



**FINANCIAL LITERACY, IMPULSIVE BUYING, AND FINANCIAL
STRESS AMONG GENERATION Z: THE MEDIATING ROLE OF
CONSUMER DEBT****Vika Nabilla Amwa¹****Universitas Swadaya Gunung Jati, Cirebon, Indonesia**vika.122020598@ugj.ac.id**Krisdiana²****Universitas Swadaya Gunung Jati, Cirebon, Indonesia**krisdiana@ugj.ac.id

Abstract

Advances in digital financial services, especially consumer credit schemes such as buy now, pay later (BNPL), facilitate transactions; however, they also have the potential to cause financial stress if not accompanied by adequate financial literacy and management. This condition is particularly relevant for Generation Z, who have broad access to various digital credit services. This study aims to analyze the influence of financial literacy and impulsive buying behavior on financial stress, with consumer debt as a mediating variable. A quantitative approach was employed through a survey of 150 Generation Z respondents aged 18–27 years in the Cirebon area, selected using purposive sampling. Data were collected a Likert-scale questionnaire and analyzed using the Partial Least Squares–Structural Equation Modeling (PLS-SEM) method. The results indicate that financial literacy has a significant effect on financial stress and consumer debt levels. Meanwhile, impulsive buying does not have a direct effect on financial stress but has a significant effect on consumer debt. Furthermore, consumer debt has a significant effect on financial stress and acts as a mediating variable in the relationship between financial literacy and impulsive buying on financial stress. These findings suggest that consumer debt is a key mechanism explaining how financial literacy and consumptive behavior influence the level of financial stress among Generation Z.

Keywords: Financial Literacy, Impulsive Buying, Consumer Debt, Financial Stress, Generation Z, BNPL



INTRODUCTION

In recent years, the acceleration of digital financial services, including buy now pay later (BNPL) or paylater, has expanded access to consumer credit for younger age groups. On the one hand, this development can help facilitate transactions and individual cash flow. However, on the other hand, easy access to credit risks encouraging unplanned spending decisions, especially among Generation Z, who are highly exposed to digital promotions and instant installment schemes. One phenomenon that is currently growing is the increased use of cardless credit-based payment services, such as Pay Later, which allows consumers to make purchases without having to pay immediately. Experimental research findings and transaction data show that BNPL can increase spending compared to other payment methods because it reduces the perception of "expensive" through the display of installment prices per period (Ashby et al., 2025).

In the Indonesian context, this issue is becoming increasingly relevant because increased access to financial services has not been fully matched by financial literacy levels. The results of the 2022 National Survey of Financial Literacy and Inclusion (SNLIK) show that Indonesia's financial literacy index is 49.68% and its financial inclusion index is 85.10%, indicating that there is still a significant gap in literacy and inclusion (Financial Services Authority [OJK], 2022). This gap is important because financial literacy is "human capital" that helps individuals process economic information and make more appropriate financial decisions, including those related to debt management (Lusardi & Mitchell, 2014). By definition, the OECD emphasizes that financial literacy is a combination of awareness, knowledge, skills, attitudes, and behaviors that individuals need to make appropriate financial decisions to achieve financial well-being (OECD, 2022).

Additionally, user behavior data shows that young people are significant users. A collaborative survey by Kredivo–Katadata Insight Center published through DataBoks reports that 26.5% of paylater users are Gen Z (18–25 years old), while 43.9% are millennials (Center, 2024). With such a large proportion of users, Gen Z becomes a strategic yet vulnerable group when consumer credit services are used for non-essential or unplanned purchases.

This vulnerability is further exacerbated when impulsive buying becomes a behavioral pattern. Classically, impulsive buying is understood as a sudden, strong urge to buy that tends to involve minimal deliberative consideration (Rook, 1987). In the digital ecosystem, this impulsive urge can be



reinforced by periodic promotions (e.g., 10.10/11.11), flash sales, and instant checkout features. Research on paylater users among students also shows a correlation between literacy/financial pressure and impulsive purchasing tendencies in the context of paylater, indicating the complexity of consumption behavior among young people (Oktaviana & Aji, 2025).

The accumulation of uncontrolled consumption decisions has the potential to lead to consumer debt (e.g., paylater installments, credit cards, or non-productive consumer loans). The OJK itself emphasizes the need to strengthen BNPL regulations for consumer protection and to anticipate the potential for a "debt trap," especially for users who do not yet have adequate financial literacy (OJK, 2024). This means that consumer debt is not only relevant as a consequence of consumption behavior, but also as a mechanism that can bridge the influence of psychological/behavioral factors on financial well-being.

In terms of outcome, financial stress/financial distress is understood as a reaction of mental and physical discomfort due to concerns about financial conditions (Prawitz et al., 2006). The literature also shows that financial worries correlate with psychological distress (Ryu & Fan, 2023), and in the student/young adult population, debt burdens can contribute to anxiety/financial pressure (Archuleta et al., 2013). Thus, financial stress among Gen Z can be viewed as an issue influenced by a combination of literacy capacity, impulsive tendencies, and accompanying consumer debt.

Based on this explanation, this study places financial literacy and impulsive buying as the main predictors of behavior/capacity, consumer debt as a mediating variable, and financial stress as the outcome in Gen Z. Theoretically, this model integrates the perspectives of financial literacy as human capital (Lusardi & Mitchell, 2014) and impulsive buying behavior (Rook, 1987) in the context of digital consumer credit (Ashby et al., 2025). Empirically, although studies on paylater and impulsive buying among young people have begun to emerge (Oktaviana & Aji, 2025), research that explicitly examines the mediating role of consumer debt in the relationship between financial literacy and impulsive buying on Gen Z's financial stress in Indonesia still needs to be deepened, especially to provide practical input for financial education and consumer protection (OJK, 2024).

To conclude the introduction, this study was designed to comprehensively address the relationship between financial literacy and impulsive buying behavior on financial stress levels among Generation Z, by positioning consumer debt as a mediating variable that bridges this relationship. The proposed research problem emphasizes that the analysis focuses not only



on the direct influence between variables but also on indirect mechanisms, which have been limitedly explained in the literature.

Accordingly, this study aims to examine the influence of financial literacy and impulsive behavior on financial stress, both directly and through consumer debt as a mediator. This approach is expected to provide a more comprehensive understanding of the dynamics of financial management among Generation Z, particularly in the context of increased access to digital credit facilities such as "buy now, pay later."

Furthermore, this study is expected to provide theoretical contributions to the development of studies on financial literacy and consumer behavior, while also offering practical implications for individuals, families, and educational institutions in designing wiser financial management strategies. At the policy level, the findings of this study are also expected to inform stakeholders' considerations in strengthening regulations and education regarding the use of consumer credit among the younger generation. The writing system in this research is structured from the introduction to the conclusions and recommendations, to ensure a systematic and easy-to-understand discussion flow.

LITERATURE REVIEW

The literature indicates that financial literacy is an individual's ability to understand basic financial concepts and use them to make informed decisions, such as saving, borrowing, and managing risk (Huston, 2010; Lusardi & Mitchell, 2014). From an economic perspective, financial literacy is positioned as a form of human capital investment that improves the quality of decision-making and individual well-being (Becker, 1993). Internationally, financial literacy measurements often refer to the OECD/INFE framework, which encompasses the dimensions of financial knowledge, behavior, and attitudes (OECD, 2022). In Indonesia, the results of the National Survey of Financial Literacy and Inclusion (SNLIK) show a gap between literacy and inclusion levels, indicating that access to financial services has not been fully balanced with adequate understanding (OJK, 2022). Empirically, financial literacy has been shown to correlate with lower levels of financial stress and plays a role in improving financial well-being through better financial management mechanisms (Zhang & Chatterjee, 2023).

On the other hand, impulsive buying behavior describes an individual's tendency to make spontaneous purchases without careful planning, often triggered by emotional impulses (Rook, 1987). This construct encompasses a



cognitive dimension, such as lack of consideration, as well as an affective dimension, such as a strong emotional urge to buy immediately (Verplanken & Herabadi, 2001). The two-system model (reflective-impulsive) explains that consumption behavior is the result of the interaction between rational, reflective processes and automatic, emotional, impulsive processes (Strack & Deutsch, 2004). In the context of Generation Z, who are highly exposed to digital ecosystems, promotions, and the convenience of instant credit such as buy now, pay later (BNPL), impulsive behavior has the potential to increase the frequency and value of purchases beyond financial capabilities. Empirical studies show that the use of BNPL can increase the value of shopping transactions, which ultimately has the potential to increase the risk of debt if not balanced with good financial planning (Ashby et al., 2025; Kumar et al., 2024).

Financial stress itself is understood as a state of psychological distress that arises when an individual perceives that the financial demands they face exceed their ability to meet them. This concept is rooted in the Transactional Model of Stress, which emphasizes the importance of cognitive appraisal processes in balancing demands and resources (Lazarus & Folkman, 1984). In practice, financial stress is measured through indicators such as difficulty meeting needs, concerns about payment obligations, and feelings of financial insecurity. Instruments such as the InCharge Financial Distress/Financial Well-Being Scale are widely used to measure an individual's level of financial distress (Prawitz et al., 2006). Numerous studies have shown that financial stress has a significant impact on productivity and mental health, making it an important variable in the study of financial behavior (Bialowolski et al., 2022).

Within this dynamic, consumer debt plays a crucial role in linking behavior and an individual's psychological state. Consumer debt refers to the use of credit to meet consumption needs, such as credit cards, consumer loans, or BNPL schemes. Despite providing easy access, using debt without careful planning has the potential to create a debt trap, as highlighted by the Financial Services Authority (OJK) in its efforts to strengthen BNPL regulations (OJK, 2024; 2025). Furthermore, low debt literacy has been shown to be associated with an increased risk of overindebtedness and suboptimal credit decision-making (Lusardi & Tufano, 2015). Psychosocially, high debt levels are also associated with increased stress and mental health disorders, including depression (Sweet et al., 2013); Bialowolski et al., 2022).

Numerous empirical studies have shown a consistent relationship: better financial literacy tends to reduce the risk of overindebtedness, while impulsive behavior increases the tendency to borrow. At the same time, high debt



contributes to increased financial stress. However, research simultaneously examining the role

of financial literacy and impulsive behavior on financial stress, with consumer debt as a mediating variable, is still limited, particularly in the context of Generation Z in Indonesia, which faces easy access to digital credit. This gap is the basis for research development, with an emphasis on testing indirect pathway mechanisms that explain how financial literacy and impulsive behavior influence financial stress through consumer debt.

Based on a theoretical framework referring to Human Capital Theory and the Transactional Model of Stress, financial literacy is seen as a protective factor that encourages rational decision-making and reduces the use of debt, while impulsive behavior increases the tendency for unplanned consumption that leads to debt. Furthermore, consumer debt increases the perception of financial stress when the burden of obligations exceeds an individual's capacity. Therefore, the hypothesis is formulated that financial literacy and impulsive behavior have an influence on financial stress, both directly and indirectly through the mediation of consumer debt, with the direction of the relationship indicating that financial literacy reduces risk, while impulsive behavior and consumer debt increase the level of financial stress.

RESEARCH METHOD

This study uses an associative quantitative explanatory approach to examine the causal relationship between variables, namely the influence of financial literacy and impulsive buying behavior on financial stress, with consumer debt as a mediating variable. This quantitative approach was chosen because it allows for measurable intervariable relationships to be tested using standardized instruments and systematic statistical analysis (Creswell & Creswell, 2017). The analysis was conducted using Partial Least Squares–Structural Equation Modeling (PLS-SEM) given that the research model involves simultaneous relationships and testing indirect effects (mediation), and is also relevant for testing predictive models with latent constructs measured by multiple indicators (Hair et al., 2019, 2021).

The study population included Generation Z individuals aged 18–27 who reside or work in Cirebon City/Regency and have experience in consumer transactions, particularly online shopping and using consumer credit facilities. The sample was determined using a purposive sampling technique with the following criteria: aged 18–27, domiciled/working in Cirebon, having made a consumer purchase in the last 3–6 months, and willing to complete a



questionnaire. The target sample size was 200 respondents, with a minimum limit of 150 respondents to ensure the adequacy of the PLS-SEM analysis based on model complexity and statistical power requirements.

The data used consisted of primary and secondary data. Primary data were obtained by distributing questionnaires to eligible respondents, while secondary data came from official reports, publications from relevant institutions, and scientific literature relevant to financial literacy, consumption behavior, and digital credit use. Data collection was conducted using a questionnaire instrument with a Likert scale of 1–5, distributed online and offline according to field needs. The research instrument was adapted from scales already used in the literature: financial literacy refers to the OECD/INFE framework, impulsive behavior refers to the concept of impulsive buying, financial stress refers to the construct of financial distress/well-being, and consumer debt was measured using behavioral indicators and debt burden based on the concept of debt literacy.

Instrument quality was tested through validity and reliability tests within the outer model framework in PLS-SEM. Convergent validity was evaluated using outer loading values (≥ 0.70) and Average Variance Extracted (AVE ≥ 0.50), while reliability was measured using Composite Reliability and Cronbach's Alpha with a threshold of ≥ 0.70 . Discriminant validity was also tested to ensure that each construct had clear empirical differences. Data analysis was conducted in stages, including descriptive analysis to describe the characteristics of respondents and research variables, evaluation of the outer model to test validity and reliability, and evaluation of the inner model through testing path coefficients, R^2 values, and the significance of relationships between variables. Hypothesis testing was conducted using a bootstrapping procedure to assess the significance of direct and indirect influences.

This research was conducted in Cirebon City, considering the high level of activity among Generation Z in using digital financial services. The research process includes the instrument preparation stage in November 2025 and data collection in December 2025. The entire research process is carried out by paying attention to the principles of research ethics, namely providing informed consent to respondents, maintaining anonymity and confidentiality of data, and ensuring that the data obtained is only used for academic purposes and scientific reporting in accordance with applicable ethical guidelines.



RESULTS AND DISCUSSION

This section presents the results of the data analysis and a discussion linking the empirical findings to the established theoretical framework. This study involved 150 Generation Z respondents with diverse characteristics, as shown in the following table.

Table 1.
Respondent Profile

Characteristics	Category	Number	Percentage
Age	19 years	8	5.33%
	20 years old	11	7.33
	21 years	44	29.33%
	22 years	35	23.33
	23 years	21	14.00
	24 years	11	7.33%
	25 years	12	8.00%
	26 years	4	2.67%
	27 years	4	2.67%
	Gender	Female	123
Male		27	18.00
Status	Employed	90	60.00
	Student	60	40

Source: Processed data (2026)

The majority of respondents were aged 21–22, predominantly female, and most were employed. This composition reflects the characteristics of Generation Z in their early productive phase, with active involvement in economic activities and digital consumption.

Measurement model testing showed that all indicators had outer loading values above 0.70 after eliminating indicators that did not meet the criteria. Furthermore, the Average Variance Extracted (AVE) value for each variable was above 0.50, thus concluding that all constructs met convergent validity.

Table 2.
Validity Test

Variable	Indicator	Factor Loadings	AVE
Financial Literacy (X1)	LK1	0.792	0.637



	LK2	0.821	
	LK4	0.877	
	LK5	0.868	
Impulsive Buying (X2)	IB2	0.816	0.630
	IB3	0.892	
	IB4	0.858	
	IB5	0.821	
Consumer Debt (Z)	UK1	0.875	0.750
	UK2	0.839	
	UK3	0.815	
	UK4	0.916	
	UK5	0.883	
Financial Stress (Y)	SK1	0.879	0.736
	SK2	0.791	
	SK3	0.877	
	SK4	0.897	
	SK5	0.843	

Furthermore, the results of the reliability test show that all variables have Cronbach's Alpha and Composite Reliability values above 0.70, which indicates good internal consistency of the instrument.

Table 3.
Reliability Test

Variable	Cronbach's Alpha	Composite Reliability
Financial Literacy (X1)	0.857	0.884
Impulsive Buying (X2)	0.847	0.884
Consumer Debt (Z)	0.917	0.925
Financial Stress (Y)	0.910	0.910

The discriminant validity test using HTMT also showed that all values were below 0.90, so that each construct was stated to have clear differences and was worthy of further analysis.

Table 4.
Discriminant Validity (HTMT)

	Latent Variable 1	Latent Variable 2	Latent Variable 3	Latent Variable 4
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Latent Variable 1				
Latent Variable 2	0.804			
Latent Variable 3	0.645	0.789		
Latent Variable 4	0.708	0.730	0.757	

The results in Table 4 show that all HTMT values are below the threshold of 0.90. This means that each construct in this study has good discriminant validity and can be empirically distinguished from one another. In other words, the variables financial literacy, impulsive buying, consumer debt, and financial stress do not overlap conceptually or in measurement.

Table 5.
R Square

Variable	R Square
Financial Stress	0.581
Consumer Debt	0.524

Based on Table 5, the R-square value of 0.581 for the financial stress variable indicates that 58.1% of the variation in financial stress can be explained by financial literacy and impulsive buying through the model. Meanwhile, the value of 0.524 for consumer debt indicates that 52.4% of the variation is explained by these two independent variables. Both values are in the moderate category, indicating the model has fairly strong explanatory power.

Table 6.
Bootstrapping Results

Hypothesis	Relationship Between Variables	Path Coefficient (β)	p-value	Decision
H1	Financial Literacy → Financial Stress	0.294	0.001	Accepted
H2	Impulsive Buying → Financial Stress	0.158	0.087	Not Accepted
H3	Financial Literacy → Consumer Debt	0.187	0.007	Accepted



H4	Impulsive Buying → Consumer Debt	0.578	<0.001	Accepted
H5	Consumer Debt → Financial Stress	0.408	<0.001	Accepted
H6	Financial Literacy → Consumer Debt → Financial Stress	0.076	0.020	Accepted
H7	Impulsive Buying → Consumer Debt → Financial Stress	0.236	<0.001	Accepted

Table 6 reveals the core story of this study. Financial literacy was shown to have a significant effect on financial stress (H1 accepted), although the direction of the effect was positive—indicating that higher understanding, greater awareness of financial burdens. Impulsive buying, on the other hand, had no direct effect on financial stress (H2 rejected), but had a very strong influence on consumer debt (H4 accepted).

Consumer debt then emerged as a key player—significantly influencing financial stress (H5 accepted) and acting as a bridge in the indirect relationship. It was evident that both financial literacy and impulsive buying influenced financial stress through consumer debt (H6 and H7 accepted). In fact, in the impulsive buying → financial stress relationship, this mediation was complete, meaning the effect was only felt when the "desire to shop" turned into "bills to pay."

The discussion shows that the insignificant direct effect of impulsive buying on financial stress aligns with the Transactional Model of Stress framework, where pressure arises when an individual feels the burden exceeds their capabilities. Respondents, who were mostly employed, tended to feel able to control the impact of impulsive buying in the short term. However, when this behavior transitioned into debt, the impact became real and significant on financial stress.

The significant effect of impulsive buying on consumer debt confirms the dominance of the impulsive system in consumer decision-making. Easy access to digital credit, such as PayLater, accelerates this process—a "shortcut" that often feels less steep at first, but steeper in the end.

Another striking finding is the positive relationship between financial literacy and financial stress. This suggests that greater understanding isn't always comforting; it can actually open awareness of risks, obligations, and



potential financial burdens. In this context, literacy works like a light; it illuminates, but also reveals things previously unnoticed.

Furthermore, financial literacy also influences consumer debt. Individuals with higher levels of literacy tend to be more confident in using credit products, but without adequate controls, this still risks increasing their debt burden. This is where it's important not only to "know" but also to "use it wisely."

The role of consumer debt as a mediator has been proven significant, even a full mediator, in the relationship between impulsive buying and financial stress. This means that impulsive behavior only has an impact when it transforms into a financial obligation. Meanwhile, in the relationship between financial literacy and financial stress, consumer debt acts as a partial mediator, indicating the existence of both direct and indirect pathways.

Overall, the results of this study confirm that consumer debt is a key link in the financial dynamics of Generation Z. It serves as a bridge—or perhaps a narrow gap—connecting consumption decisions and psychological stress. Therefore, efforts to improve financial literacy need to go hand in hand with strengthening self-control, budget planning, and payment discipline, to ensure not only financial literacy but also financial peace of mind.

CONCLUSION

This study concludes that financial stress in Generation Z does not exist in isolation, but rather is formed by the interaction between financial literacy, impulsive buying behavior, and consumer debt, a key link. Financial literacy has been shown to significantly influence financial stress, both directly and indirectly through increased consumer debt. These findings indicate that higher financial understanding leads to greater awareness of individual financial obligations and risks. Conversely, impulsive buying behavior does not directly influence financial stress, but contributes significantly to increasing consumer debt, ultimately exacerbating financial stress. Thus, consumer debt emerges as a key factor bridging this relationship and a primary determinant of increased financial stress. Overall, the results of this study confirm that the accumulation of consumer debt is a crucial factor determining the level of financial vulnerability of Generation Z, particularly in the context of easy access to digital credit.

Based on these findings, Generation Z is advised not only to improve financial literacy at the knowledge level but also to integrate it with practical



skills such as budget planning, self-control in consumption, and discipline in debt repayment. The ability to distinguish between needs and wants, and evaluate repayment capacity before using consumer credit such as PayLater, is a crucial step in reducing the risk of financial stress. Furthermore, future research is recommended to develop a more comprehensive model by adding other variables such as self-control, income level, financial attitudes, and social influences. Expanding the coverage area and respondent characteristics is also important to increase the generalizability of the results. Furthermore, the use of a longitudinal design or mixed methods approach can provide a deeper understanding of the dynamics of financial behavior and financial stress, thereby capturing changes that occur over time more comprehensively and reflectively.

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