.3%) from Banten, and the rest came from several other provincial areas (11.4%) located on the islands of Sumatra, Kalimantan, and Sulawesi.

Outer model analysis

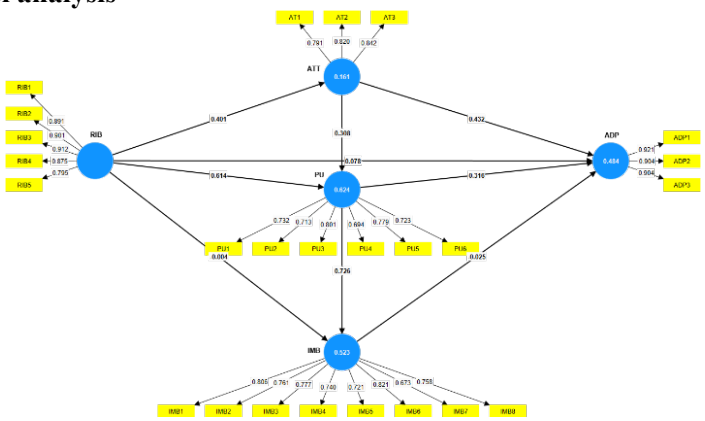

Figure 2. Model Calculation and Value of Loading Factor for Each Indicator

To obtain consistent test results, reliability testing is necessary. Reliability testing measures the extent to which items measure the same construct (Hair et al., 2021). The criteria used in this study (Hair et al., 2021) include a composite reliability (CR) of at least 0.60 and a Cronbach's Alpha ($\alpha \geq 0.6$) to demonstrate internal consistency.

Table 1. Reliability and Convergent Validity Test Results

Variable	Cronbach's Alpha	Composite Reliability	AVE
Risky Indebtedness Behavior (RIB)	0.923	0.943	0.767
Attitudes Towards PayLater (ATT)	0.752	0.858	0.669
PayLater Use (PU)	0.835	0.879	0.549
Impulsive Buying (IMB)	0.894	0.915	0.575
Long-Term PayLater Adoption (ADP)	0.896	0.935	0.828

(Source: Primary Data, 2026)

To explain the uniqueness of a measure by examining the low correlation between measurement scales of different constructs, a discriminant validity test was conducted. The heterotrait-monotrait ratio (HTMT) parameter was used as an indicator to assess the level of discriminant validity problems in this study (Hair et al., 2021; Henseler et al., 2015). The criterion used was that the HTMT value must be less than 0.85. Thus, the level of uniqueness of the measurement scales of different constructs is declared valid when the HTMT value in this study is less than 0.85. The following table shows the measurement results from the discriminant validity test.

Table 2. Discriminant Validity Test Results

Variable	RIB	ATT	PU	IMB	ADP
RIB					
ATT	0.480				
PU	0.841	0.696			
IMB	0.577	0.654	0.829		
ADP	0.519	0.759	0.685	0.530	

(Source: Primary Data, 2026)

Structural model analysis

Collinearity testing is performed by examining the level of collinearity in each predictor construct in the model, as indicated by the variance inflation factor (VIF) value. A high VIF value indicates the potential for multicollinearity, and the VIF value must be equal to or no greater than 5 to avoid collinearity (Hair et al., 2021). The test results indicate that this study does not indicate critical multicollinearity issues. This is because the VIF values for all study variables are less than 5 (VIF < 5).

Table 3. Collinearity Test Results

Variable	RIB	ATT	PU	IMB	ADP
RIB		1.000	1.192	2.194	2.194
ATT			1.192		1.533
PU				2.194	3.496
IMB					2.225
ADP					

(Source: Primary Data, 2026)

Referring to Hair et al. (2021), the function of the number of predictor constructs is indicated by the R-square value. The number of predictor constructs tends to be higher when the R-square value is higher. Based on the criteria, the results indicate that all endogenous variables in the study are acceptable ($R^2_{(AT)} = 0.158$; $R^2_{(PU)} = 0.621$; $R^2_{(IMB)} = 0.519$; $R^2_{(ADP)} = 0.475$). This indicates that the endogenous variables can well explain all exogenous variables. To understand the level of fit or fitness between the model and data in structural testing, Q-square is used in predictive relevance or goodness of fit. Hair et al. (2019) stated that there is an indication of predictive relevance when the Q^2 value is greater than or equal to zero ($Q^2 \geq 0$). The test results show that all endogenous variables have values greater than zero ($Q^2_{(AT)} = 0.153$; $Q^2_{(PU)} = 0.538$; $Q^2_{(IMB)} = 0.275$; $Q^2_{(ADP)} = 0.216$).

Table 4. Coefficient Determination and Q-Square Results

Variable	R-Square	R-Square Adjusted	Q-Square
Attitudes Towards PayLater (ATT)	0.161	0.158	0.153
PayLater Use (PU)	0.624	0.621	0.538
Impulsive Buying (IMB)	0.523	0.519	0.275
Long-Term PayLater Adoption (ADP)	0.484	0.475	0.216

(Source: Primary Data, 2026)

The hypothesis testing indicates that all hypotheses are significant except H11 and H12, as shown in Table 4. These results confirm that IMB has no direct relationship with long-term PayLater adoption ($\beta = -0.025$, $p > 0.05$, $t = 0.326$), rejecting H11. IMB does not mediate the relationship between RIB and long-term PayLater adoption ($\beta = 0.000$, $p > 0.05$, $t = 0.020$), rejecting H12. RIB is positively related to several variables, such as long-term PayLater adoption ($\beta = 0.078$, $p < 0.01$, $t = 9.626$); attitude towards PayLater ($\beta = 0.401$, $p < 0.01$, $t = 8.783$); PayLater use ($\beta = 0.614$, $p < 0.01$, $t = 21.784$), confirming H1, H2, and H3. RIB is negatively related to IMB ($\beta = -0.004$, $p < 0.01$, $t = 10,988$) thus not supporting H4. The result also indicates that there is a direct effect of ATT on PayLater use ($\beta = 0.308$, $p < 0.01$, $t = 6.669$) and long-term PayLater adoption ($\beta = 0.432$, $p < 0.01$, $t = 9.707$) therefore, H5 and H7 are accepted. Furthermore, the result confirms H6 and H9, PU has a direct impact on IMB ($\beta = 0.726$, $p < 0.01$, $t = 5.584$) and long-term PayLater adoption ($\beta = 0.316$, $p < 0.01$, $t = 3.626$). Regarding the mediation effect, it was found that the relationship between risky indebtedness behavior and long-term PayLater adoption was mediated by ATT ($\beta = 0.173$, $p < 0.01$, $t = 5.249$) and PU ($\beta = 0,194$, $p < 0.01$, $t = 2.988$) therefore, H8 and H10 are accepted.

Table 5. Hypotheses Testing Results

Hypotheses	Structural path	Path coefficient	*t*-value	Conclusion
H1	RIB → ADP	0.078	9.626	Accepted
H2	RIB → ATT	0.401	8.783	Accepted
H3	RIB → PU	0.614	21.784	Accepted
H4	RIB → IMB	-0.004	10.988	Not supported
H5	ATT → PU	0.308	6.669	Accepted
H6	PU → IMB	0.726	5.584	Accepted
H7	ATT → ADP	0.432	9.707	Accepted
H8	RIB → ATT → ADP	0.173	5.249	Accepted
H9	PU → ADP	0.316	3.626	Accepted
H10	RIB → PU → ADP	0.194	2.988	Accepted
H11	IMB → ADP	-0.025	0.326	Not supported

H12	RIB → IMB→ ADP	0.000	0.020	Not supported

(Source: Primary Data, 2026)

5. Discussion

The findings of this study highlight the relationship between risky debt behavior and long-term PayLater adoption among Indonesian college students, both directly and through the mediating role of attitudes toward PayLater, PayLater usage, and impulsive purchases. The results indicate that risky debt behavior significantly influences long-term PayLater adoption. Risky indebtedness behavior is often triggered by excessive consumption (Hayashi & Routh, 2025) and individuals' inability to assess their ability to repay obligations (Hamid, 2025), resulting in the perception that credit is a reasonable financial solution to adopt in the long term. As individuals begin to normalize this, dependence develops over time (Waliszewski et al., 2024) and credit like PayLater is no longer just a payment alternative but a part of their finances. Even among college students, credit like PayLater is sometimes used to meet personal and lifestyle needs (Amelia & Syafrini, 2024). Coffey et al. (2024) stated that PayLater for young people is part of a financialization process. Other studies have also emphasized the tendency to adopt credit instruments like PayLater when individuals face risky indebtedness behavior (Kumar & Nayak, 2023). Thus, it can be argued that risky debt behavior increases individuals' long-term adoption of PayLater.

Long-term PayLater adoption is also influenced by other factors, such as attitude. Tang et al. (2025a) stated that attitude is the result of an evaluation or the level of conformity of an individual's expectations that determines the decision to adopt PayLater. Individuals with positive evaluations typically perceive the convenience and flexibility offered by PayLater, potentially increasing long-term PayLater adoption. Previous studies have also emphasized that flexibility is a key feature of PayLater, which can influence attitudes (Dadra et al., 2024). Furthermore, attitudes toward PayLater also mediated the relationship between risky debt behavior and long-term PayLater adoption. Individuals with risky debt behavior were more likely to adopt PayLater in the long term, depending on their attitudes. This is because individuals with risky indebtedness behavior typically have low self-control, and taking on new debt is less of a concern. Moreover, the convenience and flexibility offered by PayLater also improved their evaluation of PayLater, making long-term adoption of the service more likely. Previous studies have also emphasized that low self-control leads individuals to take on more debt than others and potentially default on repayments (Pulk & Riitsalu, 2024), although they are more willing to take out another loan (Grohmann & Hamdan, 2021).

PayLater use also shows a direct influence on adoption rates. As explained by Raj et al. (2024) initial usage serves as a learning process that increases user engagement with the service. The results of this study indicate that PayLater usage can increase user familiarity and experience, which can encourage long-term PayLater adoption, especially among young tech-savvy consumers. This is also consistent with (Tang et al., 2025b) who stated that familiarity creates a positive experience and shapes the

tendency to adopt PayLater. This mediating role can also be seen in PayLater usage. In this case, PayLater usage stems from risky debt behaviors, which often bind individuals to PayLater and encourage long-term adoption of the service. This aligns with a study that found individuals with risky debt behavior exhibit a dependency on PayLater (Abrantes-Braga & Veludo-de-Oliveira, 2020), where initial use provides direct experience and forms habits that can strengthen ongoing commitment. Furthermore, another study found a dependency on other credit options to pay bills (Guttman-Kenney et al., 2023). This suggests that PayLater use can mediate the relationship between risky indebtedness behavior and long-term PayLater adoption because during use, users develop a close relationship with the service, even when they are at risk. This study also found that PayLater use was positively correlated with user impulse buying. It can be said that impulse buying increases when individuals use PayLater, because they do not experience immediate financial consequences and fulfill their desires immediately. This aligns with a study by Ayu et al. (2021), which found that PayLater use is a triggering factor of impulsive buying. This concordance between the research findings and previous studies validates that PayLater users are more prone to unplanned purchases.

This study found a negative effect of risky indebtedness on impulsive buying. This may occur because individuals with debt exceeding their financial capabilities are more aware of their current financial situation, increasing their caution in making purchases. This phenomenon aligns with the concept of debt aversion, where individuals with excessive debt tend to reduce discretionary spending (Meissner & Albrecht, 2022). These results differ from previous studies that found that unplanned purchases were a way to relieve stress and anxiety caused by risky indebtedness (Raj et al., 2024a; Zhang & Shi, 2022). Similar results were found regarding the direct relationship and mediating role of impulsive buying on long-term PayLater adoption. This indicates that the tendency to make impulsive purchases alone is not sufficient to explain consumers' decisions to adopt PayLater in the long term. These results differ from previous studies that found that impulsive buying drives adoption intentions (Kumar & Nayak, 2023). In this case, it can be said that impulsive buying does not encourage individuals to adopt PayLater in the long term due to the risk of debt burden that must be borne. This can occur in the context of students in particular, because students are indicated to have a better level of financial literacy (Geriadi & Dwijayanthi, 2024), so they tend to avoid credit instruments even to satisfy impulsiveness. Furthermore, risky indebtedness behavior also forms negative financial experiences due to debt accumulation and the risk of default (Hesniati et al., 2025). Thus, it can be said that risky indebtedness behavior does not encourage individuals to make unplanned purchases. Impulsive buying also does not provide a significant incentive for those with this condition to adopt PayLater in the long term, due to the burden of risk that must be borne in the long term.

The majority of study participants were undergraduate students or equivalent, predominantly from the Generation Z age group, with a small number of advanced students. This suggests that young students' digital familiarity makes it easier for them to adopt PayLater. Furthermore, research data also confirms that the higher a student's education level, the lower their likelihood of using credit instruments like PayLater.

Individuals with higher levels of education have better financial literacy and more critical thinking skills regarding credit decisions, both conventional credit and PayLater. The results of this study confirm previous research that students with higher levels of education tend to have higher financial literacy, structured risk evaluation, and greater caution (Phung, 2025). The study confirmed the twelve hypotheses formulated. Broadly speaking, long-term PayLater adoption can be influenced by risky indebtedness behavior, both directly and through the mediating role of attitudes toward PayLater and PayLater usage. This research finding differs significantly from the models proposed previously by Kumar & Nayak (2023) and Raj et al. (2024), which discuss risky indebtedness behavior, attitudes toward PayLater, PayLater use, impulsive buying, and PayLater adoption.

6. Conclusions

This study has both academic and industry implications. Research related to PayLater still has limitations, with most studies identifying PayLater as a determinant of debt. Few studies address long-term adoption of PayLater; the few that do exist only address the intention to adopt the service without considering the sustainability of adoption. This study found that individuals with risky indebtedness behavior are still likely to adopt PayLater in the long term. Kumar & Nayak (2023) emphasized the intention of individuals with RIB to adopt PayLater through the mediating role of impulsive buying. However, this study found that RIB directly drives long-term adoption of PayLater, and impulsive buying does not play a mediating role. Furthermore, this study also adds insight into PayLater use, where individuals who have used PayLater are more likely to adopt the service long-term due to familiarity and previous experience. This study expands the literature on planned behavior, where attitudes are a determinant of individuals' continued use of the service, particularly in the context of BNPL.

This study provides recommendations for PayLater service providers and policymakers. PayLater service providers need to implement responsible lending practices and monitor users to prevent borrowing beyond their means, thereby preventing them from becoming trapped in a vicious cycle of debt. Furthermore, to maintain relationships with customers, companies need to provide services that offer convenience, flexibility, and low risk through more targeted communications, particularly for those with pre-existing debt. Meanwhile, policymakers should provide facilities for the public to improve financial literacy and prevent them from entering into harmful debt, particularly for low-income individuals, allowing them to still utilize PayLater, even if they have limited funds, but with more careful consideration.

The data of the study were collected from university students in Indonesia, a developing country with a relatively low average income compared to other countries. Furthermore, other factors, such as hedonism and social norms, still need to be explored in future studies. This study only used attitudes and PayLater usage as mediators of long-term adoption, future research could explore the mediating role of these variables simultaneously, or even add other variables. Future studies are

expected to overcome the limitations of the cross-sectional approach in this study through experiments and longitudinal approaches.

References:

Abrantes-Braga, F. D. M. A., & Veludo-de-Oliveira, T. (2020). Help me, I can't afford it! Antecedents and consequence of risky indebtedness behaviour. *European Journal of Marketing*, *54*(9), 2223–2244. https://doi.org/10.1108/EJM-06-2019-0455

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), 122–133. https://doi.org/10.24191/jikm.v15i2.8980

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/https://doi.org/10.1080/23311886.2024.2306705

Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, *2*(4), 314–324. https://doi.org/10.1002/HBE2.195;WGROUP:STRING:PUBLICATION

Ajzen, I., & Fishbein, M. (1970). The prediction of behavior from attitudinal and normative variables. *Journal of Experimental Social Psychology*, *6*(4), 466–487. https://doi.org/10.1016/0022-1031(70)90057-0

Amelia, R., & Syafrini, D. (2024). Penggunaan Shopee Paylater di Kalangan Mahasiswa Universitas Negeri Padang. *Jurnal Perspektif*, *7*(2), 291–300. https://doi.org/10.24036/perspektif.v7i2.757

Amit, N., Ismail, R., Zumrah, A. R., Mohd Nizah, M. A., Tengku Muda, T. E. A., Tat Meng, E. C., Ibrahim, N., & Che Din, N. (2020). Relationship Between Debt and Depression, Anxiety, Stress, or Suicide Ideation in Asia: A Systematic Review. *Frontiers in Psychology*, *11*(July). https://doi.org/10.3389/fpsyg.2020.01336

Andrade, C. (2021). The Inconvenient Truth About Convenience and Purposive Samples. *Indian Journal of Psychological Medicine*, *43*(1), 86–88. https://doi.org/10.1177/0253717620977000

Ayu, D., Lia, Z., & Lu'ay Natswa, S. (2021). Buy-Now-Pay-Later (BNPL): Generation Z's Dilemma on Impulsive Buying and Overconsumption Intention. *Proceedings of the BISTIC Business Innovation Sustainability and Technology International Conference (BISTIC 2021)*, *193*(Bistic), 130–137. https://www.atlantis-press.com/proceedings/bistic-21/125963881

Bakar, A. R. A., Wan Muhd Rahimi, W. N. A., Adilah Tarmazi, S. A., & Azwa Fudzali, F. (2022). Malaysian Intention to Use e-Wallet: Forthcoming Expectation in Cashless Transactions. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, *7*(6), e001537. https://doi.org/10.47405/mjssh.v7i6.1537

Barr, A., Bird, K. A., & Castleman, B. L. (2021). The effect of reduced student loan borrowing on academic performance and default: Evidence from a loan counseling experiment. *Journal of Public Economics*, *202*, 104493. https://doi.org/https://doi.org/10.1016/j.jpubeco.2021.104493

Berg, T., Burg, V., Keil, J., & Puri, M. (2025). The economics of "Buy Now, Pay Later": A merchant's perspective. *Journal of Financial Economics*, *171*,

104093. https://doi.org/https://doi.org/10.1016/j.jfineco.2025.104093

Bergmann, M., Maçada, A. C. G., de Oliveira Santini, F., & Rasul, T. (2023). Continuance intention in financial technology: a framework and meta-analysis. *International Journal of Bank Marketing*, *41*(4), 749–786. https://doi.org/10.1108/IJBM-04-2022-0168

Cachón-Rodríguez, G., Blanco-González, A., Prado-Román, C., & Fernández-Portillo, A. (2025). How compulsive and impulsive buying affect consumer emotional regulation. Is anxiety a differential element? *European Journal of Management and Business Economics*, *34*(3), 340–358. https://doi.org/10.1108/EJMBE-06-2023-0172

Candika, Y. I., Riadi, F. S., Putri, E. L. H., & Bahtera, N. T. (2025). Kecenderungan penggunaan paylater di kalangan mahasiswa: Peran perilaku konsumtif dan tekanan sosial. *Journal of Management and Digital Business*, *5*(2), 685–702. https://doi.org/10.53088/jmdb.v5i2.1862

Cindy, V. D., Nurshinta, & Usman, O. (2024). Analysis of Factors Affecting Generation Z's Intention in Using Shopee PayLater. *International Student Conference on Business, Education, Economics, Accounting, and Management (ISC-BEAM)*, *1*(1), 420–439. https://doi.org/10.21009/isc-beam.011.29

Coelho, F., Aniceto, I., Bairrada, C. M., & Silva, P. (2023). Personal values and impulse buying: The mediating role of hedonic shopping motivations. *Journal of Retailing and Consumer Services*, *72*, 103236. https://doi.org/https://doi.org/10.1016/j.jretconser.2022.103236

Coffey, J., Senior, K., Haro, A., Farrugia, D., Threadgold, S., Cook, J., Davies, K., & Shannon, B. (2024). Embodying debt: youth, consumer credit and its impacts for wellbeing. *Journal of Youth Studies*, *27*(5), 685–705. https://doi.org/https://doi.org/10.1080/13676261.2022.2162376

Consumer Financial Protection Bureu (CFPB). (2022, September 15). *Buy Now, Pay Later: Market trends and consumer impacts | Consumer Financial Protection Bureau*. https://www.consumerfinance.gov/data-research/research-reports/buy-now-pay-later-market-trends-and-consumer-impacts/

Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (3rd ed.). SAGE Publications, Inc.

Dadra, R., Sonavane, A., Bachwani, S., & Bahera, C. K. (2024). Beyond credit cards: A TEP perspective on buy-now-pay-later adoption. *Journal of Global Scholars of Marketing Science: Bridging Asia and the World*, *34*(4), 459–484. https://doi.org/https://doi.org/10.1080/21639159.2024.2391282

Davidsson, T., & Eriksson, E. (2025). Rhythms of debt: Lived temporalities of over-indebted young adults in Sweden. *Economy and Society*, *54*(2), 233–255. https://doi.org/10.1080/03085147.2025.2508072

Edgina, E., Bianca, S., Hamzah, L., & Gunadi, W. (2025). Extended TPB: The Role of Perceived Trust and Financial Self-Efficacy in Intention to Use BNPL Among Gen Z and Millennials. *International Journal of Research and Review*, *12*(10), 312–322. https://doi.org/10.52403/ijrr.20251031

Flores, S. A. M., & Vieira, K. M. (2014). Propensity toward indebtedness: An analysis using behavioral factors. *Journal of Behavioral and Experimental Finance*, *3*, 1–10. https://doi.org/10.1016/j.jbef.2014.05.001

Geriadi, M. A. D., & Dwijayanthi, A. A. I. A. O. (2024). Understanding Financial

Behavior Among Students: A Literature Review on the Risks of Falling into Online Loan Debt. *JUSTBEST Journal of Sustainable Business and Management*, *4*(2), 53–63. https://doi.org/https://doi.org/10.52432/justbest.4.2.53-63

Grohmann, A., & Hamdan, J. (2021). The Effect of Self-Control and Financial Literacy on Impulse Borrowing: Experimental Evidence. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3864924

GSMA. (2025). *The Mobile Economy 2025*. https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-economy/

Guttman-Kenney, B., Firth, C., & Gathergood, J. (2023). Buy now, pay later (BNPL) ...on your credit card. *Journal of Behavioral and Experimental Finance*, *37*. https://doi.org/https://doi.org/10.1016/j.jbef.2023.100788

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate Data Analysis (Sixth Edition). In *Gedrag & Organisatie* (Vol. 19, Issue 3). https://doi.org/10.5117/2006.019.003.007

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial Least Squares Structural Equation Modeling (PLS-SEM)*. https://doi.org/10.1007/978-3-030-80519-7_5

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hamid, F. S. (2025). Behavioral biases and over-indebtedness in consumer credit: evidence from Malaysia. *Cogent Economics and Finance*, *13*(1). https://doi.org/10.1080/23322039.2024.2449191

Hartanto, A. Y. (2022, October 26). *Paylater Bikin Orang Makin Impulsif Berbelanja*. https://tirto.id/paylater-bikin-orang-makin-impulsif-berbelanja-gxH8

Hayashi, F., & Routh, A. (2025). Financial Constraints Among Buy Now, Pay Later Users. *The Federal Reserve Bank of Kansas City Economic Review*. https://doi.org/10.18651/ER/v110n4HayashiRouth

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Hesniati, Phangestu, S. J., Marheni, D. K., & Arviano, H. (2025). Navigating Digital Credit : How Risky Indebtedness Behavior and Impulsive Buying Shape Buy-Now-Pay-Later Intention ? *JOURNAL OF THEORETICAL AND APPLIED MANAGEMENT*, *18*(3), 275–290. https://doi.org/https://doi.org/10.20473/jmtt.v18i3.77543

Irimia-Diéguez, A., Velicia-Martín, F., & Aguayo-Camacho, M. (2023). Predicting Fintech Innovation Adoption: the Mediator Role of Social Norms and Attitudes. *Financial Innovation 2023 9:1*, *9*(1), 36-. https://doi.org/10.1186/S40854-022-00434-6

Juniper Research. (2022, August 8). *Buy Now Pay Later Users to Reach Over 900 Million Globally by 2027 | Press*. https://www.juniperresearch.com/press/bnpl-users-reach-over-900-million-by-2027

Kandasamy, I., Kandasamy, W. B. V., Obbineni, J. M., & Smarandache, F. (2020). Indeterminate Likert scale: feedback based on neutrosophy, its distance

measures and clustering algorithm. *Soft Computing*, *24*(10), 7459–7468. https://doi.org/10.1007/s00500-019-04372-x

Katadata. (2024). *Survei: Paylater Jadi Solusi Gen Z & Milenial Atur Cash Flow - Fintech Katadata.co.id*. https://katadata.co.id/digital/fintech/6765015f673a6/survei-paylater-jadi-solusi-gen-z-milenial-atur-cash-flow

Keil, J., & Burg, V. (2023). "Buy Now, Pay Later" and Impulse Shopping. *SSRN Electronic Journal*, *August*. https://doi.org/10.2139/ssrn.4629415

Kontan. (2025, January 16). *Generasi Milenial Dominasi Pengguna BNPL di Indonesia, Capai 48,27% per November 2024*. https://keuangan.kontan.co.id/news/generasi-milenial-dominasi-pengguna-bnpl-di-indonesia-capai-4827-per-november-2024

Kumar, S., & Nayak, J. K. (2023). Understanding the intricacies of risky indebtedness, impulse buying and perceived risk in buy-now-pay-later adoption. *Asia Pacific Journal of Marketing and Logistics*, *36*(7), 1697–1716. https://doi.org/10.1108/APJML-08-2023-0759

Kumar, S., & Nayak, J. K. (2025). *Exploring buy-now-pay-later adoption among e-retail consumers : a user ' s gratification perspective*. https://doi.org/10.1108/IJRDM-08-2024-0409

Leandro, J. C., & Botelho, D. (2022). Consumer over-indebtedness: A review and future research agenda. *Journal of Business Research*, *145*, 535–551. https://doi.org/https://doi.org/10.1016/j.jbusres.2022.03.023

Liu, Y. (2020). *The effects of mobile payment on consumer behavior*. *March*, 1–9. https://doi.org/10.1002/cb.1880

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

Maesen, S., & Ang, D. (2025). Buy Now, Pay Later: Impact of Installment Payments on Customer Purchases. *Journal of Marketing*, *89*(3), 13–35. https://doi.org/https://doi.org/10.1177/00222429241282414

Meissner, T., & Albrecht, D. (2022). *Debt Aversion: Theory and Measurement*. *795958*, 1–65. http://arxiv.org/abs/2207.07538

Mukherjee, S. (2025). Factors impeding buy now, pay later (BNPL) adoption in India: A mixed-method approach. *Journal of Retailing and Consumer Services*, *87*(July), 104402. https://doi.org/10.1016/j.jretconser.2025.104402

Nabila, N., Dari, T. W., & Hendra K, J. (2025). Perubahan Pola dan Perilaku Konsumsi Masyarakat di Tengah Digitalisasi Pasca Pandemi Covid-19. *JAMPARING: Jurnal Akuntansi Manajemen Pariwisata Dan Pembelajaran Konseling*, *3*(1), 147–159. https://doi.org/10.57235/JAMPARING.V3I1.4529

Nguyen, H. P., & Pham, T. B. D. (2024). Determinants of risky buy-now-pay-later intentions and behaviors of Vietnamese students. *Journal of Financial Services Marketing 2024 29:4*, *29*(4), 1318–1329. https://doi.org/10.1057/S41264-024-00283-7

Noor, S. S. N., & Fatihat, G. G. (2025). The Influence of FOMO (Fear of Missing Out), Instant Gratification, and Financial Literacy on Buy Now Pay Later (BNPL) Usage among Generation Z University Students in Indonesia. *International Student Conference on Business, Education, Economics,*

Accounting, and Management (ISC-BEAM). https://journal.unj.ac.id/unj/index.php/isc-beam/article/view/61501/21881

Nyrhinen, J., Sirola, A., Koskelainen, T., Munnukka, J., & Wilska, T. A. (2024). Online antecedents for young consumers' impulse buying behavior. *Computers in Human Behavior*, *153*, 108129. https://doi.org/10.1016/J.CHB.2023.108129

Parameswari, R., & Ginny, P. L. (2022). The Effect Of Paylater Payment Methods On The Increase Of Impulse Purchases. *Primanomics : Jurnal Ekonomi & Bisnis*, *20*(2), 175–185. https://doi.org/10.31253/pe.v20i2.1183

Phung, T. M. T. (2025). Financial literacy and risk-taking behavior: a study of graduates and undergraduates. *Journal of Applied Research in Higher Education*, *17*(3), 853–867. https://doi.org/10.1108/JARHE-07-2023-0273

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 and Finance*, *63*(4), 4431–4451. https://doi.org/10.1111/acfi.13100

Pulk, K., & Riitsalu, L. (2024). How explicit consumer credit information affects intent to purchase on credit: an experiment. *International Journal of Bank Marketing*, *42*(5), 1007–1035. https://doi.org/10.1108/IJBM-06-2023-0347

Punwatkar, S., & Verghese, M. (2018). Adaptation of e-Wallet Payment: An Empirical Study on Consumers' Adoption Behavior in Central India. *International Journal of Advanced in Management, Technology and Engineering Sciences*, *8*(III), 1147–1156.

Putri Permatasari, L., & Yuhertiana, I. (2025). Pengaruh Fear of Missing Out (Fomo) dan Self-Control Terhadap Penggunaan Pinjaman Online Pada Mahasiswa Gen Z. *Ekonomi, Keuangan, Investasi Dan Syariah (EKUITAS)*, *7*(1), 144–152. https://doi.org/https://doi.org/10.47065/ekuitas.v7i1.7989

Qi, Y. (2025). "You Only Buy What You Love": Understanding Impulse Buying Among College Students Through Values, Emotion, and Digital Immersion. *Journal of Theoretical and Applied Electronic Commerce Research 2025, Vol. 20, 20*(4), 271. https://doi.org/https://doi.org/10.3390/jtaer20040271

Raj, P. (2023). *Student debt and behavioral bias: a trillion dollar problem*. https://doi.org/https://doi.org/10.48550/arXiv.2310.02081

Raj, V. A., Jasrotia, S. S., & Rai, S. S. (2024a). Intensifying materialism through buy-now pay-later (BNPL): examining the dark sides. *International Journal of Bank Marketing*, *42*(1), 94–112. https://doi.org/10.1108/IJBM-08-2022-0343

Raj, V. A., Jasrotia, S. S., & Rai, S. S. (2024b). Role of Privacy Concerns and Trust in Consumers' Intention to Use Buy-Now, Pay-Later (BNPL): An Extended TPB Model. *International Journal of Human-Computer Interaction*, *40*(22), 7731–7742. https://doi.org/10.1080/10447318.2023.2269005

Redine, A., Deshpande, S., Jebarajakirthy, C., & Surachartkumtonkun, J. (2023). Impulse buying: A systematic literature review and future research directions. *International Journal of Consumer Studies*, *47*(1), 3–41. https://doi.org/10.1111/ijcs.12862

Relja, R., Ward, P., & Zhao, A. L. (2024). Understanding the psychological determinants of buy-now-pay-later (BNPL) in the UK: a user perspective. *International Journal of Bank Marketing*, *42*(1), 7–37. https://doi.org/10.1108/IJBM-07-2022-0324

Ritchie, H., Mathieu, E., Roser, M., & Ortiz-Ospina, E. (2023). Internet. *Our World in Data*. https://ourworldindata.org/internet

Schomburgk, L., & Hoffmann, A. (2023). How mindfulness reduces BNPL usage and how that relates to overall well-being. *European Journal of Marketing*, *57*(2), 325–359. https://doi.org/10.1108/EJM-11-2021-0923

Tang, M. B., Sa'adi, N., & Andam, J. L. (2025a). Buy Now, Pay Later Services: Adoption Drivers among Digitally Fluent Generations in Sarawak. *Journal of Technology Management and Business*, *12*(1), 119–136. https://publisher.uthm.edu.my/ojs/index.php/jtmb/article/view/19844

Tang, M. B., Sa'adi, N. B., & Andam, J. L. (2025b). Adoption of Buy Now, Pay Later (BNPL) Services: A UTAUT2 Model Analysis among Gen Y and Z in Sarawak. *Borneo Journal of Social Science & Humanities*, 40–66. https://doi.org/https://doi.org/10.35370/bjssh.2025.7.1-03 e-ISSN:

The Leap. (2025, April 24). *Paylater Users in Indonesia Surge to 17.26 Million*. https://theleap.id/detail/1647/paylater-users-in-indonesia-surge-to-17-26-million

Tijssen, J., & Garner, R. (2021). *Buy Now, Pay Later Moves Center Stage with Consumers and Regulators | Bain & Company*. https://www.bain.com/insights/center-stage-with-consumers-and-regulators-bnpl-report-2021/

Untari, P. H. (2025, January 16). *Bisnis PayLater Tumbuh Tiga Kali Lipat dibandingkan Kartu Kredit*. https://finansial.bisnis.com/read/20250116/89/1832383/bisnis-paylater-tumbuh-tiga-kali-lipat-dibandingkan-kartu-kredit

Vieira, K. M., Matheis, T. K., & Maciel, A. M. H. (2023). Risky Indebtedness Behavior: Impacts on Financial Preparation for Retirement and Perceived Financial Well-Being. *Journal of Risk and Financial Management*, *16*(12). https://doi.org/10.3390/jrfm16120519

Waliszewski, K., Solarz, M., & Kubiczek, J. (2024). Factors Influencing the Use of Buy Now Pay Late(BNPL) Payments. *Contemporary Economics*, *18*(4), 444–457. https://doi.org/10.5709/ce.1897-9254.548

Xu, H., Zhang, K. Z. K., & Zhao, S. J. (2020). A dual systems model of online impulse buying. *Industrial Management and Data Systems*, *120*(5), 845–861. https://doi.org/10.1108/IMDS-04-2019-0214

Zhang, M., & Shi, G. (2022). Consumers' Impulsive Buying Behavior in Online Shopping Based on the Influence of Social Presence. *Computational Intelligence and Neuroscience*, *2022*, 1–8. https://doi.org/https://doi.org/10.1155/2022/6794729

Zhu, B., Charoennan, W., & Embalzado, H. (2022). The influence of perceived risks on millennials' intention to use m-payment for mobile shopping in Bangkok. *International Journal of Retail and Distribution Management*, *50*(4), 479–497. https://doi.org/10.1108/IJRDM-05-2020-0174

Zhu, D. (2025). Research on Psychological Motivation of Buy-now-pay-later in Consumer Finance: Benefits and Risks for Consumer. *Scientific Journal of Economics and Management Research*, *7*(6), 207–213. https://doi.org/https://doi.org/10.54691/sab44988