

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

Julita¹

¹Universitas Muhammadiyah Sumatera Utara

¹julita@umsu.ac.id

Abstract— The rapid development of financial technology has transformed payment systems, particularly through the widespread Generation Z's use of e-wallets. While digital payment services provide convenience and efficiency, they may also encourage excessive consumptive behavior if not accompanied by adequate financial literacy. The purpose of this study is to examine how Generation Z's purchasing habits in Medan City are impacted by financial literacy and e-wallet use. Using questionnaire data from 100 Generation Z respondents who actively use e-wallets, this study used a quantitative associative technique. Partial Least Squares-Structural Equation Modeling (PLS-SEM) was used to examine the data. 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 expanding body of research on digital financial behavior and offer useful 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].

The rapid expansion of this sector has triggered intense competition in the Indonesian domestic market, marked by the proliferation of prominent e-wallet providers like OVO, GoPay, DANA, Flip, and ShopeePay [1], [22]. Consumptive behavior itself is defined as

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*Corresponding Author: julita@umsu.ac.id

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 impact of e-wallet usage and financial literacy on the development of consumer behavior among Medan City's Generation Z [1].

2. THEORETICAL REVIEW

2.1 Consumptive Behavior and Financial Literacy

Knowledge of finance 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: Generation Z's purchasing habits are significantly impacted negatively by financial literacy.

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]. According to the Technology Acceptance Model (TAM), a person's intention to accept technology increases linearly with a system's perceived usefulness and ease of use. [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: Generation Z's purchasing habits are significantly improved by the use of e-wallets.

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 The dependent variable (consumptive behavior) is influenced by (financial literacy and e-wallet usage).

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. A 4-point Likert scale was used in the questionnaire's design. 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 Concur (SS)
3	Concur (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, modeling structural equations using partial least squares (PLS-SEM). Two primary model stages are included in the PLS-SEM approach's evaluation :

- Measurement Model (Outer Model): Used to assess construct reliability using Cronbach's Alpha and Composite Reliability indicators (threshold > 0.70) and construct validity using loading factors (threshold > 0.70).
- Structural Model (Inner Model): Path coefficients (β), T-statistics indicators (threshold > 1.96), and P-values (threshold < 0.05) are used to assess the validity of research ideas.

4. RESULT AND DISCUSSION

4.1 Respondent Profiles

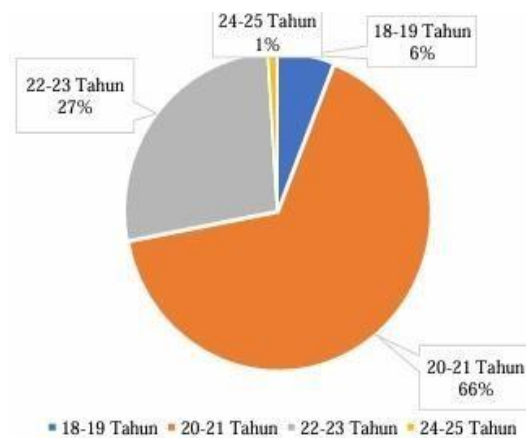


Figure 1. Respondens by Age

Source: The author's convergent validity test in PLS using reflecting indicators, 2026

According to the information above, out of 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.



Figure 2. Respondens Based on Gender

Source: The author's convergent validity test in PLS using reflecting indicators, 2026

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

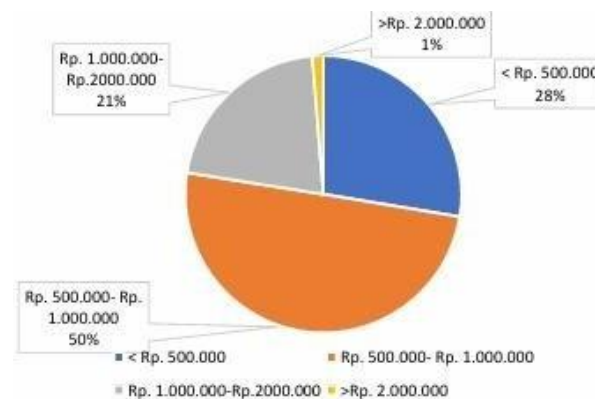


Figure 3. Respondens Based on Income or Pocket Money Per Month
Source: The author's convergent validity test in PLS using reflecting indicators is, 2026

According to 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 of IDR 2,000,000 or between Rp1,000,000 as much as 21% with a total of 21 respondents. 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 reflected indicators is evaluated depending 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	Legitimate
	X1.2	0,742	Legitimate
	X1.3	0,746	Legitimate
	X1.4	0,751	Legitimate
	X1.5	0,834	Legitimate
	X1.6	0,768	Legitimate
	X1.7	0,756	Legitimate
	X1.8	0,800	Legitimate
	X1.9	0,791	Legitimate
E-Wallet (X2)	X2.1	0,834	Legitimate
	X2.2	0,761	Legitimate
	X2.3	0,815	Legitimate
	X2.4	0,827	Legitimate
	X2.5	0,802	Legitimate
	X2.6	0,788	Legitimate
	X2.7	0,817	Legitimate
	Y1	0,766	Legitimate
	Y2	0,750	Legitimate

Consumptive Behavior (Y)	Y3	0,789	Legitimate
	Y4	0,790	Legitimate
	Y5	0,743	Legitimate
	Y6	0,785	Legitimate
	Y7	0,756	Legitimate

Source: Data Processing SmartPLS 4.0

Based on the outer loading table above, it can be interpreted that all indications in the financial literacy, e-wallet use, and consumer 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.

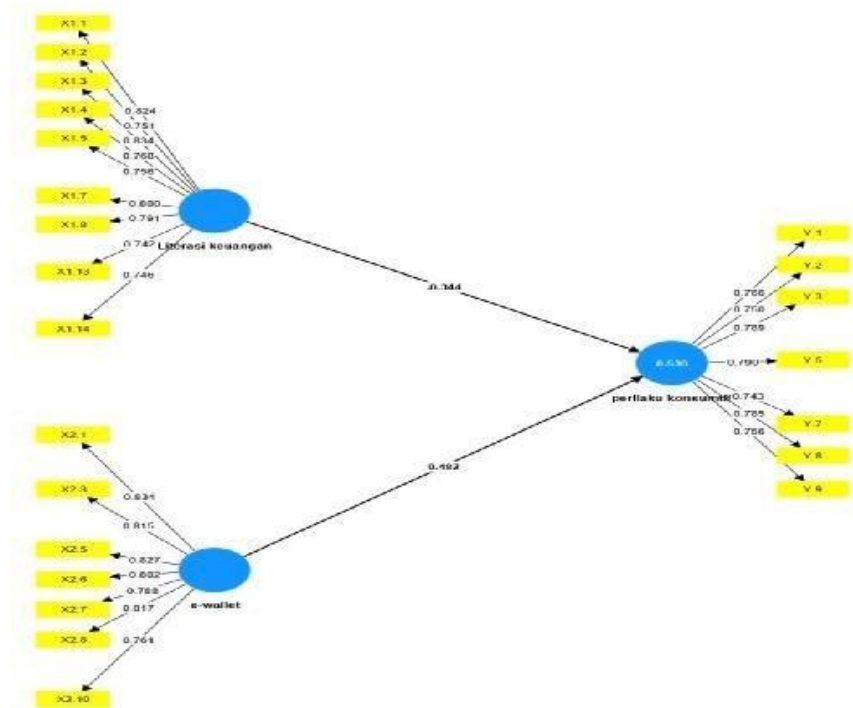


Figure 4. Smart PLS Diagram
Source: Data Processing SmartPLS 4.0

4.3 Construct Reliability

The reliability test is carried out to determine whether variable is reliable 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 higher than 0.70 and can be said to have high reliability.

Table 2. Composite Reliability

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 satisfied the acceptable reliability standards (> 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 Financial Literacy has a substantial negative impact influence on the consumer's behavior 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 Impact of E-Wallet Usage on Consumer 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 Positive and significant compared to the crucial 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 simplicity of usage 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 favorable and noteworthy influence on forming consumptive behavior [1]. The T-Statistic score of $6.761 > 1.96$, the positive path coefficient value of 0.482, and the 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]. Therefore, it can be said that one of the most important factors influencing consumptive behavior is how simple it is to utilize an e-wallet. [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

The study's findings indicate that the degree of financial literacy and the extent of e-wallet usage are important factors influencing Generation Z's purchasing habits 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 legitimate and trustworthy.

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.

Considering these actual findings, it is highly suggested 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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