

The Influence of Financial Literacy and The Use of E-Wallets on The Consumptive Behavior of Generation Z in Medan City

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Abstract— The rapid development of financial technology has transformed payment systems, particularly through the widespread use of e-wallets among Generation Z. While digital payment services provide convenience and efficiency, they may also encourage excessive consumptive behavior if not accompanied by adequate financial literacy. This study aims to analyze the influence of financial literacy and e-wallet usage on the consumptive behavior of Generation Z in Medan City. This research employed a quantitative associative approach using questionnaire data collected from 100 Generation Z respondents who actively use e-wallets. Data were analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM). The structural model assessment shows that e-wallet usage significantly increases consumptive behavior ($\beta = 0.482$, $T = 6.761$, $p < 0.05$) while better financial literacy helps individuals make more rational financial decisions and controls impulsive spending. These findings contribute to the growing literature on digital financial behavior and provide practical implications for improving financial literacy among Generation Z.

Keywords: Consumptive Behavior, Digital payment, E-Wallet, Financial Literacy

1. INTRODUCTION

Disruptive digital transformation has fundamentally reshaped the landscape of personal financial management [1], [11]. A major breakthrough in this industry is marked by the integration of digital payment platforms that facilitate transaction circulation across various demographic groups [1], [4]. The majority of users in this digital ecosystem originate from Generation Z a cohort that grew up alongside digitalization, making them highly adaptive to technological advancements yet vulnerable to massive exposure to digital consumption [1], [10].

Digital-based payments represent a crucial innovation pillar within the Financial Technology (Fintech) domain [1], [5]. Among the various product lines that have developed, the e-wallet has emerged as a practical financial application offering alternative fund storage and alternative payment solutions [1], [22]. The flexibility of digital wallets simplifies shopping activities, both online and offline, which frequently drives a transition in behavior toward consumptive patterns by prioritizing transactional efficiency via smartphones [1], [18].

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The rapid expansion of this sector has triggered intense competition in the Indonesian domestic market, marked by the proliferation of prominent e-wallet operators such as OVO, GoPay, DANA, Flip, and ShopeePay [1], [22]. Consumptive behavior itself is defined as the tendency to acquire commodities or services merely for subjective satisfaction without weighing the actual utility or urgency of the goods [16]. If left unchecked, this pattern has the potential to become an engrained, destructive lifestyle among youth and induce long-term financial vulnerability [16]. Young individuals and students trapped in a cycle of excessive spending will gradually lose personal financial management competencies, experience psychological pressure when their desires are unmet, and face intense social pressure to constantly align with modern trends [16]. Previous studies confirm that cashless payment systems can induce transactional dependency due to their flexibility [21], where electronic money acts as a catalyst that drives higher consumption among the middle class [1], [6].

This excessive consumption behavior is driven by the interaction of external variables (comprising culture, social stratification, reference groups, and family upbringing) and internal variables (such as personal motivation, perception, individual character, self-concept, and lifestyle) [12]. Gen Z consumers are also highly responsive to digital wallet applications due to promotional program stimuli, transaction efficiency, and intuitive interfaces [22]. However, this ease of cash-free transactions can be balanced if individuals possess adequate financial literacy [1], [9].

Financial literacy encompasses the comprehension, skills, and convictions that direct an individual's perspective and actions in improving the quality of financial decision-making and management [7]. Empirical evidence confirms that mature financial understanding is directly proportional to the ability to control consumptive desires [14].

Although studies regarding digital consumption have been widely reviewed, a distinct research gap remains concerning how internal application features (such as promotions and interfaces) interact with the financial literacy levels of Gen Z in a developing metropolitan area like Medan City [1], [2]. Most prior studies tend to focus primarily on capital cities or macro university student populations [1], [13]. Therefore, this study is directed to examine and dissect the direct influence of financial literacy and the intensity of e-wallet usage on the formation of consumptive behavior among Generation Z in Medan City [1].

2. THEORETICAL REVIEW

2.1 Financial Literacy And Consumptive Behavior

Financial literacy reflects a person's capacity to comprehend, evaluate, and allocate financial resources effectively to achieve long-term welfare [7]. Within the dynamics of consumer behavior, individuals with a solid foundation of financial knowledge are capable of formulating objective priority scale to separate urgent primary needs from temporary desires [1], [9]. Empirical studies indicate that high financial literacy acts as an internal cognitive control mechanism that dampens impulsive buying tendencies [17]. When buyers realize the future cost consequences of current expenditures, the orientation of their actions shifts to become more rational [1], [14].

H1: Financial literacy exerts a significant negative influence on the consumptive behavior of Generation Z.

2.2 E-Wallet Usage And Consumptive Behavior

Digital wallets operate as modern transaction methods that maximize efficiency by eliminating reliance on physical cash and direct contact [10]. Referring to the Technology Acceptance Model (TAM), the perceived ease of use and perceived usefulness of a

system linearly increase an individual's intention to adopt technology [1], [13]. However, within the realm of behavioral finance, excessive transaction convenience actually degrades the psychological burden when spending money (psychological pain of paying), thereby triggering a systematic surge in impulsive and structured spending [13]. Integrated marketing strategies embedded within the application such as instant cashbacks and limited-time discounts further escalate consumer interest in consuming products beyond their actual needs [20]

H2: The utilization of e-wallets exerts a significant positive influence on the consumptive behavior of Generation Z.

3. METHOD

This investigation is executed by adopting a quantitative method with an associative design. The quantitative approach is aimed at systematically and objectively solving research problems using valid statistical data processing to map the relationships between independent and dependent variables while testing the proposed hypotheses. The associative design in this context focuses specifically on evaluating a causal relationship to measure how the independent variables (Financial Literacy and E-Wallet Usage) influence the dependent variable (Consumptive Behavior).

The population represents the totality of elements within the scope of research, including objects and subjects that possess specific characteristics. The target population in this study consists of all Generation Z individuals throughout Medan City (born between 1997-2012) who utilize digital wallets in their daily routines. Meanwhile, samples in quantitative research are positioned as a representative portion of the population selected for analysis so that the final conclusions can be generalized to the entire population. The sample size involved in this research was established at 100 respondents from Gen Z.

Primary data was gathered through the distribution of a structured online questionnaire using Google Forms, which was distributed via social media networks including WhatsApp and Instagram. The questionnaire instrument was designed using a 4-point Likert scale to gather the opinions, attitudes, and perceptions of respondents while mitigating response bias from neutral answers. The weight for each option is arranged as follows:

Tabel 1. Data Collection Technique

Weight	Category
4	Strongly Agree (SS)
3	Agree (S)
2	Disagree (TS)
1	Strongly Disagree (STS)

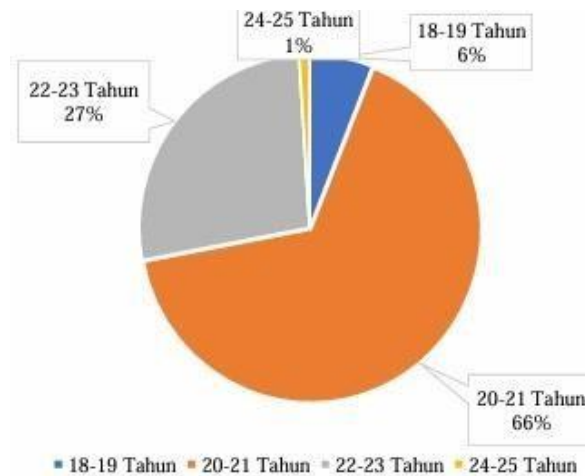
Source: Raw Data, 2026

The gathered information was evaluated through descriptive statistical analysis to map the demographic profiles of respondents, followed by structural equation modeling based on Partial Least Squares (PLS-SEM). The evaluation within the PLS-SEM approach encompasses two main model stages:

- Measurement Model (Outer Model): Used to evaluate construct validity via loading factors (threshold > 0.70) and construct reliability using Cronbach's Alpha and Composite Reliability indicators (threshold > 0.70).
- Structural Model (Inner Model): Used to test the validity of research hypotheses by observing path coefficients (β), T-statistics indicators (threshold > 1.96), and P-values (threshold < 0.05).

4. RESULT AND DISCUSSION

4.1 Respondent Profiles



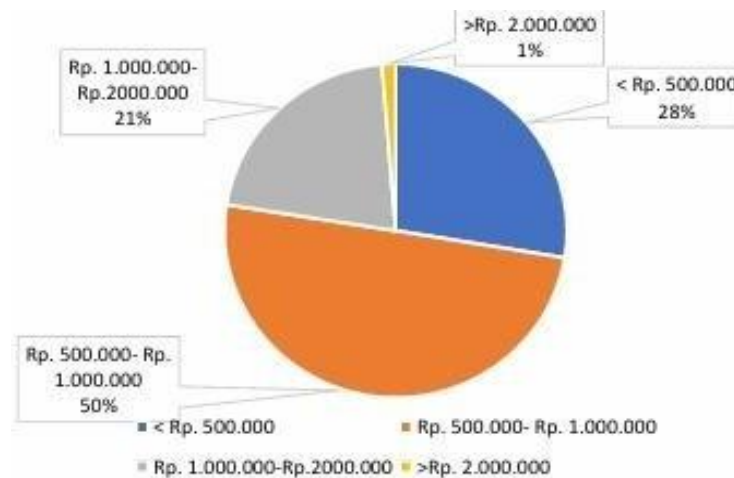
Source: Processed by the author, 2026

Based on the diagram above, it shows that of the 100 respondents, 66% were aged 20-21 years, totaling 66 people as the largest percentage of respondents. 27% of respondents were 22-23 years old with 27 people. Age 18-19 years with a percentage of 6% as many as 6 people, while the lowest percentage of respondents at the age of 24-25 years with a total of 1 person.



Source: Processed by the author, 2026

Based on the diagram above, it is known that the number of female respondents is the highest at around 66% or 66 people, while male respondents amounted to 34% with 34 people. So the most respondents are female.



Source: Processed by the author, 2026

Based on the picture above, it shows that out of 100 respondents, 28% have an income or pocket money of less than Rp500,000, totaling 28 people. Income or pocket money of Rp500,000-Rp1,000,000 is 50% or 50 people. Income or pocket money between Rp1,000,000-Rp2,000,000 as much as 21% with a total of 21 respondents. And income or pocket money of IDR 2,000,000 with a percentage of 1% or 1 person. So, the most income or pocket money of respondents is Rp500,000- Rp1,000,000.

4.2 Measurement Model Evaluation

The convergent validity test in PLS modeling with reflective indicators is assessed based on the factor loading value (loading factor) of each construct-measuring indicator. The degree of validity is considered satisfactory if the indicator correlates above 0.70 with the targeted construct. Given that the nature of this research is confirmatory, the loading factor limit applied strictly refers to the standard value of 0.70. The research is confirmatory. In this study, it will be calculated using a loading factor limit of 0.70.

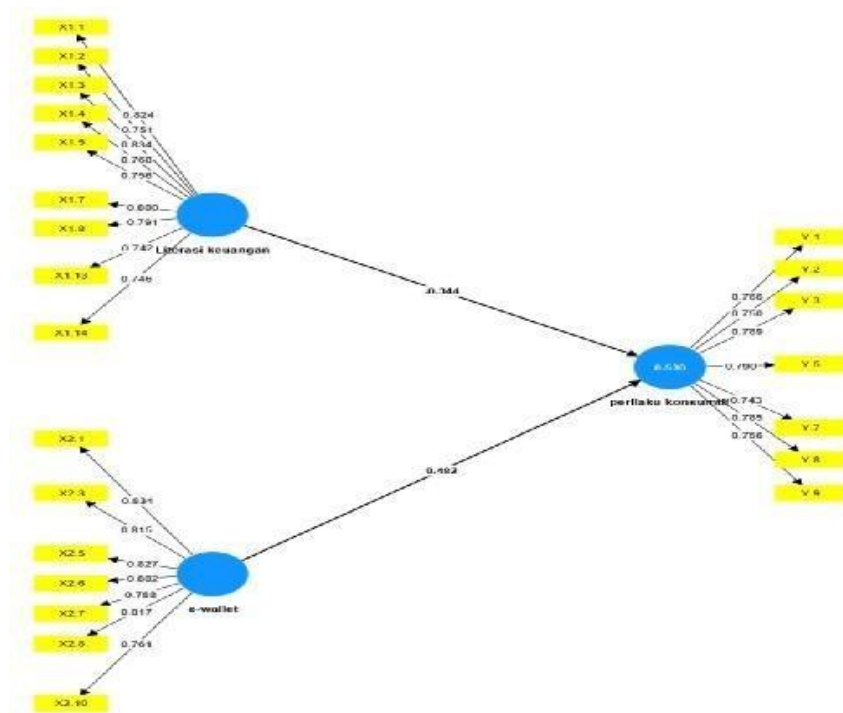
Table 1. Outer Loading Results

Variables	Indicator	Outer Loading Value	Description
Financial Literacy (X1)	X1.1	0,824	valid
	X1.2	0,742	valid
	X1.3	0,746	valid
	X1.4	0,751	valid
	X1.5	0,834	valid
	X1.6	0,768	valid
	X1.7	0,756	valid
	X1.8	0,800	valid
	X1.9	0,791	valid
E-Wallet (X2)	X2.1	0,834	valid
	X2.2	0,761	valid
	X2.3	0,815	valid
	X2.4	0,827	valid
	X2.5	0,802	valid
	X2.6	0,788	valid
	X2.7	0,817	valid

Consumptive Behavior (Y)	Y1	0,766	valid
	Y2	0,750	valid
	Y3	0,789	valid
	Y4	0,790	valid
	Y5	0,743	valid
	Y6	0,785	valid
	Y7	0,756	valid

Source: Data Processing SmartPLS 4.0

Based on the outer loading table above, it can be interpreted that all indicators in the Financial Literacy, E-Wallet Use, and Consumptive Behavior variables have significant outer loading and exceed the minimum limit of 0.7 set. This shows that all indicators in each variable can be considered valid and meet the criteria for construct validity.



Source: Data Processing SmartPLS 4.0

4.3 Construct Reliability

Reliability test is carried out to see whether the variable is reliable to be carried out in the next test. The Reliability Test in this study uses Cronbach's Alpha and Composite Reliability analysis techniques. The composite reliability value must be greater than 0.70 and can be said to have high reliability.

Table 2. Composite Reliability Results

Variables	Cronbach Alpha	Composite Reliability	Description
Financial Literacy	0,919	0,933	Reliable
E-Wallet	0,911	0,929	Reliable
Consumptive Behavior	0,889	0,910	Reliable

Source: Data Processing SmartPLS 4.0

The empirical data above proves that all constructs have met the required reliability criteria (> 0.70). Thus, all variables in this study are proven to be stable and can be relied upon as measurement tools.

4.4 DISCUSSION

4.4.1 The Influence Of Financial Literacy On Consumptive Behavior

Based on the structural model estimation, it was found that Financial Literacy exerts a significant negative influence on the consumptive behavior of Generation Z in Medan City ($\beta = -0.344$, $T = 4.125$, $p < 0.05$) [1]. This negative path coefficient indicates a linear inverse relationship: as the financial understanding of Gen Z matures, their tendency to engage in excessive consumptive behavior decreases significantly [1]. On this basis, H1 is accepted [1].

Theoretically, comprehensive financial knowledge serves as an internal cognitive anchor for individuals [7]. Gen Z individuals who grasp basic financial budgeting principles and the long-term impacts of credit are more capable of constructing a clear priority scale, helping them separate objective fundamental needs from transient desires [9]. This interaction pattern aligns with the premises of Oktaviani et al. [17] and Mohehu et al. [14], who argue that financial literacy capacity acts as an effective psychological brake to curb impulsive spending.

Nevertheless, field data indicates that many young consumers still struggle to control their micro-expenditures due to a lack of practical financial planning skills [1], [11]. This underscores the critical need for educational institutions in Medan City to integrate modern digital financial management courses into their curricula, shifting focus from abstract financial formulas to practical spending control instruments [1].

4.4.2 The Influence Of E-Wallet Usage On Consumptive Behavior

Referring to empirical data processing, the E-Wallet Usage variable records a positive and highly significant direct influence on consumptive behavior ($\beta = 0.482$, $T = 6.761$, $p = 0.000$) [1]. Because the T-statistic value is substantially higher than the critical value of 1.96 accompanied by a P-value below 0.05, H2 is accepted [1]. The implication of this finding shows that a higher frequency and reliance on digital wallets directly expands impulsive and consumptive spending actions among Gen Z in Medan City [1], [21].

This reality goes hand in hand with modern consumer technology acceptance frameworks [1]. The presence of e-wallets eliminates transaction friction by removing physical cash handling, which systematically reduces the psychological "pain of paying" [13]. Consequently, users become prone to making frictionless, uncalculated purchases directly from their smartphones [15]. Generation Z utilizes these digital platforms not merely for survival or essential needs, but also to support rapid transactions linked to their continuous social lifestyles and academic micro-purchases [1]. This outcome strongly corroborates previous research by Patrisia et al. [18] and Jumawan et al. [10], which stated that application ease of use and immediate payment execution serve as primary catalysts for modern lifestyle consumption.

4.4.3 The Accelerating Effect Of E-Wallet Promotions And Discounts

The intense consumptive trend among Gen Z is further accelerated by tactical marketing incentives embedded within financial applications [15]. Fintech operators utilize continuous promotional frameworks such as immediate cashbacks, point rewards, and flash discounts as strategic triggers to drive short-term transaction volumes [19].

As defined by Kotler and Armstrong, discounts provide instant price reductions that heavily motivate consumer engagement in a short period [26]. Because Gen Z highly

values transactional efficiency and short-term savings, the constant presence of these application-based discounts pushes them to complete unplanned purchases [15], [20]. Young consumers frequently buy non-essential commodities simply to capture a limited-time promo, ultimately overriding their logical self-control mechanisms and increasing overall consumptive behavior [13], [20].

4.4.4 The Influence Of E-Wallet On Generation Z's Consumptive Behavior

Non-cash transaction mechanisms are defined as cashless payment activities that optimize the role of electronic money, where contemporary payment systems currently refer fully to digital payment ecosystems [6]. This applies to various payment instrument options, including popular digital wallets (e-wallets) such as GoPay, OVO, DANA, ShopeePay, and LinkAja [22]. The primary utility of an e-wallet as an alternative non-cash payment instrument lies in its ability to increase consumer attractiveness and business outcome effectiveness [5]. In a cashless payment system, transactions can be completed without the need for physical contact between sellers and buyers [10]. In addition, convenience, speed of processing, and transaction security act as the main factors encouraging the adoptions of e-wallets [10].

The output of the analysis proves that the convenience offered by digital wallets holds a positive and significant influence on forming consumptive behavior [1]. This is justified by the positive path coefficient value of 0.482 and a T-Statistic score of $6.761 > 1.96$, with a P-Value of $0.000 < 0.05$ [1]. These statistical indicators confirm a pattern: the easier a digital wallet is to use, the higher the consumptive behavior that manifests [1]. Thus, it can be concluded that the ease of e-wallet use is a crucial factor in influencing consumptive actions [1], [8].

The essence of consumptive behavior is the act of purchasing commodities without reasonable consideration because it is not based on objective need factors [16]. In other words, consumptive activity is identical to purchasing goods spontaneously without planning and calculation [16]. This unplanned purchase of goods or services is caused by a lack of an allocated budget based on a structured priority scale [13]. On the other hand, a separate study found that the manifestation of Gen Z's consumptive behavior in using e-wallets does not solely involve spending on non-essential items, but also encompasses micro-transactions that support the learning of students who make up the majority of the population [1].

5. CONCLUSION

This study concludes that Financial Literacy levels and the intensity of E-Wallet Usage are critical determinants that shape the consumptive behavior of Generation Z in Medan City. Empirically, the transaction convenience, seamless operational speed, and targeted promotional incentives such as flash sales, discounts, and cashbacks provided by fintech operators act as powerful external drivers that increase impulse buying among young consumers. This behavioral pattern is heavily exacerbated when individuals suffer from a deficit in financial literacy, which diminishes their ability to manage personal budgets or differentiate objective needs from subjective desires. From a statistical validation standpoint, the PLS-SEM outer model evaluations confirm that all empirical indicators used in this study are structurally valid and reliable.

However, several limitations should be noted when interpreting these results, particularly the sample size which is limited to 100 Generation Z respondents in Medan City, thereby restricting the generalizability of these structural conclusions to a wider regional or national population. Furthermore, the structural framework focuses exclusively on financial literacy and e-wallet usage, omitting other potential socio-

economic variables such as parental income, peer group pressure, or subjective social status.

Based on these empirical insights, it is highly recommended that academic institutions organize interactive financial literacy seminars and digital wealth-management bootcamps to provide students with practical tools to monitor their digital cash outflows. Concurrently, fintech application developers should incorporate reflective user-experience elements, such as automated monthly spending trackers or customizable daily transaction limits, to encourage mindful digital spending among youth. Finally, subsequent researchers should expand the sample size across multiple metropolitan cities and integrate moderating variables, such as internal self-control or psychological materialism, to capture a more comprehensive picture of digital consumer behavior.

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