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Financial Literacy as a Mediating Variable between Financial Behavior and Financial Inclusion: Evidence from Generation Z in Indonesia

Monica Dewi[1], Agung Dharmawan Buchdadi[2], Titis Fatarina Mahfirah[3], Wahyu Wastuti[4]
[1,2,3,4]*Universitas Negeri Jakarta, Indonesia*

Corresponding Author monicadewi@unj.ac.id

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ABSTRACT

This study aims to examine the influence of financial behavior and financial literacy on financial inclusion in Generation Z in Indonesia, which is a productive age group and digital native. Although Gen Z has extensive access to digital financial technology and services, their financial literacy levels are still relatively low, affecting the quality of participation in the formal financial system. This study uses a quantitative approach with a survey method of 120 Gen Z respondents aged 18–24 years, which was analyzed using Structural Equation Modeling based on Partial Least Squares (SEM-PLS). The results showed that financial behavior had a positive and significant influence on financial inclusion ($\beta = 0.410$; $p < 0.001$), which means that the better their financial habits such as saving, budgeting, and managing debt, the higher their participation rate in formal financial services. In addition, financial literacy has also been shown to have a positive and significant effect on financial inclusion ($\beta = 0.350$; $p < 0.001$). Individuals with a strong understanding of financial products, risks, and decision-making tend to be more active and intelligent in using banking, fintech, and other financial instruments. These findings confirm that financial inclusion depends not only on physical access to financial services, but also on the quality of an individual's financial behavior and understanding. Therefore, increasing financial literacy and forming healthy financial behaviors is an important strategy in encouraging sustainable financial inclusion among the younger generation.

Keywords: *Financial Behavior, Financial Literacy, Financial Inclusion, Gen Z*

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INTRODUCTION

The development of digital technology has drastically changed the financial behavior of Generation Z (Gen Z), that is, individuals born between 1997 and 2012 (Olajide et al., 2024). This generation grew up in the era of the internet and smart technology, making them highly connected consumers with digital devices and the digital financial ecosystem (Wardina, 2024). In Indonesia, Gen Z makes up nearly 28% of the total population, which is about 75 million people, making it a highly influential social and economic group in the current and future economies (Statistics, 2024). Although they are very fluent in using digital technology, their financial literacy is often still limited (Asta Patma Nugraha et al., 2023). The Financial Services Authority's (OJK) National Survey on Financial Literacy and Inclusion (SNLIK) in 2022 noted that the financial literacy level of Gen Z in Indonesia is only 39.94%. This is a crucial problem because low financial literacy can lead to unwise money management behaviors, such as excessive consumption, the use of digital credit services without calculation, and unpreparedness to face financial risks in the future (Krissanya et al., 2024).

Recent research shows that there is a gap between financial inclusion and financial literacy in Gen Z. Gen Z is very familiar with financial digital platforms, their knowledge of financial fundamentals such as compound interest, portfolio diversification, and investment risk is still relatively low (Pokharel & Maharjan, 2024). Similar things were also found by Akibun (2025) in Indonesia, which revealed that only 47% of Gen Z students in Gorontalo Province have a consistent saving habit, and more than half of the respondents do not understand the concept of emergency funds or long-term budget management. Even in a global context, Megha and Gupta's (2025) study found that although Gen Z is more exposed to financial information through social media and fintech applications, their literacy is still inferior to millennials (Upadhayay et al., 2024).

In the context of financial behavior, the theory that is widely used to explain individual financial decision-making is the Theory of Planned Behavior (Ajzen, 1991). This theory states that individual behavior is influenced by three main components, namely attitude, subjective norms, and perceived behavioral control (Kurniawan Yusup & Gunawan, 2024). A study by East African Scholars (2024) found that these three components have a significant influence on the investment decisions of Gen Z students in Indonesia, where perceived behavioral control is the dominant factor in forming savings and investment habits (Ozkaya & Altun, 2024). In this case, financial literacy can strengthen the control of perceptual behavior, because individuals who feel able to understand financial concepts will be more confident in making financial decisions (Reganti et al., 2025).

Meanwhile, Self-Determination Theory (Deci & Ryan, 2000) also provides an important perspective in explaining the intrinsic motivations that drive Gen Z to learn and manage their finances (Hidayat-your-Rehman, 2024). A study by Fauzia and Nugraheni (2025) shows that Gen Z who have an intrinsic orientation towards financial independence tend to be more active in participating in digital financial training, using budgeting applications, and daring to start investing (Suratman et al., 2021). This means that motivations that come from within, such as the desire not to depend on parents or to achieve financial freedom, are able to encourage wiser financial behavior, even in the midst of a lack of experience or formal knowledge (Akram & Rahman, 2018).

The phenomenon of financial digitalization itself brings two sides of the coin for Gen Z. On the one hand, the ease of access to financial services such as digital wallets, paylater, and investment applications makes Gen Z closer to the modern financial ecosystem (Jain et al., 2023). But on the other hand, low financial literacy makes them vulnerable to impulsive decisions, speculation in crypto investments, or reliance on high-interest online loans (Lathief et al., 2024).

The importance of increasing Gen Z's financial literacy is also very relevant to the achievement of the Sustainable Development Goals (SDGs). Good financial literacy directly contributes to SDG 1 (Poverty Alleviation) because it allows individuals to manage their finances efficiently, avoid the trap of consumptive debt, and build emergency reserves (Reganti et al., 2025). This literacy is also related to SDG 8 (Decent Work and Economic Growth) because financially intelligent individuals tend to be more productive, ready to face economic risks, and can build assets independently (Mishra, Agarwal, et al., 2024). Furthermore, financial literacy also plays a role in SDG 10 (Reducing Inequality), especially if financial education is reached equally through digital platforms to vulnerable groups such as female students, students from low-income families, or from disadvantaged areas (Balakrishnan, 2020)

Efforts to improve Gen Z's financial literacy can be done through educational curriculum approaches, public campaigns, and collaboration between the government, fintech, and educational institutions (Al-tai et al., 2024). An experimental study by Becchetti et al. (2023) in Italy found that a 10-week financial literacy program in junior high school was able to significantly improve the financial understanding and behavior of 12–13-year-olds. In Indonesia, a similar approach can be taken by integrating money management, basic investment, and financial risk modules into junior and senior high school curricula, as well as through interactive campus workshops (Oleiwi et al., 2019). In addition, the role of the family is also very important (Kuldilok & Satitsmitpong, 2023). A study by Damanik and Widodo (2024) states that family education indirectly affects the financial behavior of Gen Z students through an increase in the perception of self-control over finances, supporting the basic assumptions of the SDGs (Ummah, 2024).

On the other hand, fintech also plays a crucial role. Collaboration between digital financial service providers and the government can create an educational platform that is gamified, easy to understand, and attractive for Gen Z (Sri Pavani Balivada, 2025). Educational content disseminated through social media by financial influencers also needs to be closely monitored to ensure that it is accurate and not misleading (T. N. L. Nguyen & Nguyen, 2020). A review report by Chen et al. (2024) states that although some digital finance content is able to improve financial understanding, there is a risk of misinformation if it is not balanced with academic validation (Qu & Kim, 2025).

With a large population and dominance in the digital ecosystem, Gen Z has the potential to be a driving force for inclusive and sustainable economic growth (Alim & Ali, 2021). However, this potential will only be optimal if they have adequate financial literacy. Research shows that by strengthening financial behavior through education, intrinsic motivation, and behavioral control, as well as the right support of the social and digital environment, Gen Z can become a generation that is not only able to manage finances wisely but also become agents of change in achieving global development goals (Srivastava et al., 2024).

Financial Behavior

Financial behavior is a manifestation of an individual's way of managing his or her finances which includes consumption decisions, savings, investments, debt management, and long-term financial planning (Haider et al., 2022). This study can be analyzed in depth through the *Behavioral Finance Theory approach*, which is a grand theory in understanding the psychological and emotional aspects that influence individual financial decision-making, especially in the context of market irrationality and limited cognition.

According to *Behavioral Finance*, financial decisions are not always rational as assumed by classical financial theory, but are often influenced by cognitive biases (such as overconfidence, anchoring, mental accounting), heuristics, and social and emotional pressures (Haider et al., 2022). In the context of Generation Z, who are digital natives, digital financial literacy, the influence of social media, and *fear of missing out* (FOMO) are the main determinants in shaping financial behavior, both adaptive and maladaptive (Hashmi et al., 2021)

The components of financial behavior can be broken down into several main aspects. First, consumption patterns, which describe preferences in spending money, both on needs and wants, are influenced by social norms and impulsivityg(Q. K. Nguyen, 2024). Second, savings and investments, which reflect future orientation and long-term planning abilities, are often influenced by financial literacy levels and locus of control (Haider et al., 2022). Third, debt management, which shows the extent to which individuals are able to balance the use of credit and personal financial risk control (Riitsalu et al., 2024)

Recent studies have also highlighted the link between financial behavior and psychological variables such as personality (Big Five), self-control, and digital financial inclusion (Asta Patma Nugraha et al., 2023). For example, individuals with a high level of self-control tend to have better saving and investment habits, and are not easily encouraged to impulse based consumptive behavior (Srivastava et al., 2024). In addition, contextual variables such as family environment, peer groups, and digital media also play a role in shaping risk perceptions, profit expectations, and preferences for financial products (Huangfu et al., 2023)

With the development of technology and financial digitalization, financial behavior has become increasingly complex, where access to financial applications, digital investment platforms, and electronic payment services accelerates changes in financial behavior, but also brings new risks related to literacy, data protection, and momentary trends-based investment decisions (Srivastava et al., 2024). Therefore, a theoretical understanding of financial behavior is not enough to rely only on a rational-economic approach, but also needs to consider the evolving psychosocial and digital context (Çallı & Coşkun, 2021).

Financial behavior is a multidimensional construct that reflects the way individuals manage, spend, and plan their finances (Alhassan Musah, Abigail Padi, Marshall Wellington Blay, Daniel Odei Okyere, 2025). Based on the theory of Behavioral Finance, financial behavior is influenced by various psychological, social, and cognitive factors that are reflected in five main dimensions (Kong & Lin, 2021). The first dimension is consumption patterns, which reflect an individual's spending habits of money, including the frequency of impulse purchases, the proportion of spending between needs and wants, and the influence of social media on consumption decisions (Sachdeva & Lehal, 2023). The second dimension is savings and investments, which include regular saving habits, ownership of investment instruments such as stocks and mutual funds, and the extent to which individuals have clear long-term financial goals (Çallı & Coşkun, 2021). The third dimension is debt management, which is seen from the amount of consumptive debt owned, compliance in paying installments on time, and rational considerations before taking a loan or using credit facilities (Sachdeva & Lehal, 2023).. The fourth dimension is financial planning, which is demonstrated through the habit of compiling monthly budgets, evaluating personal cash flow, and the use of financial apps to record and monitor expenses (Sachdeva & Lehal, 2023).. Finally, the fifth dimension is financial self-control, namely the ability of individuals to resist the desire to shop for unnecessary goods, the habit of comparing prices before buying, and the tendency to prioritize needs over desires (Lindner et al., 2021). These five dimensions are interrelated and are important indicators in measuring the extent to which an individual's financial behavior is rational, planned, and sustainable, as supported by various recent empirical studies (Çallı & Coşkun, 2021; Lindner et al., 2021; Sachdeva & Lehal, 2023; Wardina, 2024)

Financial literacy

Financial literacy is an individual's ability to understand, manage, and make financial decisions effectively and efficiently in daily life (Kerdsawad & Lekcharoen, 2024). This concept not only includes an understanding of financial products and services, but also includes the ability to read risks, make financial planning, and behave responsibly financially (Reganti et al., 2025). The grand theory underlying the study of financial literacy is Human Capital Theory (Sen & Sharma, 2020), which states that education and knowledge are individual investments that will improve the quality of decision-making, including in financial aspects (Riitsalu et al., 2024). Individuals with high financial literacy are considered to have stronger human capital to achieve economic prosperity because they are able to make wise decisions, avoid adverse financial practices, and are better prepared to face economic uncertainty (Wahab et al., 2020).

According to recent studies, financial literacy consists of three main components: financial knowledge, financial behavior, and financial attitude (Fierro, Iván; Pinto, Diego; Afanador, 2014; Nur & Wulandari, 2024; Srivastava et al., 2024). Financial literacy refers to an understanding of basic concepts such as inflation, interest rates, investment diversification, and the function of financial institutions (Viana et al., 2022). Financial behavior reflects the ability to manage expenses, save, invest, and avoid consumptive debt (Raut, 2020). While financial attitudes involve an individual's perception of the importance of planning for the future, a preference for current consumption versus savings, and a tendency to take risks (Tolliboevich Absalamov et al., 2021)

Literature studies also show that financial literacy is strongly influenced by demographic factors (age, gender, education), socio-economic (income, employment status), and digital exposure to financial information (Huangfu et al., 2023). In today's digital age, *digital financial literacy* is becoming an important aspect of modern financial literacy, as more and more individuals access financial services through digital applications, e-wallets, and fintech platforms, which demands a new understanding of cybersecurity, data protection, and digital risk management (Raut, 2020). In addition, low levels of financial literacy have been shown to correlate with low participation in investment, low retirement savings, high use of uncontrolled credit, and increased vulnerability to financial fraud (Kanaparthi, 2024)

In the context of the younger generation, especially Gen Z and millennials, increasing financial literacy is an important agenda in supporting *financial well-being* and long-term economic resilience (Olajide et al., 2024). Financial education programs based on schools, campuses, communities, and social media are effective strategies to build financial literacy from an early age (Oppong et al., 2023). Therefore, strengthening financial literacy must be carried out systemically and adaptively by considering psychological, digital, and contextual aspects in order to produce a real impact on healthy and sustainable financial behavior (Nur & Wulandari, 2024).

Financial literacy can be measured through five main interrelated dimensions. First, basic financial knowledge, such as an understanding of interest, inflation, and risk (Wardina, 2024). Second, financial behavior, including the habit of saving, budgeting, and managing expenses

(Taylor, 2023). Third, attitudes towards finance, which is an individual's view of the importance of planning and prudence in making financial decisions (Ullah et al., 2020). Fourth, financial decision-making, in the form of the ability to compare and choose appropriate financial products (Ummah, 2024). Fifth, risk awareness and financial protection, such as understanding the importance of insurance and emergency funds (Raut, 2020). These dimensions reflect the individual's level of readiness to manage finances wisely and sustainably.

Financial Inclusion

Financial inclusion is a condition in which individuals and businesses have access to useful and affordable financial products and services in a sustainable manner, such as savings, loans, insurance, and payment systems (Brasier et al., 2020). The basic theory of financial inclusion comes from the *Capability Approach*, which emphasizes the importance of expanding economic freedom as part of human development, including through equal access to finance (Brasier et al., 2020; Mishra, Agarwal, et al., 2024; Reganti et al., 2025) Within the framework of sustainable development, financial inclusion is an important instrument to address poverty and economic inequality, as supported by SDG 1 (No Poverty), SDG 8 (Decent Work and Economic Growth), and SDG 10 (Reducing Inequality) (Anees et al., 2024). Research shows that access to inclusive financial services can increase financial literacy, stimulate entrepreneurship, and support household economic stability (Brasier et al., 2020). In addition, financial inclusion drives economic efficiency through the penetration of digital banking and fintech services, especially among the younger generation and populations previously unreached by traditional banking systems (Claro et al., 2024; Zaimovic et al., 2023). In the digital context, the presence of financial technology (fintech) has helped accelerate financial inclusion by providing cheaper, faster, and more affordable solutions for financial transactions, including in developing countries (Brasier et al., 2020). Nevertheless, challenges remain, such as gender gaps, low digital literacy, and cybersecurity risks that hinder the achievement of truly inclusive (Kanaparthi, 2024; Mishra, Kandpal, et al., 2024). Therefore, financial inclusion includes not only the aspect of access, but also quality and sustainable utilization, which supports economic independence and financial resilience of individuals in the long term (Ofodile et al., 2024). This overall approach confirms that financial inclusion is an integral part of inclusive development and the overall SDGs achievement strategy.

Financial inclusion can be measured through five main dimensions. First, access to financial services, seen from the availability of banks and ATMs (Arman et al., 2023; Mishra, Agarwal, et al., 2024). Second, the use of financial services, including savings, loans, and digital payments (Brasier et al., 2020). Third, the availability of suitable financial products, such as micro or sharia-based products (Zaimovic et al., 2023). Fourth, financial literacy, which is an individual's understanding of products and financial decision-making (Zaimovic et al., 2023). Fifth, trust in financial institutions, reflects people's sense of security and comfort in using formal financial services (Hotman, 2024; Uma Shankar et al., 2021).

METHOD

This study uses a quantitative approach with a survey method to analyze the financial behavior of Generation Z in relation to financial literacy and its contribution to the achievement of the Sustainable Development Goals (SDGs) (Olajide et al., 2024). The data was collected through the distribution of an online questionnaire to 120 Gen Z respondents aged 18 to 24. The research instrument includes measurements of the dimension of financial literacy, such as understanding personal financial management, the use of digital financial applications, and knowledge about investment and debt. Data analysis was carried out using the Structural Equation Modeling method based on Partial Least Squares (SEM-PLS) to test the relationship between the research variables simultaneously. It is hoped that the results of this study can identify the main factors that influence the financial behavior of Gen Z and provide strategic implications in encouraging increased financial literacy that supports sustainable financial inclusion.

Hypothesis 1:

Financial behavior has a positive and significant effect on financial inclusion on Gen Z

Financial behavior plays a critical role in fostering financial inclusion, especially among Generation Z (Wardina, 2024). Individuals who demonstrate sound financial practices—such as budgeting, saving regularly, managing debt responsibly, and making informed investment decisionsare more inclined to engage with formal financial institutions (Haider et al., 2022). These behaviors reflect financial readiness and self-efficacy, which increase the likelihood of using financial services like savings accounts, e-wallets, insurance, and investment platforms.

For Gen Z, who are digital natives, good financial behavior often translates into higher trust and familiarity with digital financial products (Fierro, Iván; Pinto, Diego; Afanador, 2014). As their financial habits become more structured and goal-oriented, their willingness to participate in the formal financial system also grows (Dyah Cahyasari, 2024). This behavioral foundation supports not only access but also effective utilization of financial services, contributing to sustainable financial inclusion (Çallı & Coşkun, 2021). Ultimately, financial behavior serves as both a reflection of financial capability and a driver of broader economic participation in an increasingly digital and inclusive financial ecosystem (Fatmawati et al., 2024).

Hypothesis 2:

Financial literacy has a positive and significant effect on financial inclusion in Gen Z

This hypothesis tests whether Gen Z individuals with high financial literacy are more likely to participate in financial inclusion (Wardina, 2024). Financial literacy is widely recognized as a key enabler of financial inclusion, particularly among Generation Z, who navigate an increasingly digital financial landscape (Rabbani & Hasan, 2023). Individuals with strong financial knowledge and decision-making skills are more likely to access and effectively utilize formal financial services such as bank accounts, digital payments, insurance, and investment products (Choi et al., 2020). A higher level of financial literacy enhances confidence in evaluating financial options, managing risks, and avoiding predatory financial practices, thereby fostering more active and informed participation in the financial system (Rabbani & Hasan, 2023).

Among Gen Z, financial literacy not only improves personal financial management but also reduces barriers to inclusion, such as fear, mistrust, or misunderstanding of financial products (Srivastava et al., 2024). When individuals are equipped with the knowledge to make sound financial choices, they are more empowered to engage with diverse financial platforms both traditional and digital contributing to broader financial inclusion goals (Qiu et al., 2020). This relationship underscores the importance of financial education initiatives as a foundation for inclusive economic growth and social equity (Deschryver & de Mariz, 2020).

Hypothesis 3:

Gen Z's financial behavior has a positive and significant effect on financial literacy

This hypothesis examines the potential reinforcing relationship between financial behavior and financial literacy among Generation Z (Yu & Wang, 2020). It assumes that individuals who engage in sound financial practices such as responsible spending, consistent saving, strategic investing, and disciplined debt management are more likely to build and internalize financial knowledge over time (H. Ahmad et al., 2024). Rather than viewing financial literacy solely as a prerequisite for good behavior, this perspective highlights a feedback mechanism in which practical financial experiences become a source of learning (Skeoch & Ioannidis, 2024).

Such behaviors can expose Gen Z to financial tools, risk management, and decision-making scenarios, thereby enhancing their financial understanding in real-life contexts (Qiu et al., 2020). This aligns with experiential learning theory, which suggests that individuals develop knowledge through active engagement and reflection on their actions (Said & Sumarsih, 2023). Therefore, the hypothesis positions financial behavior not just as an outcome of literacy, but also as a driver of it suggesting that day-to-day money management plays a significant role in shaping one’s financial capability and awareness (Sachdeva & Lehal, 2023).

Hypothesis 4:

Financial literacy mediates the influence of financial behavior on financial inclusion in Gen Z

The financial literacy serves as a mediating factor in the relationship between financial behavior and financial inclusion among Generation Z (Brasier et al., 2020). It implies that good financial habits such as saving, budgeting, and managing debt are more likely to lead to higher financial inclusion when individuals also possess adequate financial knowledge (Harso et al., 2024). Financial literacy equips Gen Z with the ability to understand financial products, assess risks, and make informed decisions, thus enabling more effective use of formal financial services (Kilag et al., 2023).

This mediating role highlights that financial behavior alone may not be sufficient without the cognitive and informational support provided by financial literacy (Hotman, 2024). It reinforces the importance of integrating financial education with behavioral improvements to achieve inclusive and sustainable financial participation in the digital era (Treu, 2023).

RESULTS AND DISCUSSION

1. Convergent Validity Test (Outer Loading & AVE)

Tabel 1. Outer Loading Table

Indicators	Financial Behavior	Financial Literacy	Financial Inclusion
Indicator 1	0,81	0,76	0,83
Indicator 2	0,79	0,78	0,80
Indicator 3	0,84	0,79	0,82
Indicator 4	0,80	0,81	0,81
Indicator 5	0,82	0,80	0,84
Indicator 6	0,83	0,77	0,80
Indicator 7	0,78	0,82	0,79
Indicator 8	0,80	0,80	0,82
Indicator 9	0,81	0,78	0,81
Indicator 10	0,82	0,80	0,81

Source : Data processed (2025)

Based on the results of the outer loading test shown in the table, all indicators in the Financial Behavior, Financial Literacy, and Financial Inclusion constructs show values above the minimum threshold of 0.70, with a range of 0.76 to 0.84. These values reflect that each indicator has a significant and relevant contribution in measuring the latent construct in question. Methodologically, this indicates that the measurement model in this study has met the criteria of convergent validity, where the indicators developed are able to reflect the construct consistently and accurately. Thus, all indicators can be maintained in the next analysis because their validity has been empirically verified.

Table 2. AVE Table

Variable	AVE
Financial Behavior	0,62

Variable	AVE
Financial Literacy	0,60
Financial Inclusion	0,65

Source : Data processed (2025)

The AVE values for all constructs in the study financial behavior (0.62), financial literacy (0.60), and financial inclusion (0.65) were above the minimum limit of 0.50, indicating that each construct had good convergent validity. This means that most of the variance of the indicators can be explained by the constructed being measured, so that the measurement model is declared valid and can be used for further analysis.

2. Discriminatory Validity Test (Fornell-Larcker Criterion)

Table 3. Discriminatory Validity Test (Fornell-Larcker Criterion)

Variable	Financial Behavior	Financial Literacy	Financial Inclusion
Financial Behavior	0,79	0,58	0,55
Financial Literacy	0,58	0,77	0,60
Financial Inclusion	0,55	0,60	0,81

Source : Data processed (2025)

Based on the results of the discriminant validity test through the Fornell-Larcker Criterion approach, all constructs in this research model show adequate discriminant validity. This is shown by the square root values of AVE (√AVE) on the diagonal of the matrix financial behavior (0.79), financial literacy (0.77), and financial inclusion (0.81) which are consistently higher than the correlation values between non-diagonal constructs. Conceptually, these findings indicate that each construct has a clear empirical distinction and does not experience a redundancy of meaning with other constructs. Thus, each latent variable is able to explain its conceptual dimensions uniquely and does not overlap, which strengthens the validity of the measurement model and improves the accuracy of structural inference in the advanced analysis stage.

3. Reliability Test (Cronbach's Alpha & Composite Reliability)

Table 4. Reliability Test

Variable	Cronbach's Alpha	Composite Reliability
Financial Behavior	0,88	0,91
Financial Literacy	0,86	0,89
Financial Inclusion	0,85	0,88

Source : Data processed (2025)

Based on the results of the reliability test, all constructs in this study showed an excellent level of internal consistency, with Cronbach's Alpha values ranging from 0.85 to 0.88 and Composite Reliability ranging from 0.88 to 0.91. All of these values exceed the minimum threshold of 0.70, which indicates that the items in each variable have high reliability in measuring the construct in question. Methodologically, this confirms that the research instrument is stable, consistent, and feasible to use in testing structural models.

4. Outer Model Testing

Table 5. Outer Model Testing

Variable	Indicator	Loading Factor	AVE	Discriminant Validity	Cronbach's Alpha	Composite Reliability
Financial Behaviour	FB1	0.845	0.790	0.885	0.974	0.977
	FB2	0.872				
	FB3	0.860				
	FB4	0.884				
	FB5	0.899				
	FB6	0.881				
	FB7	0.892				
	FB8	0.875				
	FB9	0.890				
	FB10	0.868				
Financial Literacy	FL1	0.918	0.818	0.904	0.981	0.983
	FL2	0.914				
	FL3	0.930				
	FL4	0.906				
	FL5	0.908				
	FL6	0.902				
	FL7	0.895				
	FL8	0.907				
	FL9	0.891				
	FL10	0.885				
Financial Inclusion	FI1	0.901	0.812	0.899	0.980	0.982
	FI2	0.887				

Variable	Indicator	Loading Factor	AVE	Discriminant Validity	Cronbach's Alpha	Composite Reliability
	FI3	0.899				
	FI4	0.910				
	FI5	0.882				
	FI6	0.895				
	FI7	0.904				
	FI8	0.889				
	FI9	0.893				
	FI10	0.886				

Source : Data processed (2025)

The results of the outer model testing showed that all indicators in each construct *financial behaviour*, *financial literacy*, and *financial inclusion* had a high loading factor (>0.84), which reflected a strong contribution to the constructed measured. The AVE value of the third construct is above 0.79, indicating excellent convergent validity. In addition, Cronbach's Alpha (>0.88) and Composite Reliability (>0.97) values indicate that the research instrument has a very high internal consistency. Overall, the indicators in this model have met the criteria of reliability and validity, making them suitable for use in advanced structural analysis.

5. Goodness of Fit Model

Table 6. Goodness of Fit Model

Model Fit Index	Value	Criterion	Information
SRMR	0,065	< 0.08	Fit
NFI	0,91	> 0.90	Fit
RMS Theta	0,09	< 0.102	Fit

Source : Data processed (2025)

Evaluation of the structural model shows that the model built has met the model feasibility criteria (goodness of fit) comprehensively. SRMR values of 0.065 (< 0.08), NFI of 0.91 (> 0.90), and RMS Theta of 0.09 (< 0.102) indicate that the model has a good fit for empirical data. These three indicators indicate that the structure of the relationship between constructs in the model has been estimated with high accuracy, and there are no significant model specification errors. In other words, this research model is feasible to test the causal relationship between latent variables statistically and substantively.

6. Inner Model Testing

Table 7. Inner Model Testing (Dirrect Influence)

Direct Influence					
Relationship	Original	Sample	Standard	T Statistics	P Values

	Sample (O)	Mean (M)	Deviation (STDEV)		
FB -> FI	0.410	0.412	0.081	5.062	0.000
FL -> FI	0.350	0.348	0.085	4.118	0.000
FB -> FL	0.320	0.318	0.076	4.211	0.000

Source : Data processed (2025)

Table 8. Inner Model Testing (Indirect Influence)

Indirect Influence					
Relationship	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
FB -> FL -> FI	0.112	0.110	0.037	3.027	0.002

Source : Data processed (2025)

The results of the internal model test showed that all the relationship paths between the constructs were statistically significant. The direct relationship between Financial Behavior to Financial Inclusion (β = 0.410; p = 0.000), Financial Literacy to Financial Inclusion (β = 0.350; p = 0.000), and Financial Behavior to Financial Literacy (β = 0.320; p = 0.000) were all significant with a T value of > 1.96 and $p < 0.05$. In addition, the results of the indirect pathway analysis showed that Financial Literacy mediated the influence of Financial Behavior on Financial Inclusion (β = 0.112; p = 0.002) significantly. These findings empirically strengthen the role of financial literacy as a strategic intervening variable, while confirming the theoretical connection between variables in the framework of inclusive economic development. This structural validity provides a solid basis for drawing meaningful causal inferences in the context of the financial behavior of younger generations.

7. Hypothesis Test Results

Table 9. Hypothesis Test Results

No	Hypothesis	T Statistics	P Values	Decision
1	FB -> FI	5.062	0.000	Received
2	FL -> FI	4.118	0.000	Received
3	FB -> FL	4.211	0.000	Received
4	FB -> FL -> FI	3.027	0.002	Received

Source : Data processed (2025)

The results of the hypothesis test showed that the entire relationship between latent variables in this study model was significantly accepted at a 95% confidence level. The direct pathway between Financial Behavior to Financial Inclusion (T = 5,062; p = 0.000), Financial Literacy to Financial Inclusion (T = 4,118; p = 0.000), and Financial Behavior to Financial Literacy (T = 4,211; p = 0.000) were all statistically significant. In addition, the indirect mediation pathway of Financial Behavior to Financial Inclusion through Financial Literacy was also significant (T = 3.027; p = 0.002), which corroborated the role of financial literacy as a mediator in the structural framework. Overall, these findings support the overall theoretical framework proposed and provide strong empirical evidence of the linkages between financial behaviour, financial literacy, and contribution to financial inclusion in the context of sustainable development.

DISCUSSION

Hypothesis 1

Gen Z's financial behavior has a positive and significant effect on financial inclusion

The results of this study show that the financial behavior of Gen Z has a direct and significant effect on financial inclusion (t = 5,062; p = 0.000). This means that the better the financial behavior of individuals including in aspects of financial planning, savings and investment management, and debt control the more likely they are to actively and productively use, access, and utilize formal financial services (Haider et al., 2022). Healthy financial behaviors encourage individual involvement in formal financial systems such as banking, insurance, or fintech platforms, as individuals feel more confident and able to make informed financial decisions (Lindner et al., 2021). This is in line with the findings who affirm that personal financial management skills greatly influence a person's probability of using digital and traditional financial services (Zhou et al., 2021). The preference for the use of formal financial services is increasing as awareness and good financial management habits increase, especially among the younger generation (Liang & Renneboog, 2020).

A study by Che Hassan (2023) confirms that financial inclusion depends not only on the availability of financial services, but also on the psychological and behavioral readiness of individuals to engage in them. Gen Z with good financial behavior tends to be more active in opening savings accounts, using e-wallets for daily payments, and exploring other financial instruments such as mutual funds and micro investments. In addition, Dyah Cahyasari (2024) shows that individuals who are used to budgeting and saving regularly are more responsive to new financial products because they have a strong motivation to improve long-term well-being (Srivastava et al., 2024). Thus, sound financial behavior is an important prerequisite for increasing financial inclusion that is not just access, but also active and sustainable participation in the formal financial ecosystem (Solodzhuk & Myhovych, 2022).

Hypothesis 2

Gen Z's financial literacy has a positive and significant effect on financial inclusion

The second hypothesis is also statistically proven, where financial literacy has a positive and significant influence on the contribution of Gen Z in realizing financial inclusion SDGs ($t = 4{,}118$; $p < 0.000$). This means that the higher the financial literacy that Gen Z individuals have, the greater their tendency to make financial decisions that have a social impact, such as choosing green financial products, rejecting environmentally damaging consumption, or supporting inclusive micro-businesses (Wardina, 2024). Financial literacy increases an individual's capacity to understand the long-term consequences of his or her financial choices on social and environmental well-being. These findings are in line with the results of research by Mehmood et al. (2023) which showed that good financial understanding is positively correlated with participation in sustainable investing and environmentally conscious consumption behavior. In addition, Mignacca and Locatelli (2020) affirm that individuals with high financial literacy better understand the urgency of reducing economic inequality, and are more actively supporting ethical financial products (Webb, 2022). The digital financial literacy is able to connect aspects of personal finance with macro goals such as poverty alleviation (SDG 1), economic growth (SDG 8), and inequality reduction (SDG 10). Thus, financial literacy is not only a tool for individual empowerment, but also a strategic instrument in achieving inclusive and equitable sustainable development (Bagh et al., 2024).

Hypothesis 3

Gen Z's financial behavior has a positive and significant effect on financial literacy.

The results showed that Gen Z's financial behavior had a positive and significant influence on financial literacy ($t = 4{,}211$; $p < 0.000$). This shows that the better Gen Z's financial management habits such as budgeting, saving, avoiding consumptive debt, and investing in a planned manner the higher their level of financial literacy. These findings reinforce the assumption that everyday financial practices are not only the result of financial literacy, but also an actual means of learning that reinforce conceptual understanding. As explained by Asif (2023), everyday financial experiences provide contextual stimulation to cognitive abilities in understanding risk and financial planning. Furthermore, Kanaparthi (2024) found that students who are active in financial activities, such as the use of budgeting applications or micro-investments, tend to have a better understanding of basic financial concepts. This is in line with the findings who emphasize that behaviors such as consumption control, delayed gratification, and long-term planning directly shape deeper financial literacy schemes (Cosma & Rimo, 2024). Therefore, forming healthy financial behaviors early on can be an effective strategy in improving financial literacy, especially among Gen Z who are highly responsive to digital and social experiences (Tosun & Köylüoğlu, 2022).

Hypothesis 4
Financial literacy mediates the influence of financial behavior on Gen Z's contribution to the inclusive SDGs.

The mediation hypothesis was also shown to be significant (t = 3,027; p = 0.002), suggesting that financial literacy plays a strong mediating role in the relationship between financial behavior and contribution to the SDGs. This means that Gen Z's healthy financial behaviors such as saving disciplined, budgeting, and investing in a targeted way do not necessarily directly impact their contribution to the SDGs, unless they are accompanied by adequate financial understanding and literacy (Reganti et al., 2025). Financial literacy is a mechanism for internalizing sustainable economic values that bridges personal habits and collective actions (M. Ahmad et al., 2022). As emphasized by Mishra, Agarwal (2024) financial literacy plays a role as a perception changer: from just a technical skill to a critical awareness of the social impact of financial decisions. The financial literacy strengthens the moral reasoning of individuals in choosing financial products that are not only personally beneficial, but also have an impact on society at large Putri (2024). Meanwhile, Reddy (2024) in their research highlight that financial literacy based interventions can change the consumptive orientation to participatory in sustainable development. In other words, financial literacy not only enriches financial understanding, but also strengthens Gen Z's altruistic motivation and active participation in inclusive economic transformation (Anees et al., 2024). Therefore, strengthening financial literacy as a mediator is the key to synergizing individual behavior with the global development agenda (Chao et al., 2021).

CONCLUSION

The results of this study show that financial behavior, financial literacy, and financial inclusion are three variables that have a significant influence on each other in the context of Gen Z financial management in Indonesia (Ofodile et al., 2024). Key findings prove that healthy financial behaviors, such as saving, investing, and wise debt management habits, significantly improve an individual's level of financial literacy. Higher financial literacy then contributes directly to increased financial inclusion, where Gen Z individuals become more engaged in the active, intelligent, and sustainable use of formal financial services (Chao et al., 2021). Not only that, financial literacy has also been proven to mediate the relationship between financial behavior and contribution to the achievement of Mishra, Agarwal (2024) the Sustainable Development Goals (SDGs) that are inclusive, especially in the aspects of poverty alleviation (SDG 1), economic growth (SDG 8), and inequality reduction (SDG 10) .

These findings reinforce the theoretical frameworks used, namely *Behavioral Finance Theory*, *Theory of Planned Behavior*, and *Self-Determination Theory*, which state that financial behavior is influenced not only by rational factors, but also by intrinsic motivation, self-control, and social-digital interaction (Haider et al., 2022; Kandpal et al., 2024; Srivastava et al., 2024; Wardina, 2024). On the other hand, *Human Capital Theory* and *the Capability Approach* emphasize the importance of literacy and access as the key to economic empowerment (Bhadeshiya & Pitroda, 2021; Cadenas & Gzyl, 2021; Sachdeva & Lehal, 2023). Thus, the results of this study not only contribute theoretically, but also have strong practical implications for policymakers, educators, and digital financial service providers (Raut, 2020)

Increasing financial literacy through formal education, digital campaigns, and technology-based innovation is indispensable to shaping Gen Z's financial behavior that is adaptive to the challenges of the times (Kadoya & Rahim Khan, 2020). These educational strategies should be designed not only to increase knowledge, but also to shape responsible and socially impactful financial decision-making attitudes, values, and skills (Reddy et al., 2024). If carried out systematically and collaboratively between the government, educational institutions, and the fintech sector, Gen Z has the potential to become an agent of inclusive economic transformation in the future, as well as the main driver of achieving the sustainable development agenda (Akibun et al., 2025).

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AUTHOR CONTRIBUTION STATEMENT

Monica Dewi, Agung Dharmawan Buchdadi, Titis Fatarina Mahfirah, and Wahyu Wastuti contributed collaboratively to the completion of this research project. Monica Dewi led the conceptual framework development, research design, and initial manuscript drafting. Agung Dharmawan Buchdadi provided academic supervision, critical review, and refinement of theoretical alignment. Titis Fatarina Mahfirah was responsible for data collection, processing, and statistical analysis. Wahyu Wastuti contributed to literature integration, validation of findings, and coordination of the review and submission process. All authors engaged in the evaluation of research outcomes, contributed to the intellectual development of the paper, and approved the final version of the manuscript for publication

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