

Fostering a frugal living: Examining mental accounting and green consumption among Indonesian generation Z

 Reyva Putri Tsabitah^{1*},  Vanesia Amelia¹,  Lidiyawati¹

¹Accounting Department, School of Accounting, Bina Nusantara University, Jakarta, Indonesia, 11480; reyva.tsabitah@binus.ac.id (R.P.T.) vanesia.amelia@binus.ac.id (V.A.) lidiyawati@binus.ac.id (L.).

Abstract: Frugal living is becoming a more common lifestyle choice among Indonesia's Generation Z (17–28 years old), largely due to rising financial pressures and a growing concern for environmental sustainability. This study explores how Mental Accounting and Green Consumption influence their tendency to live more frugally, especially through deliberate financial decisions and consumption habits grounded in ethical and environmental considerations. Using a quantitative method, data were gathered from 300 respondents through an online survey. Initial statistical tests were conducted with SPSS 23, and the structural model was examined using AMOS Graphics 25. The results strongly support the proposed relationships. Mental Accounting helps individuals organize and manage their finances with greater awareness, while Green Consumption encourages them to make choices that are responsible and environmentally sound. These two factors together play a meaningful role in shaping frugal living behaviors among Indonesian Gen Z. The study concludes that financial awareness and sustainability-oriented values play an important role in shaping cost-conscious and environmentally responsible lifestyles. Practically, these findings highlight the importance of promoting financial literacy and sustainable consumption awareness to encourage frugal living among younger generations.

Keywords: *Frugal living, Generation Z, Green consumption, Mental accounting.*

1. Introduction

Frugal living is becoming popular among young people, especially Gen Z, who are facing major financial and employment challenges. Basically, frugal living means a very intentional consumption and saving plan whereby each individual seeks to treat each expenditure as a real need rather than a mere want [1]. This matter is crucial, especially for Generation Z, which is the major force of the Indonesian labor market, but at the same time, the most at risk for unemployment. According to Statistics Indonesia [2], out of the total labor force of 144.01 million people, 8.40 million are still looking for work. This indicates an unemployment rate of 5.83%. Most of the unemployed in this group are from Generation Z. The 15–19 age group has the highest rate at 29.08%, followed by the 20–24 age group at 17.02%, and the 25–29 age group at 7.13%. These age groups account for 53.23% of the total unemployed population, highlighting the importance of managing money properly for young Indonesians. Frugal living is a way to save money and achieve greater financial independence and stability in a challenging world.

Frugal living is closely related to mental accounting. Frugal living is a prominent behavioral theory that explains how people internally categorize, track, and spend their funds, which impacts their saving and spending. This can help people by reducing financial planning errors and forcing them to distinguish between necessary and unnecessary expenditures carefully. Cheng et al. [3] explained that creating psychological barriers between different expenditure categories, mental accounting, encourages more thoughtful consumption choices during times of financial difficulty. Khalil [4] adds that mental accounting affects the degree of rationality in purchasing decisions by directing customers toward a

"second-best" course of action that strikes a balance between immediate gratification and long-term financial stability. Because it promotes strict budgeting and elevates saving to the top of one's financial objectives, this behavioral mechanism fits in quite nicely with the idea of frugal living. The findings of Bank Indonesia's consumer survey are even more supportive of this. In November 2023, 75.3% of the total income of households was allocated for consumption, while only 15.4% was left for savings. In November 2024, these figures changed slightly to 74.4% and 15.1%, respectively. The findings indicate that savings are still very low in comparison with consumption, although they are generally stable. This means that there is still a large number of people who regard spending as a need that cannot be cut. To consolidate the points of frugal living, it is necessary to be financially literate and to move our spending around in a clever way in order to be sure that we save more than we spend.

Practicing green consumerism is another link between frugal living and sustainability. Green consumption involves the selection, use, and discard of products and services that are least harmful to the environment [5]. Its main aim is to preserve resources for future generations and maintain the planet's equilibrium over time. Studies have confirmed that adopting environmentally friendly consumption habits, such as purchasing eco-friendly products, reducing waste, and participating in intentional consumption, can positively impact frugal lifestyles. This is because environmentally conscious people are naturally selective and do not purchase unnecessary items [6]. Environmentally conscious individuals are often so because they are aware of environmental issues and recognize eco-labels [7, 8]. These practices are compatible with frugality, for example, by prioritizing quality and durability. In Indonesia, environmental problems such as improperly disposed garbage remain significant. According to the National Research and Innovation Agency [9], 11.3 million tons of waste were left unmanaged, posing a major threat to climate stability. Green consumption serves a dual purpose by reducing environmental hazards and promoting a lifestyle that is both cost-effective and sustainable.

However, in this context, Generation Z occupies a special place. This generation is made up of people born between 1997 and 2012, according to Statistics Indonesia [10]. Since they grew up in the digital age, they have always had access to the internet and other information technologies [11]. Because Millennials and Generation Z make up a large portion of Indonesia's internet users, which is 30.62% and 34.40%, their deep reliance on digital tools has significantly changed the way they spend and manage money, Asosiasi Penyelenggara Jasa Internet Indonesia [12]. Annisa and Wardayani [13] explained that digital wallets and financial technology (fintech) make transactions faster and easier. That can also increase the risk of impulsive spending. This is particularly true for Generation Z, which is more prone to social and peer pressure that encourages immediate purchases [14]. Therefore, despite the convenience technology offers, it also creates an important need for these younger generations to develop better financial literacy and adopt smart spending habits, such as frugal living, to ensure they make informed financial choices.

This study explores frugal living as a sustainable and financially responsible lifestyle using concepts from mental accounting and green consumption. It also explains how financial technologies have changed the way Generation Z's financial practices. By integrating behavioral finance and sustainable consumption, this study fills a gap in the literature that has typically examined these subjects independently, either focusing solely on frugality as a financial management strategy or on sustainable consumption practices without explicitly defining how the two are related. This research extends earlier work and addresses a relevant social issue by placing frugal living at the intersection of environmental sustainability, technological advancement, and financial prudence. Policymakers, educators, and companies can develop more resilient, responsible, and sustainable consumer lifestyles by understanding how Indonesia's digitally native Generation Z employs mental accounting, green consumption, and frugal practices in their daily lives.

2. Literature Review

2.1. Theory of Financial Behavior

The Theory of Financial Behavior (TFB) is a multidisciplinary framework that blends psychology, economics, and finance to explain human financial decision-making, which is sometimes irrational. Its relevance is particularly high for youth, especially Generation Z in Indonesia, who face economic hardships and high unemployment rates, making understanding their financial behaviors and decision-making processes more important. According to Suriani [15], financial behavior is the skill of a person in managing income, expenses, savings, and investments. The person's attitudes, knowledge, experiences, and routines influence this. In *Financial Behavior: Players, Services, Products, and Markets*, Baker et al. [16] suggest that consumption evaluation and financial management are deeply influenced by psychological, emotional, and social factors, such as mental accounting, among others. The Theory of Planned Behavior (TPB) is a very good model providing insight into behavior changes by explaining that behavioral intention is mostly influenced by attitude toward the behavior, subjective norms, and perceived behavioral control [17]. Generation Z's decisions to live frugally, be eco-friendly consumers, and handle their money wisely are supported by positive attitudes toward saving, encouragement by society, and confidence in their ability to make the right choice. TFB and TPB together give us a fuller understanding of how Gen Z reacts to present financial challenges by using concepts of mental accounting, frugality, and sustainable consumption.

2.2. Frugal Living

Frugal living is not about being cheap or going without, but rather maximizing what you already have by using it wisely and carefully. Robin and Dominguez [18] describe frugality as a form of self-respect, where every act of consumption is a recognition of the life energy invested in material things. Frugal living is a creative and intentional way of life that focuses on managing resources in a smart way without sacrificing happiness or quality of life. The creative aspect of thriftiness, such as finding inexpensive substitutes and repurposing items, is an important thing [19]. Simple living and sustainable needs can bring happiness [20]. Furthermore, frugal living is seen as a deliberate strategy to manage money purposefully to achieve financial independence and live according to other people's values [21]. Sustainable results can be achieved by reducing overconsumption and promoting the repair, reuse, and long-term planning of resources [22].

2.3. Mental Accounting

Mental accounting plays a significant role in shaping financial behavior, especially in daily decision-making. Thaler [23] explains that mental accounting refers to the tendency of individuals to categorize money based on its source or intended use, which influences consumption and saving choices. Berek et al. [24] highlight how financial planning, including goal setting, resource allocation, and expenditure monitoring, is influenced not only by rational considerations but also by psychological biases such as mental accounting. For instance, Dan [25] notes that impulse buying often arises when individuals treat bonuses or unexpected income as 'extra money' to be spent rather than saved. This shows that while financial management involves planning and control, it is often shaped by behavioral tendencies that can undermine long-term financial goals.

2.4. Green Consumption

Green consumerism involves choosing products that are better for the environment and actively contributing to its well-being. This is important because unsustainable resource use accelerates serious issues such as the loss of animal and plant life, global warming, and ecological instability [26]. Making environmentally friendly purchases plays a crucial role in addressing many environmental problems. Esakki [27] describes green consumption as selecting environment-friendly products and services that reflect the individual's contribution toward sustainable development. Such consumption patterns align with the principles of Sustainable Consumption and Production (SCP), which advocate satisfying

current needs without compromising future generations' ability to meet theirs. Recent research indicates that eco-labels, green packaging, and environmental education significantly positively influence green consumption behavior, thereby encouraging customers to buy sustainable products [1, 5]. Green consumers promote sustainability by reducing waste, avoiding harmful products, and choosing items that last longer. Additionally, they make lifestyle choices compatible with frugality.

2.5. Financial Technology

Money-related technologies have changed very fast. They have become a major part of daily life, especially for Indonesia's Generation Z, who are digital natives. In *Your Money or Your Life*, Robin and Dominguez [18] state that fintech personal finance management is more convenient using modern technology, which in turn enables people, including Generation Z, to make more correct financial decisions that are harmonious with their values and life goals. Robin and Dominguez [18]. Setiawati and Primadineska [28] also argue that tech is instrumental in leading a frugal life as it provides Gen Z with affordable financial and investment management tools that help them keep away from overconsumption and focus on long-term happiness [28]. Fintech is a Generation Z accountability partner in money matters, which makes it effortless for them to cut unnecessary spending and find a long-term balance between saving and spending.

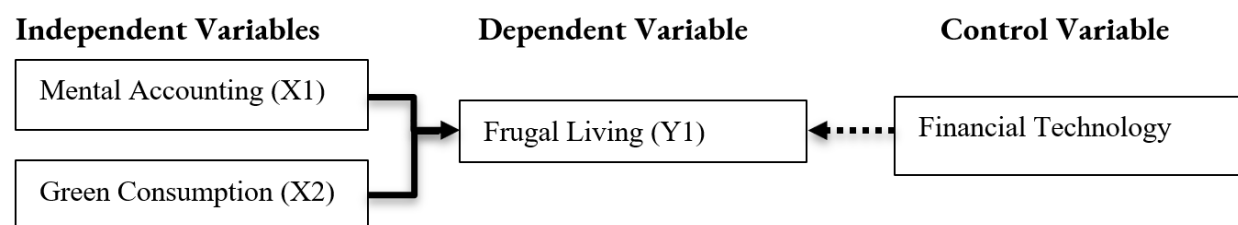


Figure 1.
Conceptual Framework.

2.6. Mental Accounting and Frugal Living

Mental accounting refers to a psychological mechanism through which people manage their finances by categorizing money into different classes based on objectives or types of expenses, thus making it easier to track cash flow and avoid impulsive purchases [3, 29]. Frugal living is a way of life that emphasizes smart financial management through wise resource use and saving without sacrificing other people's standard of living [30].

Mental accounting is the process of separating money into different categories that can make financial habits clearer and easier to manage. These distinctions can foster a frugal lifestyle by helping individuals save money and focus on necessary purchases rather than unnecessary things. Mental accounting also promotes smarter financial decisions. Studies have found that mental accounting supports frugal living by reducing unplanned spending and prioritizing essential expenses [29]. Mental accounting encourages more and better financial decisions, which in turn helps individuals live more frugal lives. This idea functions as the main hypothesis for this study.

H₁: Mental accounting positively influences frugal living among Indonesia's Generation Z.

2.7. Green Consumption and Frugal Living

Green consumerism is all about people buying eco-friendly products that are durable and made in a resource-efficient way Ali et al. [31]. Zeynalova and Namazova [32] also pointed out that green consumption is not only a sign of environmental awareness but also a sign of consumers' attempts to live responsible and efficient lifestyles that keep people healthy in the long run. Frugal living, by contrast, is a lifestyle that concentrates on the wise management of one's money, refraining from excessive purchases, and only spending on truly necessary things [1].

Green consumerism can influence frugal living in a positive way as both are inclined to efficient use and not wasting money or nature. When people do something that is in line with the environment, such as buying items that last longer, reducing single-use plastic, and supporting companies that are eco-friendly, not only do they save the environment, but they also save money, which is a principle of frugal living. Several studies have indicated that eco-friendly consumption practices can enhance a person's awareness of the need to use both resources and money wisely, which can result in people becoming more frugal and cutting off unnecessary costs [31]. Based on this explanation, we can formulate the hypothesis that green consumption contributes to frugal living, as both aim at making the planet more sustainable through the wise use of resources. Therefore, we propose the following hypothesis for testing in this research:

H₁: Green consumption positively influences frugal living among Indonesia's Generation Z

3. Methodology

3.1. Participants and Sample Characteristics

The research was carried out on Indonesian people, focusing on Generation Z, a group of young individuals seen as technologically and environmentally friendly. Gen Z was chosen because of its increasing influence as a financially savvy and eco-friendly consumer group compared to previous generations. According to the World Economic Forum [33], Gen Z globally is more likely to prioritize sustainability and social responsibility when making lifestyle and purchasing decisions. However, there is limited empirical research on how Indonesian Gen Z actually implements these beliefs in terms of financial and consumption habits. Therefore, this paper aims to determine how Indonesian Gen Z integrates mental accounting with environmentally friendly consumption to promote a thrifty lifestyle within a developing economy context. The study was primarily conducted among individuals aged 17 to 28 years (born 1997–2008). This age group typically holds a national identity card, which allows them to manage their finances, including saving and using digital banking services. A total of 300 valid responses were obtained from an online survey distributed via WhatsApp, Instagram, LinkedIn, and X between mid-April and early May 2025.

The research sampling method was non-probability purposive sampling that specifically targeted respondents who are digitally literate and are financially and technically active through online platforms. The demographic characteristics of the respondents indicate that the majority were females (261 persons or 87.0%), while the rest 13.0% were males. All the respondents were between the ages of 17 and 28. Regarding employment status, 81.3% of the respondents were university students, followed by 10.7% who were full-time employees, 3.7% were seniors in high school, 2.0% were entrepreneurs, 1.3% were freelancers, and 1.0% were unemployed. Sixty percent of people earned between IDR 1,000,000 and 5,000,000 per month, 26.0% had less than IDR 1,000,000, 10.3% earned between IDR 5,000,000 and 10,000,000, and only a few (3.7%) had more than IDR 10,000,000. The figures suggest that most of the Indonesian Gen Z respondents in our study are at the initial stage of their employment or education. They have moderate incomes and are quite active on the internet, which is similar to the profile of Gen Z consumers in emerging economies. The results of the study indicate that the majority of respondents are proficient in digital banking and money management. This study showed that 95.7 percent of the people polled were making regular savings, fully reflecting that Indonesia's Generation Z as a whole is thrifty, even if they don't always have sound financial practices. And for 97.3% of those surveyed, mobile banking was already a part of their everyday life. The whole picture seems rather symbolic in showing how financial technology and its services have come to shower every aspect of our lives in the new century; as such, this particular figure should not be taken lightly. Moreover, 65.7% of those surveyed said they use digital payment methods such as credit cards or pay-later for their everyday expenses. 91.0%, which implies that the Gen Zers in Indonesia are very knowledgeable about financial technology use and savings. This is a sign that this generation is well-versed in all things digital and able to manage their money in a reasonable way in today's climate-addled world.

Table 1.
Descriptive Statistics.

Description	Number	Percent (%)	Description	Number	Percent (%)
Gender			Age		
Male	261	87%	17	4	1.3%
Female	39	13%	18	5	1.7%
Job Classification			19	13	4.3%
Senior High School	11	3.7%	20	25	8.3%
University Student	244	81.3%	21	82	27.3%
Permanent Employee	32	10.7%	22	106	35.3%
Entrepreneur	6	2%	23	26	8.7%
Freelancer	4	1.3%	24	18	6%
Unemployed	3	1%	25	8	2.7%
Monthly Income in IDR			26	3	1%
< 1,000,000	78	26%	27	4	1.3%
1,000,000 - 5,000,000	180	60%	28	6	2%
5,000,000 - 10,000,000	31	10.3%	Do you currently have a habit of saving?		
10,000,000 - 15,000,000	6	2%	Yes	273	91%
> 15,000,000	5	1.7%	No	27	9%
Do you currently use mobile banking?			Do you regularly use mobile banking for scheduled money-saving transactions?		
Yes	292	97.3%	Yes	273	91%
No	8	2.7%	No	27	9%
Do you use mobile banking not only for saving transactions but also for making payments?			Do you use payment services such as pay later or credit cards in your daily transactions?		
Yes	295	98.3%	Yes	197	65.7%
No	5	1.7%	No	103	34.3%
N = 300					

Several techniques, including the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity, were employed to assess sample adequacy and inter-variable correlations to ensure that the current data could support additional statistical analysis. As the KMO value of 0.962 in Table 2 above is both greater than 0.6 and falls between 0 and 1, it satisfies the requirements. The table (Table 2) here shows that sample adequacy is very high, since anything above 0.8 is considered excellent [34]. Furthermore, Bartlett's Test of Sphericity has verified that the correlation matrix is not an identity matrix, with a Chi-Square of 4238.712 and 171 degrees of freedom. Because the variables are sufficiently correlated, the data from 300 respondents is statistically appropriate for factor analysis, allowing us to conduct additional analysis based on accurate findings.

Table 2.
Kaiser-Meyer-Olkin (KMO) and Bartlett's Test.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.962
Bartlett's Test of Sphericity	Approx. Chi-Square	4238.712
	df	171
	Sig.	0.000

3.2. Questionnaire and Measures

In order to measure and examine the numerical relationships between variables, the researcher used a quantitative approach in the study. An online survey with 30 key questions was used to collect the primary data. Ten questions about mental accounting, ten about green consumption, and ten about frugal living were included. Every set of items was developed using accepted academic sources and theoretical indications. The frugal living-related items were based on a study by Alim et al. [30] that looked at how digital financial inclusion and frugal living affected Indonesia's Generation Z's intention to save. Ali et al. [31], a study that examined millennials' green purchasing habits and the ensuing green actions, provided the questions on green consumption. At the same time, the mental accounting

assessment questions were changed from a study conducted by Rifani et al. [35] examining the relationship between self-control and mental accounting in daily normal expenditure of college students. A 4-point Likert scale (1 = Strongly disagree, 4= strongly agree) was applied to score responses. Participation in this study was voluntary, and informed consent was obtained from all respondents. All responses were collected anonymously and used only for research purposes. The dataset of this research is available at <https://zenodo.org/records/18984473>

Table 3.
Questionnaires Instrument.

<i>Variable</i>	<i>Statement</i>
Mental Accounting	I am familiar with the concept of mental accounting.
	I have a clear understanding of mental accounting in financial management.
	I tend to allocate my money into separate categories based on different types of expenses.
	I believe that once I have spent money on a particular item, I do not need to spend more on the same thing.
	I believe that purchasing items once and using them for an extended period is a prudent way to manage expenses.
	I distinguish between money for necessities and money for desires to ensure more responsible spending.
Green Consumption	I am willing to purchase environmentally friendly products even if they are more expensive.
	I tend to avoid using single-use plastics in my daily activities.
	I believe that environmentally friendly consumption aligns with a frugal lifestyle.
	It is important for me to purchase eco-friendly products in my daily life.
	I often seek information about environmentally friendly products before making a purchase decision.
	When given two product options, I tend to choose the one labeled as environmentally friendly.
Frugal Living	I believe that practicing green consumption helps me spend money more wisely.
	I choose to buy high-quality products that are durable, even if they are more expensive.
	I always adjust my lifestyle according to my level of income.
	I prefer allocating my money for savings rather than for shopping.
	I avoid taking loans or using installments for non-essential items.
	I take advantage of discounts or promotions to buy items that I genuinely need.
	I consider frugality as part of my personal responsibility toward myself and my future.

4. Results

4.1. Measurement Model Evaluation

For our preliminary statistical analyses, we used SPSS version 23. AMOS Graphics version 25 was used for any analysis of the overall model fit. This modification ensured that the proposed framework had an organic database. Only the first ten items created for each construct that both support theory and show statistically significant differences within groups were retained for subsequent tests. In particular, the researchers eliminated the following indicators: FL1, FL3, FL6, and FL10 for Frugal Living; MA4, MA5, MA7, and MA10 for Mental Accounting; and GC3, GC8, and GC10 for Green Consumption. The validity of each construct was enhanced by this revision, which also ensured that the measurement model employed the most reliable and valid indicators. Convergent validity and high reliability, two prerequisites for scholarly research, were demonstrated by the finished measurement model [36, 37]. As shown in Table 4, the three constructs, namely Frugal Living (FL), Green Consumption (GC), and Mental Accounting (MA), had Composite Reliability (CR) values of 0.902 or higher. This is significantly higher than the suggested threshold of 0.70 [36]. This implies that they are reasonably consistent with each other. Each construct's Average Variance Extracted (AVE) was at least 0.606, exceeding the necessary minimum of 0.50 [37]. This shows that significant convergent validity has been achieved, which means that the constructs account for more than half of the variance of the indicators. Lastly, descriptive statistics show that the average score for Thrifty Living (Mean = 18.08) is slightly higher than the average scores of Mental Accounting (Mean = 16.83) and Green

Consumption (Mean = 20.03). This suggests that most survey participants are thrifty. A consistent response pattern throughout the sample is also indicated by the relatively low standard deviations.

Table 4.
Estimates of Reliability and Validity.

<i>Variables</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
Age	1						
Gender	-0.094	1					
Job	0.421**	-0.125*	1				
Monthly Income	0.471**	-0.227**	0.329**	1			
Latent Variable							
MA	0.175*	0.004	0.020	0.075	1		
GC	0.182**	0.041	-0.055	0.050	0.799**	1	
FL	0.055	0.069	-0.076	-0.058	0.796**	0.752**	1
Composite Reliability					0.902	0.919	0.918
Average Variance Extracted					0.606	0.618	0.653
Standard Deviation					5.410	6.032	5.622
Mean					16.83	20.03	18.08

Note: Abbreviations: MA, Mental Accounting. GC, Green Consumption. FL, Frugal Living. *The Correlation is significant at the 0.01. **The Correlation is significant at the 0.05.

4.2. Structural Model Analysis and Hypothesis Testing

Using AMOS Graphics 25, accurately delineated and examined the structural relationships between the latent variables Mental Accounting (MA), Green Consumption (GC), and Frugal Living (FL). The structural model generated using AMOS is displayed in Figure 2. Our theoretical model showed excellent concordance with the empirical data, as reflected in a full set of Goodness-of-Fit measures. The chief indicators were the Chi-square value of 161.105 with a non-significant probability of 0.062 (which is more than the 0.05 threshold) and an excellent CMIN/DF ratio of 1.193 (which is far below the 2.0 difficult limit), thus indicating that the fit was strong and simple [38]. Besides, the absolute fit indicators were quite good. The RMSEA was 0.025 (indicating a very close fit), and both the GFI (0.946) and AGFI (0.924) were above the 0.90 cutoff point. The TLI (0.992) and NFI (0.963) also confirmed incremental fit, which implied that the model was superior to the baseline one. After the model fit check was successful, the presented hypotheses were scrutinized in detail following the accepted criteria: a Critical Ratio (C.R.) exceeding 1.96 and a p-value less than 0.05 [36]. The results visible in Table 5 demonstrate that the correlations talked about were strongly supported by the whole ensemble. H1 (MA → FL) was leading significantly ($\beta = 0.615$; C.R. = 5.752; $p < 0.001$), which indicated that Mental Accounting is the best way to predict Frugal Living. Simultaneously, H2 (GC → FL) was also confirmed ($\beta = 0.336$; C.R. = 3.076; $p = 0.002$), which implies that Green Consumption is a major factor with a positive impact to the target group of people who want to live a Frugal Living lifestyle. Simply put, the empirical data unequivocally establish that a person's psychological financial framework and an ecologically conscious purchasing behavior are the two main drivers of thrifty behavior.

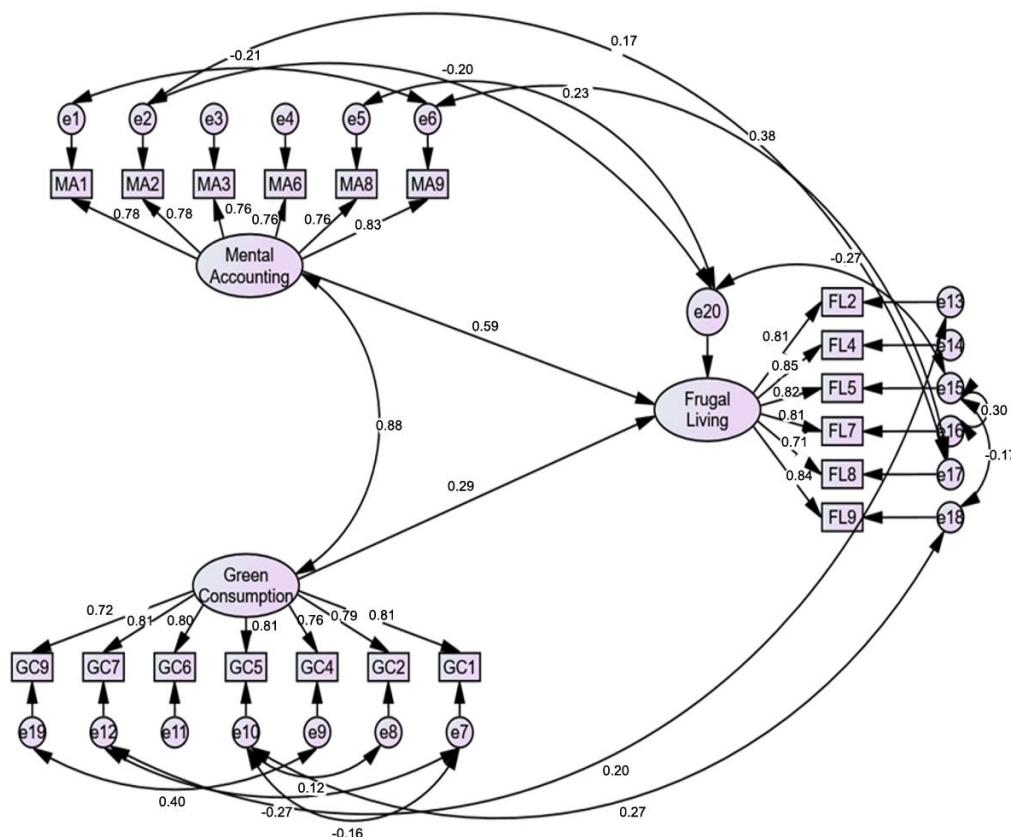


Figure 2.
Structural Model.

Table 5.
Testing The Hypotheses.

Hypothesis	Path Relations	β	S.E.	C.R.	p-Value	Decision
H1	MA \rightarrow FL	0.615	0.107	5.752	***	Supported
H2	GC \rightarrow FL	0.336	0.109	3.076	0.002	Supported

5. Discussion

In addition to providing significant insights into the primary drivers of sustainable financial behavior among Indonesian Generation Z, our empirical data also strongly supported the suggested positive relationships between Mental Accounting (MA), Frugal Living (FL), and Green Consumption (GC) and FL. These results are linked with the Theory of Financial Behavior's (TFB) extensive multidisciplinary framework. This theory posits that psychological and value-oriented factors impact financial decisions [16].

5.1. The Dominant Role of Mental Accounting on Frugal Living

This study shows that Mental Accounting (MA) has a significant impact on Frugal Living (FL) ($\beta = 0.615$, $p < 0.001$). People mentally divide money based on its source or use [23]. This study supports that statement. Evidence shows Indonesian Gen Z and FinTech as elements that strengthen it. 91.0% of respondents regularly use mobile banking for planned saving activities, and 97.3% use it regularly. The high number of people with strong saving habits shows that FinTech is effective. These digital tools help improve mental accounting because they turn abstract savings categories into actual digital

buckets, making it easier to set goals and manage cash flow. FinTech simplifies money management, essentially making the necessary self-discipline that is the foundation of frugal living automatic, predictable, and efficient [18, 20]. Using the tools to digitally set aside funds for future goals and prevent spending on non-essential items. This finding aligns with other research that explains digital tools strongly support youth self-control mechanisms like mental accounting, enabling effective financial planning [3, 29, 30].

5.2. Green Consumption as a Driver of Frugal Living

The confirmation of the hypothesis that Green Consumption (GC) has a positive influence on Frugal Living (FL) was established ($\beta = 0.336$; $p = 0.002$). It is an interaction that shows how closely the two, ecological principles and economic ones, are intertwined. Green consumption involves selecting products that are environmentally friendly and resource-efficient [27, 31, 32]. It is a practice based on one principle that values durability and resource efficiency over short-term material gain. Through this conscious choice, individuals align with the basic principles of frugal living, where waste is minimized, repair is preferred over replacement, and the focus is on the longevity of items [19]. Our research aligns with the global trend indicating that sustainable behavior naturally enhances efficiency in resource utilization, both environmentally and financially. This supports the view that eco-friendly behavior increases awareness of resource use, leading to frugality and reducing unnecessary spending [31, 32]. Furthermore, the continued significance of both Materialism (MA) and Green Consumption (GC) in predicting Frugal Living (FL), despite the widespread use of digital payment services like pay-later options or credit cards (65.7%), suggests that even with modern debt instruments, Gen Z's core values of frugality and sustainability remain primary factors influencing responsible consumption choices.

6. Conclusions

Research findings suggest that the rise in frugal living among Generation Z in Indonesia is mainly due to the successful combination of Mental Accounting (MA) and Green Consumption (GC). This means frugality should not just be a reaction to having little money, but rather a complex, value-driven lifestyle based on both a psychological approach to finance and environmental care (GC). By teaching Gen Z to manage their money by grouping it and using green consumerism to promote smart spending awareness, the study shows that linking good morals with money management leads to simpler living, savings, and environmental protection. This supports the global objectives of Sustainable Development Goal (SDG) 12 (Responsible Consumption and Production) by teaching Gen Z how to manage their money and be responsible, frugal consumers. This is the critical first step toward adopting this responsible lifestyle.

The results show that there are some challenges alongside opportunities. They are a clear signal to corporations and politicians about what they should focus on, so the biggest impact may be achieved by activities to help people develop good lifelong habits. At the same time, it shows that interventions aimed at promoting sustainability should concentrate on how the money is spent and other aspects that reflect human values in making choices within society. The results show that Financial Technology (FinTech) is an important method for the younger generation to speed up and keep track of their money. The financial industry has a great opportunity to provide consumers with digital banking services that are not only convenient but also fit Gen Z's lifestyle. A few ways to make money management easier to understand, more relatable, and more enjoyable are to carry out transactions via digital wallets, learn how to save the fruits of your labor and then invest them, and courses are available as well. This feature closes the gap between the need for financial knowledge and the high use of gadgets. The school system also has a responsibility to teach students how to manage their money well. This could be done by directly setting forth a set of courses with financial applications so that students can use what they learn in real life. Finally, the FMCG (Fast Moving Consumer Goods) sector is in a good position to help frugality with sustainability. For instance, they might do this by making eco-friendly labels more visible and appealing or by committing to being transparent about sustainability on

product packaging. By the coordinated effort between the financial, educational, and industrial sectors, the increasing awareness of frugal living and financial literacy among Generation Z can be deepened and made more sustainable.

This research has provided compelling data to support the interrelationships of Mental Accounting, Green Consumption, and Frugal Living among Generation Z in Indonesia. However, the study is limited by various methodological and conceptual constraints that need to be addressed in future research. From a methodological standpoint, the non-probability purposive sampling method used to obtain the sample, with a majority of female respondents (87.0%) and university students (81.3%), impacts the generalizability of the findings. In other words, the demographic of the research subjects may not have been well-represented in the study, the conclusion of the research may only apply to this particular group. Additionally, the cross-sectional research design used in this study cannot ascertain the direction of the causal relationship; hence, longitudinal or experimental designs are recommended for future studies. Besides that, this kind of research regularly encounters the problem of answering bias, i.e., the tendency of respondents to give socially acceptable answers to questions regarding their frugal habits and reported saving rates (e.g., the 95.7% reported saving habit). This issue can be solved by objectively measuring the data, such as through transaction records or behavioral tasks. Although the widespread use of Financial Technology was mentioned in the research, the authors did not account for FinTech, financial literacy, or objective income as strict control variables in the model. The impact of Mental Accounting and Green Consumption on behavior could give a clearer picture of their predictive power by experimentally testing those factors. Future studies can be more focused on causal mechanisms and improving demographic diversity in the Indonesian consumer context.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Acknowledgments:

This article was compiled entirely by the author independently, both in the writing process and in its analysis. All stages were carried out without direct involvement from external parties, either technically, financially, or institutionally. Thus, this section is presented as a form of statement of the independence of the compilation of this scientific work.

Copyright:

© 2026 by the authors. This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

References

- [1] E. Suárez, B. Hernández, D. Gil-Giménez, and V. Corral-Verdugo, "Determinants of frugal behavior: The influences of consciousness for sustainable consumption, materialism, and the consideration of future consequences," *Frontiers in Psychology*, vol. 11, p. 567752, 2020. <https://doi.org/10.3389/fpsyg.2020.567752>
- [2] Badan Pusat Statistik, *February 2022: The open unemployment rate(TPT) Was 5.83 percent, with the average monthly wage at 2.89 Million Rupiah*. Indonesia: Badan Pusat Statistik, 2022.
- [3] L. Cheng, Y. Yu, Y. Wang, and L. Zheng, "Influences of mental accounting on consumption decisions: Asymmetric effect of a scarcity mindset," *Frontiers in Psychology*, vol. 14, p. 1162916, 2023. <https://doi.org/10.3389/fpsyg.2023.1162916>
- [4] E. L. Khalil, "Mental accounting, heuristics, and the second-best: Solving the calculator-jacket puzzle," *Managerial and Decision Economics*, vol. 45, no. 4, pp. 2415-2427, 2024. <https://doi.org/10.1002/mde.4135>
- [5] M. Burkert, J. M. Gil Roig, D. Rahmani, and V. Hüttl-Maack, "The influence of green consumption values on how consumers form overall sustainability perceptions of food products and brands," *Journal of Sustainable Marketing*, vol. 10, no. 10, pp. 1-19, 2023. <https://doi.org/10.51300/JSM-2023-103>

- [6] C. S. Song, J. Y. Lee, R. Mutha, and M. Kim, "Frugal or sustainable? The interplay of consumers' personality traits and self-regulated minds in recycling behavior," *Sustainability*, vol. 15, no. 24, p. 16821, 2023. <https://doi.org/10.3390/su152416821>
- [7] M. A. Mahmoud, E. K. K. Tsetse, E. E. Tulasi, and D. K. Muddey, "Green packaging, environmental awareness, willingness to pay and consumers' purchase decisions," *Sustainability*, vol. 14, no. 23, p. 16091, 2022. <https://doi.org/10.3390/su142316091>
- [8] A. Panopoulos, A. Poulis, P. Theodoridis, and A. Kalampakas, "Influencing green purchase intention through eco labels and user-generated content," *Sustainability*, vol. 15, no. 1, p. 764, 2022. <https://doi.org/10.3390/su15010764>
- [9] Badan Riset dan Inovasi Nasional, *11.3 million tons of waste in Indonesia is not managed properly*. Indonesia: BRIN, 2024.
- [10] Badan Pusat Statistik, *Population by region, generation classification, and gender, Indonesia, 2020*. Indonesia: Badan Pusat Statistik, 2020.
- [11] C.-V. Priporas, N. Stylos, and A. K. Fotiadis, "Generation Z consumers' expectations of interactions in smart retailing: A future agenda," *Computers in human behavior*, vol. 77, pp. 374-381, 2017. <https://doi.org/10.1016/j.chb.2017.01.058>
- [12] Asosiasi Penyelenggara Jasa Internet Indonesia, *Indonesian internet penetration survey*. Indonesia: Asosiasi Penyelenggara Jasa Internet Indonesia, 2024.
- [13] Annisa and Wardayani, "Analysis of the impact of digital payment services on the use of conventional bank services: Case study of the use of Dana, OVO, Shopee Pay, and Gopay among students of STIM Sukma Medan," *Management Studies and Entrepreneurship Journal*, vol. 5, no. 2, pp. 6824-6834, 2024.
- [14] E. Djafarova and T. Bowes, "'Instagram made Me buy it': Generation Z impulse purchases in fashion industry," *Journal of Retailing and Consumer Services*, vol. 59, p. 102345, 2021. <https://doi.org/10.1016/j.jretconser.2020.102345>
- [15] S. Suriani, *Financial behavior*. Indonesia: Yayasan Kita Menulis, 2022.
- [16] H. K. Baker, G. Filbeck, and V. Ricciardi, *Financial behavior: Players, services, products, and markets*. United States of America: Oxford University Press, 2017.
- [17] I. Ajzen, *Attitudes, personality and behaviour*. England: McGraw-Hill Education, 2005.
- [18] V. Robin and J. Dominguez, *Your money or your life: 9 steps to transforming your relationship with money and achieving financial independence*. New York: Penguin Books, 2018.
- [19] A. Dacyczyn, *The complete Tightwad Gazette: Promoting thrift as a viable alternative lifestyle to wasteful spending*. New York: Villard, 1998.
- [20] A. Raser-Rowland and A. Grubb, *The art of frugal hedonism: A guide to spending less while enjoying everything more*. Hepburn, VIC, Australia: Melliodora Publishing, 2017.
- [21] E. W. Thames, *Meet the frugalwoods: Achieving financial independence through simple living*. New York, NY, USA: HarperCollins, 2019.
- [22] T. K. Dhandra, "Does self-esteem matter? A framework depicting role of self-esteem between dispositional mindfulness and impulsive buying," *Journal of Retailing and Consumer Services*, vol. 55, p. 102135, 2020. <https://doi.org/10.1016/j.jretconser.2020.102135>
- [23] R. H. Thaler, "Mental accounting matters," *Journal of Behavioral Decision Making*, vol. 12, no. 3, pp. 183-206, 1999.
- [24] T. A. P. Barek, M. Djuuna, and S. Danang, "The effect of mental accounting and heuristics on financial behavior with self-efficacy as moderator," *Journal of Management and Administration Provision*, vol. 5, no. 3, pp. 479-491, 2025. <https://doi.org/10.55885/jmap.v5i3.711>
- [25] K. Dan, "The role of mental accounting in risk-taking and spending: A meta-analysis of the house-money effect," *Frontiers in Psychology*, vol. 16, p. 1549626, 2025. <https://doi.org/10.3389/fpsyg.2025.1549626>
- [26] J. L. Boucher and J. Heinonen, *Sustainable consumption, promise or Myth?* U.K: Cambridge Scholars Publishing, 2019.
- [27] T. Esakki, *Green marketing and environmental responsibility in modern corporations*. Hershey, PA: IGI Global, 2017.
- [28] N. T. Setiawati and R. W. Primadineska, "Financial behavior of generation Z in Indonesia: Impact of literacy, technology and lifestyle," *Telaah Bisnis*, vol. 26, no. 1, pp. 55-68, 2025. <https://doi.org/10.35917/tb.v26i1.596>
- [29] N. Ahista and A. Fikri, "The impact of mental accounting and self-control on the daily expenses of students," *Formosa Journal of Multidisciplinary Research*, vol. 3, no. 6, pp. 1893-1904, 2024. <https://doi.org/10.55927/fjmr.v3i6.9286>
- [30] A. M. Alim, A. M. Margareta, D. Yuanna, and A. Maharani, "Exploring the role of Frugal living and digital financial inclusion to saving's intention within Indonesia's Gen Z," *Jurnal Manajemen (Edisi Elektronik)*, vol. 16, no. 1, pp. 239-251, 2025. <https://doi.org/10.32832/jm-uika.v16i1.18151>
- [31] M. Ali, S. Ullah, M. S. Ahmad, M. Y. Cheok, and H. Alenezi, "Assessing the impact of green consumption behavior and green purchase intention among millennials toward sustainable environment," *Environmental Science and Pollution Research*, vol. 30, no. 9, pp. 23335-23347, 2023. <https://doi.org/10.1007/s11356-022-23811-1>
- [32] Z. Zeynalova and N. Namazova, "Revealing consumer behavior toward green consumption," *Sustainability*, vol. 14, no. 10, p. 5806, 2022. <https://doi.org/10.3390/su14105806>
- [33] World Economic Forum, "Why Gen Z is leading the way on sustainability," 2022. <https://www.weforum.org/stories/2022/03/generation-z-sustainability-lifestyle-buying-decisions/>
- [34] J. Pallant, *SPSS Survival Manual: A step by step guide to data analysis using IBM SPSS*. U.K: McGraw-Hill Education, 2020.

- [35] R. A. Rifani, M. Kamidin, and M. R. Ramdani, "Mental accounting and self-control over daily expenses of students," *Amsir Accounting & Finance Journal*, vol. 2, no. 2, pp. 57-63, 2024. <https://doi.org/10.56341/aafj.v2i2.526>
- [36] J. F. Hair Jr, M. Sarstedt, L. Hopkins, and V. G. Kuppelwieser, "Partial least squares structural equation modeling (PLS-SEM) an emerging tool in business research," *European Business Review*, vol. 26, no. 2, pp. 106-121, 2014. <https://doi.org/10.1108/EBR-10-2013-0128>
- [37] M. Frese, D. Fay, T. Hilburger, K. Leng, and A. Tag, "The concept of personal initiative: Operationalization, reliability and validity in two German samples," *Journal of Occupational and Organizational Psychology*, vol. 70, no. 2, pp. 139-161, 1997. <https://doi.org/10.1111/j.2044-8325.1997.tb00639.x>
- [38] J. Cohen, P. Cohen, S. G. West, and L. S. Aiken, *Applied multiple regression/correlation analysis for the behavioral sciences*. New Jersey: Lawrence Erlbaum Associates, Inc., Publishers, 2003.