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Assessing Financial Management Behaviour of Undergraduate Students in Universiti Teknologi Mara (UiTM) Negeri Sembilan: A Moderation Effect of Locus of Control

(Menilai Tingkah Laku Pengurusan Kewangan Pelajar Prasiswazah di Universiti Teknologi MARA (UiTM) Negeri Sembilan: Kesan Moderasi Lokus Kawalan)

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ABSTRACT

Poor financial management among the younger generation is a growing and worrying issue. Young people often face problems with excessive debt, insufficient savings, and inadequate financial planning. The leading causes include lack of financial education, irresponsible lifestyles, economic challenges, and the influence of social media and technology. Thus, the purpose of the study is to examine the determinants of financial management behaviour among undergraduate students in Universiti Teknologi MARA (UiTM) Negeri Sembilan. Second, this study also aims to investigate the moderating effect of locus of control on the proposed relationships. A total of 357 respondents were involved in this study. The study design was quantitative, with a survey approach, and data were collected via an online questionnaire in Google Forms. Data analysis was carried out using Structural Equation Modelling (SEM). The overall study findings showed that both independent variables contributed significantly to financial management behaviour. Next, the findings showed that locus of control moderates the relationships between financial knowledge and financial management behaviour, as well as between financial attitude and financial management behaviour. The implications of this study suggest that stakeholders, such as higher education institutions and policymakers, should pay attention to financial education initiatives and positive financial behaviour development programs to improve the financial well-being of Malaysian youths.

Keywords- Financial Management Behaviour, Financial Knowledge, Financial Attitude, Locus of Control, Moderating Effect

ABSTRAK

Pengurusan kewangan yang lemah dalam kalangan generasi muda merupakan isu yang semakin meningkat dan membimbangkan. Golongan muda sering menghadapi masalah hutang yang berlebihan, simpanan yang tidak mencukupi, dan perancangan kewangan yang lemah. Punca utamanya termasuklah kekurangan pendidikan kewangan, gaya hidup yang tidak bertanggungjawab, cabaran ekonomi, dan pengaruh media sosial dan teknologi. Oleh itu, tujuan kajian ini adalah untuk mengkaji penentu tingkah laku pengurusan kewangan dalam kalangan pelajar prasiswazah di Universiti Teknologi MARA (UiTM) Negeri Sembilan. Kedua, kajian ini juga bertujuan untuk mengkaji kesan penyederhanaan lokus kawalan terhadap hubungan yang dicadangkan. Sebanyak 357 responden terlibat dalam kajian ini. Reka bentuk kajian adalah kuantitatif, dengan pendekatan tinjauan, dan data dikumpulkan melalui soal selidik dalam talian dalam Google Forms. Analisis data dijalankan menggunakan Pemodelan Persamaan Struktur (SEM). Dapatan keseluruhan kajian menunjukkan bahawa kedua-dua pembolehubah bebas menyumbang secara signifikan kepada tingkah laku pengurusan kewangan. Seterusnya, dapatan mendapati bahawa lokus kawalan menyederhanakan hubungan antara pengetahuan kewangan dan tingkah laku pengurusan kewangan serta antara sikap kewangan dan tingkah laku pengurusan kewangan. Implikasi kajian ini menunjukkan bahawa pihak berkepentingan seperti institusi pengajian tinggi dan pembuat dasar harus memberi perhatian kepada inisiatif pendidikan kewangan dan program pembangunan tingkah laku kewangan yang positif untuk meningkatkan kesejahteraan kewangan belia Malaysia.

Kata kunci- Tingkah Laku Pengurusan Kewangan, Pengetahuan Kewangan, Sikap Kewangan, Lokus Kawalan, Kesan Penyederhanaan

INTRODUCTION

In Malaysia, young people are entering adulthood in increasingly challenging circumstances (Daud et al., 2023). The reality is simple but very painful. This generation started life with debt, unstable income, and a rapidly increasing cost of living, and they are also the most vulnerable to digital financial crimes (Furrebøe & Nyhus, 2022; Hamzah et al., 2024). The latest data from the Bank Negara Malaysia (BNM) Financial Capability and Inclusion Survey 2024 paints a worrying picture. Overall, it can be interpreted that the younger generation is currently bearing immense financial pressure (Hasan et al., 2025). The government's efforts to launch the National Financial Literacy Strategy 2026 - 2030 (NS2.0), a framework conceived to help Malaysians manage their finances better across all ages, should be welcomed. This initiative aims to build a generation that is more financially literate, able to plan wisely, and face economic challenges steadily. In the BNM report, the "Feeling of Indebtedness" category shows that youth have the highest debt burden (Bank Negara Malaysia, 2024). Many graduates enter adulthood with financial commitments that exceed their income, such as PTPTN debt, store credit, BNPL (Buy Now, Pay Later) payments, and debts with friends or family (Abdul Mulup et al., 2024).

Even more sadly, this debt is not for buying a house or long-term assets, but to cover basic living expenses (Mohd Yusoff et al., 2024). In the past, young people entering public universities were usually not overly burdened by debt because many scholarships and educational assistance were available (Ahamed et al., 2025). Now, after graduation, most youth have begun incurring monthly debts. The BNM report (2020 to 2024) explains that although salaries have increased by around 7 percent, the cost of goods and services has increased by 9 percent, resulting in a 2 percent decline in the real purchasing power of the people (Bank Negara Malaysia, 2024). With the cost of living increasing faster than income, the financial space to save or spend comfortably is increasingly limited (Mohd Yusoff et al., 2024).

Many young people enter the world of work in a "financially stretched" state (Daud et al., 2023). They have no comfortable breathing space or plan their future with peace of mind, and even the slightest mistake can plunge them into severe financial stress (Shi et al., 2025). Stress is worsening as today's digital lifestyle accelerates impulsive spending (Powell et al., 2023). Youth are the largest users of digital platforms. Therefore, they are most exposed to the "painless payment" culture, which involves payment via swipe, click, or scan without the feeling of money leaving (Noh, 2022). The BNM report noted that 37 percent of people admitted to spending more impulsively on online platforms (Bank Negara Malaysia, 2024). It is not just about 11.11 or 12.12 discounts, but about a psychological structure driven by digital platforms. It is deliberately designed to make users buy without thinking twice (Mohd Yusoff et al., 2024).

Uncertain income, a high cost of living, and almost nonexistent savings put them in a very fragile position (Noh, 2022). In a rapidly changing economy, more young people are turning to gig work or freelance work. Exposure to glamorous, luxurious lifestyles on social media can lead them to feel pressured to imitate them, even though they may be beyond their financial means (Powell et al., 2023). The lack of financial education in the formal education system is a significant cause of poor financial management among young people (Song et al., 2023). Lack of exposure to financial knowledge means that they lack basic skills in budgeting, managing debt wisely, or making profitable investments (Abdul Mulup et al., 2024; Mohd Padil et al., 2022).

A growing number of scholars, NGOs, and industry players are emphasizing the need for Malaysia to implement a "financial literacy revolution" from the earliest stages of education (Banthia & Dey, 2022). Financial education is no longer an additional skill but a survival skill. If students learn about debt, risk, savings, and digital security as early as secondary school age, they will not step into adulthood unthinkingly (Reisdorfer-da-Silva et al., 2025). Financially literate young people become smarter consumers, more responsible taxpayers, and more resilient citizens (Mohd Yusoff et al., 2024). The youth financial crisis is not a moral crisis, not an attitude crisis, and not a mere individual crisis. It is a structural crisis that must be addressed in a planned manner through youth policies, wage reforms, mandatory financial literacy, and a serious digital security campaign (Daud et al., 2023; Yeo et al., 2024). Therefore, the purpose of the study is to examine the determinants of financial management behaviour among undergraduate students in Universiti Teknologi MARA (UiTM) Negeri Sembilan. Second, this study also aims to examine the moderating effect of locus of control on the proposed relationships. This study is based on Social Cognitive Theory (SCT), which explains how human behavior arises from the interaction among cognitive, personal, and behavioral factors (Bandura, 1991). In this study, financial knowledge is a cognitive factor, while financial attitudes and locus of control are personal factors. Cognitive psychology is a branch of psychology that focuses on how humans think, process information, and make decisions (Schunk & DiBenedetto, 2020). It includes various mental processes, such as perception, memory, language, and problem-solving. Cognitive psychology seeks to understand how our brains organize and manage information, and how we use that information to make choices or solve problems in everyday life (Schunk & DiBenedetto, 2020). In other words, cognitive psychology studies the basic mechanisms that allow humans to think about financial well-being.

This study attempts to close a gap in previous research: most studies examine the direct relationship between the study variables, while the moderator influence of locus of control remains unexamined, even though this variable is significant. For example, there are many cases in which individuals have sufficient knowledge and advice on financial management but are unable to control themselves and end up wasting. Therefore, psychological factors are considered very important in shaping students' attitudes and behaviour. Second, this study focuses on students at public universities because they are the group that will enter the world of work, and initial research is important as an intervention step before they do so. Most studies focus on the public and young people in general, but research on university students remains limited. This study aims to provide a clear picture of the factors that influence financial behaviour among youth, especially university students.

LITERATURE REVIEW

Social Cognitive Theory

Among the significant figures of psychology, Albert Bandura and his published work are widely used as a theoretical foundation by social science researchers. The fruits of Bandura's thinking from 1982 to 2012 spanned the turn of the millennium, a year marked by significant social changes. Bandura's great work, which is still used today, is the Social Cognitive theory. The perspective of Social Cognitive theory emerged in response to criticisms of behaviourist theorists. According to Albert Bandura, although the principle of learning is sufficient to explain and predict behaviour, it must also be considered an important phenomenon neglected by the behaviourism paradigm: that humans can think and regulate their own behaviour (Bandura, 1991). Bandura formulated Social Learning Theory by accommodating human cognitive abilities in thinking and learning through social observation (Schunk & DiBenedetto, 2020).

This theory holds that social and cognitive processes are central to understanding human motivation, emotions, and actions (Bandura, 1991). This theoretical perspective views human behaviour as a component of a model that interacts with and influences environmental situational factors, as well as personal factors that include individual affective, emotional, and cognitive states (Usher & Schunk, 2017). Humans use their ability to think, symbolize, and anticipate reacting (Schunk & DiBenedetto, 2020). In explaining this theory, Bandura presented four important elements, namely: observational learning, self-regulation, self-efficacy, and reciprocal determinism (Bandura, 2001). Mapping this study to social cognitive theory, personal factors include financial knowledge and financial attitudes; self-regulatory beliefs include locus of control; and behavioural factors include financial management behaviour.

Financial Management Behaviour

Financial behaviour plays an important role in shaping the well-being of individuals, households, societies, countries, and the world (Yeo et al., 2024). Despite being active in financial transactions, most youths are found to be unprepared to face increased financial responsibility (She et al., 2022). This shows a weak association between financial behaviour and indebted behaviour among youth (Mutlu & Özer, 2022). Healthy financial behaviour is reflected in individual attitudes toward managing cash inflows, loans, and investments (Dwiastanti, 2017). However, most youth have limited financial knowledge, especially among female, minority, and postgraduate groups, where income and higher education levels do not guarantee good financial literacy (Reisdorfer-da-Silva et al., 2025).

Hasan et al. (2025) found that the younger generation rarely practices basic financial skills such as budgeting and planning fixed savings or long-term needs. This situation can lead to poor financial behaviour among young people. The determinant of financial behaviour recognized by scholars is generally based on financial knowledge, which consists of subjective knowledge measured by the level of individual evaluation (Shi et al., 2025). Noh (2022) found that the credit mentality of "own first and pay later" is pervasive among young people. This situation has led to uncontrolled spending among young people, driven by technological advances that require them to keep up with the latest developments. According to Ahamed et al. (2025), the millennial generation, which is hyper-social and continuously uses social media, will have more purchasing power than other generations.

Financial Knowledge and Financial

Management Behaviour

Financial knowledge refers to a person's ability to understand financial management and apply these skills in life (Banthia & Dey, 2022). Financial knowledge is essential for an individual to plan, manage, and subsequently evaluate their financial situation (Powell et al., 2023). Financial knowledge encompasses a wide range of skills, including personal financial planning, understanding life's wants and needs, managing assets and debts, the need for insurance or takaful, and others (Gafoor et al., 2025). Therefore, financial education should be introduced at a young age to provide individuals with guidance and basic knowledge (Khalisharani et al., 2022). It can also reduce the risk of financial failure or bankruptcy, an issue increasingly affecting the younger generation who lack basic knowledge, especially in personal finance (Van Nguyen et al., 2022). Investment knowledge is no longer exclusive to certain groups but is a necessity for every individual, regardless of age or background (Sabri et al., 2023). The reality of rising living costs demands that we think beyond just saving money (Furrebøe & Nyhus, 2022). Relying solely on basic savings without additional strategies exposes us to significant financial risk after retirement (Song et al., 2023). Many students have limited financial knowledge due to a lack of financial education (Mohd Padil et al., 2022). As a result, when students have a lot of money, they will spend it on less important or unnecessary items. Thus, we proposed the following hypotheses:

H1: There is a significant relationship between financial knowledge and UiTM Negeri Sembilan undergraduate students' financial management behaviour.

Financial Attitude and Financial Management Behaviour

A good financial attitude is the key to achieving financial stability in this era of uncertainty. Khalisharani et al. (2022) stated that financial attitudes encompass ways of thinking, opinions, and views on financial practices. Therefore, if students can provide opinions, views, and thoughts regarding their financial practices, they will be able to support themselves in making decisions (Banthia & Dey, 2022). This means that an individual with a good attitude towards finance can support self-discipline in implementing behaviors or decisions. A poor financial attitude can lead to financial instability, forcing a person to sacrifice their quality of life and their ability to meet daily needs (Banthia & Dey, 2022). It can even force individuals to go into debt to meet basic needs. The habit of going into debt to meet life's needs can trigger a cycle of dependency (Yeo et al., 2024).

Dependence on debt to meet life's needs can trigger more complex problems (Noh, 2022). The initial factors that cause poor financial attitudes are excessive consumption, lack of awareness of current financial condition, failure to plan production and inputs, and failure to set aside part of income for later (Banthia & Dey, 2022). Teenagers today are heavily influenced by digital habits and Internet usage. They tend not to be able to live their daily lives without Internet access, considering the various activities that can be done through digital platforms (Banthia & Dey, 2022; Shi et al., 2025). These activities include transportation, buying food and clothes, and fulfilling other daily needs. This phenomenon has a positive impact on efficiency and convenience (Syaliha et al., 2022).

However, it can raise concerns about an increase in consumptive behaviour driven by the ease of access to various products and services (She et al., 2022). In addition, prestige power can also influence financial attitudes. Prestige refers to the degree to which individuals consider money as a symbol of status, achievement, and influence. Individuals with high prestige-power attitudes will use money to attract others' attention, prefer to show off, and use it to stand out (Yıldırım & Özbek, 2022). Therefore, we proposed the following hypotheses:

H2: There is a significant relationship between financial attitude and UiTM Negeri Sembilan undergraduate students' financial management behaviour.

Moderating Role of Locus of Control

Locus of control is a measure of how a person views the relationship between actions and their outcomes. Spector (1997) states that locus of control is a cognitive variable that represents an individual's general belief in his or her ability to control positive and negative reinforcement in their life. Locus control can be understood as a mindset or way of viewing someone, a thing, or an event, enabling the person to assess whether they can control the incident (Sabri & Magli, 2025). According to Social Cognitive Theory, perceptions of self-control influence self-efficacy in action. Therefore, locus of control can influence the financial decisions individuals make (Dwiastanti, 2017).

Although financial knowledge provides an understanding of how to manage money, the success of applying that knowledge is also influenced by personality factors, such as locus of control (Hasan et al., 2025; Hoang & Vo, 2026). Individuals with an internal locus of control tend to be more confident in applying their financial knowledge to make financial decisions (Shaikh & Khan, 2025). Anxiety can have various effects on the locus of control (Ahamed et al., 2025). Anxiety reflects an individual's lack of confidence in their ability to manage their own finances (Mutlu & Özer, 2022). Individuals with high levels of anxiety are likely to be less financially literate because they invest less and tend to make irrational decisions and make mistakes in financial matters (Syaliha et al., 2022). Consequently, we proposed the following hypotheses:

H3: Locus of control moderates the relationships between (a) financial knowledge, (b) financial attitude, and UiTM Negeri Sembilan undergraduate students' financial management behaviour.

A conceptual framework is illustrated in Figure 1. A direct relationship between the independent and dependent variables likely exists and is likely to be influenced by other variables. The moderator variable in this study is locus of control, which can strengthen or weaken the relationships among financial knowledge, financial attitude, and financial management behaviour.

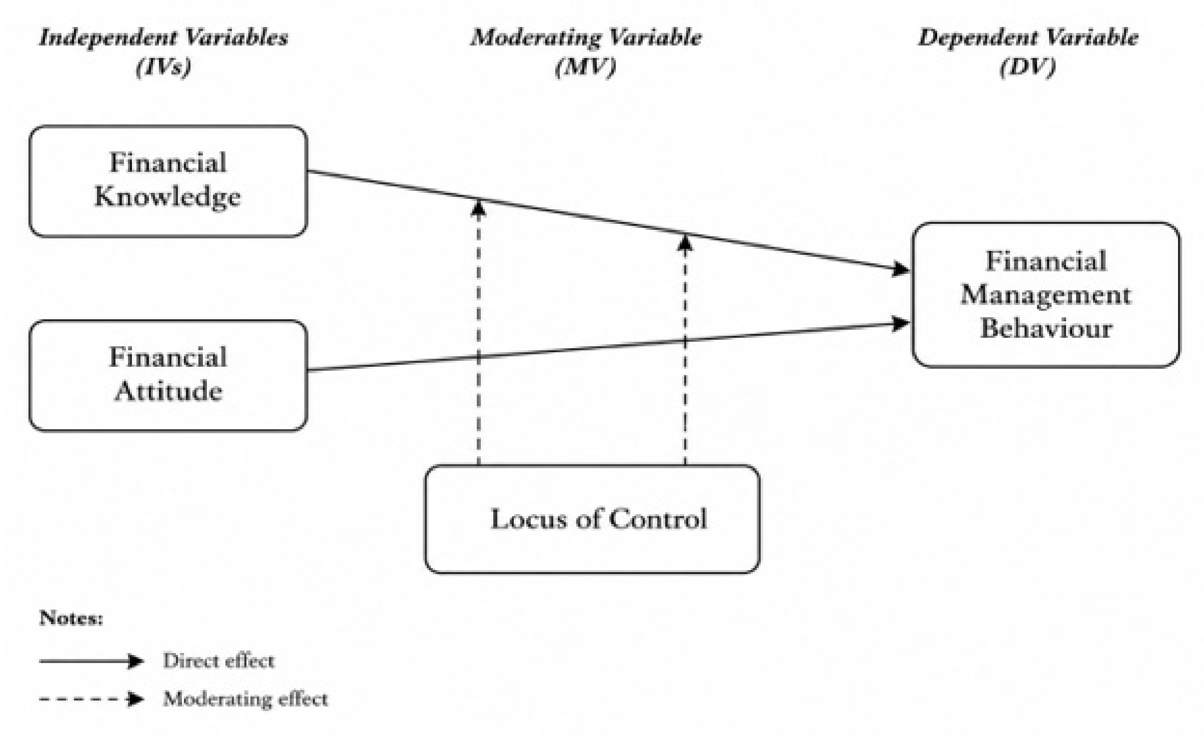


FIGURE 1. Research Model

METHODOLOGY

The researchers in this study used a quantitative research method, namely a survey, to collect data via a questionnaire. This form was distributed via Google Forms to undergraduate students and via WhatsApp, Telegram, and email to respondents. The sample size is determined based on the Sample Size Table introduced by Krejcie and Morgan (1970). Although the calculation has been in use for a long time, most methods for determining sample size still refer to results based on a 5% confidence level. The appropriate sample size of respondents, according to the Krejcie and Morgan (1970) table, is 357 undergraduate students at Universiti Teknologi MARA (UiTM) Negeri Sembilan (N=5000). Specifically, the respondents in this study were diploma and bachelor's degree students currently studying at Universiti Teknologi MARA (UiTM) Negeri Sembilan. This study involved students in full-time mode and did not include students with full-time income. In addition, this study also involved UiTM students who worked part-time. The desire to be independent and reduce the burden on the family prompted some students to work part-time even while still full-time students. To produce findings that can be applied universally, researchers need to strive for a truly representative sample of the population. Therefore, the study sample includes students from a variety of backgrounds, including those who receive financial resources from parents or family, those who receive scholarships or student loans, and those who work part-time.

In addition, convenience sampling was used in this study. The measurement items for financial knowledge and attitude are adapted from Parrotta and Johnson's (1998) study. The locus of control measurement items are adapted from a study by Perry and Morris (2005). At the same time, financial management behaviour scales are adapted from Dew and Xiao (2011). All questions are in the form of a Likert scale, namely (1) strongly disagree, (2) disagree, (3) not sure, (4) agree, and (5) strongly agree. A pilot study was conducted by researchers before the main study, involving 30 respondents, to identify weaknesses in the study instrument and procedures. The Cronbach alpha value for the 30 initial respondents was high, above 0.80 (Peterson, 1994). The researchers use structural equation modeling (SEM) to analyze the data. SEM is a multivariate statistical technique that combines factor analysis and regression (correlation) to test the relationships among variables in a model. Table 1 summarises the measurement items of the study.

TABLE 1. Measurement Items

Variable	Items
Financial Knowledge	FK1. I understand basic financial terms, such as interest rates, financial costs, and credit terms.
	FK2. 1 knows financial terms such as credit files and credit ratings.
	FK3. I understand how to manage my personal finances well.
	FK4. I have a clear understanding of the origin (source) of my balance.
	FK5. I know the benefits of insurance in minimizing the various risks that may occur.
Financial Attitude	FA1. Writing down financial goals can help me determine spending priorities.
	FA2. For me, planning for daily spending is essential for successful financial management.
	FA3. For me, a regular and disciplined savings pattern is significant.
	FA4. Saving is important regardless of the amount.
	FA5. Keeping a written budget is essential to my success in financial management.
Locus of Control	LC1. I can make sound financial decisions.
	LC2. I can realize the ideas and goals that I have set.
	LC3. I believe what happens to me in the future depends on myself
	LC4. I can solve my own financial problems.
	LC5. I have control over what happens to me.
Financial Management Behaviour	FMB1. I always keep track of and monitor my monthly expenses.
	FMB2. I always stay within the budget plan that I have created.
	FMB3. I compare prices before buying products and services.
	FMB4. I started saving activities for an emergency savings fund.

RESULTS

Demographic Profiles

This study was distributed to 357 respondents, and the final sample consisted of 256. The return rate of completed questionnaires is high (71.7%). According to Baruch and Holtom (2008), the response rate for studies using the questionnaire method should be at least 60 percent to ensure sufficient data for analysis. Furthermore, considering that SEM analysis requires a minimum of 200 samples (Hair et al., 2014). Therefore, the number of questionnaires used for this study is sufficient. As shown in Table 2, out of the 256 respondents, most are female (n=168, 65.6%), and the rest are male (n=88, 34.4%). Next, for the age group, 165 respondents (64.5%) are aged 18-22 years, and 60 (23.4%) are aged 23-25 years. This is followed by 31 respondents (12.1% of those aged 25 or older). Regarding academic programs, most respondents are undertaking a diploma (n=146, 57.0%), followed by a bachelor's degree (n=110, 43.0%). Regarding household monthly income, most respondents reported household income of RM4849 or below (166 respondents, 64.8%); 70 respondents (27.3%) reported household income of RM4850–RM10959; and 20 respondents (7.8%) reported household income of RM10960 or above. Furthermore, 132 respondents (51.6%) currently reside in urban areas, followed by semi-urban areas (n=102, 39.8%) and rural areas (n=22, 8.6%). Then, of the 256 respondents, most were single (n=222, 86.7%), while the remaining were married (n=34, 13.3%). Finally, the majority of respondents received allowances or scholarships, with 187 respondents (73.0%). This was followed by engaging in part-time employment (n=57, 22.3%) and fully on parental support (n=12, 4.7%).

TABLE 2. Profile of the Respondents

Profile		n	%
Gender	Male	88	34.4
	Female	168	65.6
Age Group	18-22 years old	165	64.5
	23-25 years old	60	23.4
	Above 25 years old	31	12.1
Academic Program	Diploma	146	57.0
	Bachelor’s degree	110	43.0
Household Monthly Income	RM4849 and below	166	64.8
	RM 4850 - RM 10959	70	27.3
	RM 10959 and above	20	7.8
Current living Area	Urban	132	51.6
	Semi-urban	102	39.8
	Rural	22	8.6
Marital status	Single	222	86.7
	Married	34	13.3
Main Financial Sources	Fully on Parental Support	12	4.7
	Receiving Allowances or Scholarships	187	73.0
	Engaging in Part-Time Employment	57	22.3

Confirmatory Factor Analysis (CFA)

Testing the model's fit determines which association between latent variables accurately reflects the relationship in the observational data. The evaluation of the level of significance, parameter, and level strength assessment, and the model's fit to the data, is expressed in various indices. This study used several indices, namely CMIN/DF, the root mean square error of approximation (RMSEA), the Goodness-of-Fit Index (GFI), the Tucker–Lewis index (TLI), and the comparative fit index (CFI). According to Jöreskog and Sörbom (1993), one weakness of the Chi-square test is its sensitivity to sample size: the larger the sample, the more likely it is to yield model misfit.

On the other hand, if the sample size is small, the Chi-square test cannot determine whether the model is suitable. Therefore, recommended to use the relative Chi-square approach, which is a comparison between the $\chi2$ values with their degrees of freedom ($\chi2/df$), which is hereinafter referred to as CMIN/DF. The recommended CMIN/DF value is less than 5.0 (Hair et al., 2019; Hu & Bentler, 1999). RMSEA is a goodness-of-fit index in which a value of zero indicates appropriateness, with a threshold of < 0.08. The GFI, TLI, and CFI indices range from 0.0 to 1.0, with values close to 1.0 indicating a good model fit (Hair et al., 2019; Hu & Bentler, 1999). The CFA model shows good fit indices (CMIN/DF = 1.275, RMSEA = 0.036, GFI = 0.963, TLI = 0.971, and CFI = 0.958).

Validity and Reliability Assessments

The validity and reliability of the CB-SEM model are included in the outer model level (external structure). At the outer level, the model consists of a convergent validity test examining the Standardized Loading Factors and Average Variance Extracted (AVE) for each variable, as well as a reliability test that calculates the Composite Reliability (CR). Convergent validity is assessed by examining each indicator's factor loading; each indicator must have a loading ≥ 0.50. The AVE coefficient for each recommended variable is 0.50. The model is said to pass the reliability test when CR > 0.70. As shown in Table 3, the instruments used in this study are valid and reliable.

TABLE 3. Items Loading, Composite Reliability (CR), and Average Variance Extracted (AVE)

Variable	Items	Item Loadings	AVE	CR
Financial Knowledge	FK1	0.706	0.553	0.861
	FK2	0.741		
	FK3	0.763		
	FK4	0.737		
	FK5	0.769		
Financial Attitude	FA1	0.757	0.571	0.869
	FA2	0.755		
	FA3	0.758		
	FA4	0.763		
	FA5	0.745		
Locus of Control	LC1	0.774	0.634	0.897
	LC2	0.788		
	LC3	0.798		
	LC4	0.810		
	LC5	0.811		
Financial Management Behaviour	FMB1	0.721	0.544	0.827
	FMB2	0.746		
	FMB3	0.751		
	FMB4	0.732		

Discriminant Validity Assessment

Discriminant validity is used to ensure that each concept in each latent model is distinct from other variables. Discriminant validity can be evaluated using the Fornell-Larcker criterion and cross-loadings. In the Fornell-Larcker criterion test, discriminant validity is considered good if the square root of the construct's AVE is higher than the correlation between the construct and other latent variables (Sekaran & Bougie, 2016). As shown in Table 4, the discriminant validity is achieved.

Moderation Analyses

As shown in Table 5, there are significant relationships between financial knowledge ($\beta = 0.372$, $p = 0.000$, $p < 0.001$) and financial attitude ($\beta = 0.218$, $p = 0.000$, $p < 0.001$) and financial management behaviour. Therefore, Hypotheses 1 and 2 are accepted. The interaction paths between financial knowledge and locus of control ($\beta = 0.019$, $p = 0.039$, $p < 0.05$) and financial attitude and locus of control ($\beta = 0.014$, $p = 0.025$, $p < 0.05$) were statistically significant. Thus, Hypotheses 3(a)

TABLE 4: Discriminant Validity Results

No.	Variable	1	2	3	4
1	Financial Knowledge	0.744			
2	Financial Attitude	0.426	0.756		
3	Locus of Control	0.497	0.328	0.796	
4	Financial Management Behaviour	0.522	0.407	0.520	0.737

Note: Values in the diagonal show the square root of AVE

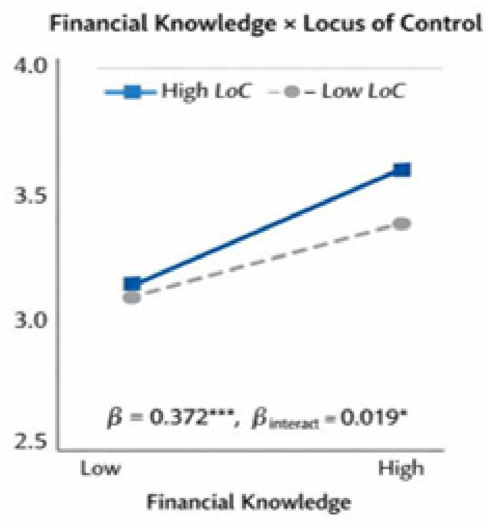
and 3(b) are accepted. As shown in Figure 2a, the interaction effect of financial knowledge and locus of control is significant. At a high level of locus of control, financial knowledge has a substantial effect on financial management behaviour. In a similar vein, the same effect has also been found in the interactions between financial attitude and locus of control (see Figure 2b).

TABLE 5. Moderation Analyses

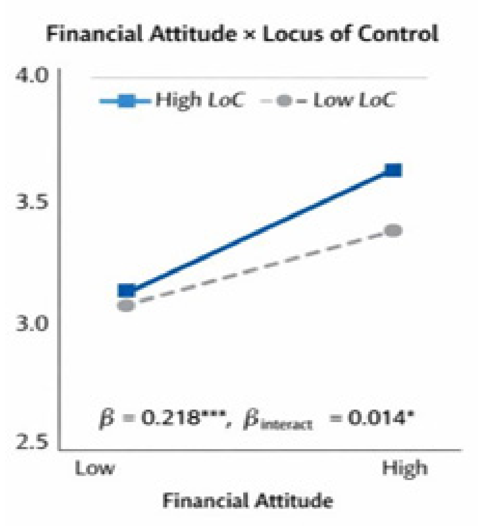
Direct effect	β	t-value	p-value
Financial Knowledge → DV	0.372***	4.113	0.000
Financial Attitude → DV	0.218***	3.290	0.000
Interactive effect			
Financial Knowledge*Locus of Control→ DV	0.019*	2.034	0.039
Financial Attitude*Locus of Control→ DV	0.014*	2.870	0.025

Note: Significance level: ***p < 0.001; *p <0 .01; *p <0 .05.

DV= Financial Management Behaviour



(a) Financial Knowledge*Locus of Control→ DV



(b) Financial Attitude*Locus of Control→ DV

FIGURE 2. Moderation Slope Graphs

DISCUSSION

The overall study findings showed that both financial knowledge and financial attitude have contributed significantly to financial management behaviour. Financial knowledge is a person's understanding of financial concepts and the ability to manage money wisely and make appropriate decisions regarding personal finances (Khalisharani et al., 2022). Someone with sound financial knowledge will have a solid foundation to make sound financial plans (Banthia & Dey, 2022). One way to improve the public's understanding of finance is through financial education (Gafoor et al., 2025). Powell et al. (2023) found that knowledge of financial management is important to help students manage their finances better and focus entirely on their studies. A financial attitude reflects individuals' views, evaluations, and thoughts about money, which are then realized in behaviour (Khalisharani et al., 2022; Yeo et al., 2024). Someone who has a negative financial attitude will certainly face financial problems. Sometimes, people are willing to starve themselves to achieve a lifestyle or desires, such as owning a luxury car, designer clothes, or expensive furniture (Banthia & Dey, 2022; Shi et al., 2025).

Next, the findings showed that locus of control moderates the relationships between financial knowledge and financial management behaviour, as well as between financial attitude and financial management behaviour. Locus of control refers to an individual's view or mindset about whether they have control over what happens in their lives (Shaikh & Khan, 2025). In the context of financial management behaviour, someone with a locus of control is expected to understand changes in their financial situation (Hasan et al., 2025; Hoang & Vo, 2026). With a high level of self-control, one can refrain from buying impulsively, including indulging in hedonic shopping, which can lead to unplanned purchases (Syaliha et al., 2022). Self-control supports the ability to control rational awareness, needs, and feelings. People with low self-control may be more susceptible to the temptation to shop for temporary emotional satisfaction (Ahamed et al., 2025).

This study has contributed to several theoretical and research implications. First, this study has proven that the interaction between individual cognition and the environment influences social cognitive theory. This study also shows that individuals' internal influences are strong in strengthening the effects of financial knowledge and financial attitude on financial management behaviour. The study's results also offer several policy and practical implications. UiTM needs to ensure students receive early exposure to financial management literacy. The university can play an important role by offering programs or lectures on financial literacy and financial management (Khalisharani et al., 2022). With the right guidance, students can learn smart ways to manage their money. Exposure to students related to financial management literacy is very important so that students know how to make budget plans, build financial discipline from the beginning to prevent them from wasting, understand the concept of savings and investment, learn about the importance of thrift, as well as tips to avoid being involved in financial fraud (Yeo et al., 2024). Managing finances well can give them peace of mind and allow them to focus on their studies. Students who manage their finances wisely can avoid financial stress that can affect academic performance. This aligns with Social Cognitive Theory (SCT), where experience and learning play an important role in shaping behaviour, which in turn affects perceptions of reinforcement, hope, and motivation, as well as the likelihood of an individual engaging in a behaviour and the reasons behind such involvement.

At the basic level, the Ministry of Higher Education and related financial regulatory bodies can develop a national framework to foster a society with responsible financial behaviour, the ability to manage finances well, and the capacity to achieve financial security. Financial well-being is a prerequisite to a more productive, resilient, and inclusive economy, and this supports the government's long-term aspirations under the National Transformation Financial Cluster 2050 (TN50) initiative. Financial literacy programs such as the PTPTN Smart Next Gen program and the “My Money & Me” initiative show continuous efforts to increase financial awareness among the community. Through this program, students focus on financial literacy, including savings planning and debt management. Based on this study's findings, locus of control is an important factor that should be included in the youth financial literacy program. Research has shown that people with a high internal locus of control feel they control their own destiny and tend to be happier and less stressed. Therefore, to strengthen the locus of control, among the topics that can be applied are building financial confidence, warning of financial fraud, the importance of insurance coverage, and personal financial evaluation. Cash Flow Game, for example, is a game-based learning method in which students are tested on making financial decisions based on real-world scenarios, including managing income, expenses, assets, and liabilities. This activity requires students to think critically, analyze risks, and plan realistic long-term financial strategies. Students not only acquire knowledge of financial and investment management but can also apply the concepts learned in an interactive, fun atmosphere.

At the individual level, setting financial goals is an important step in forming a healthy financial attitude. Making a budget is the foundation of successful financial management (Mutlu & Özer, 2022). Students need to learn to create a practical, realistic budget that includes daily, weekly, and monthly expenses. By adhering to the budget, they can avoid wasting money on unimportant items (Van Nguyen et al., 2022). Saving is a habit that should be instilled from a young age. Practicing the habit of saving will help students build savings, be prepared for unexpected needs, and achieve their financial goals (Yeo et al., 2024). Financial education should start as early as possible. Subjects such as "Fundamentals of Financial Management" can be included in school and higher education curricula to provide students with early exposure. This allows them to understand the basics of financial management before entering the workforce. Financial literacy campaigns such as those organized by Bank Negara Malaysia and the Credit Counseling and Management Agency (AKPK) need to be strengthened. These programs can help youth understand financial concepts such as debt management, savings, and investments. Moreover, university students can find part-time jobs to supplement their financial resources. For students who are worried about their studies or are afraid of becoming too tired, this part-time job can be done during the semester break to avoid disrupting their study time. In this sophisticated era, students can do part-time work in the virtual world, such as being a 'dropship' for products on Shopee, TikTok, Instagram, and other applications. In addition, if students want to save money, they are strongly encouraged to invest in financial institutions that pay annual dividends, such as Amanah Saham Bumiputera (ASB) and Tabung Haji, to increase their savings.

CONCLUSION

Financial problems among students can be prevented by practicing proper saving, increasing financial resources through side income, and reducing debt. Students will lead more peaceful lives if they practice sound financial management. Nowadays, too many things are trends that make the young generation scramble to achieve and possess to the point of being willing to waste and go into debt (Ahamed et al., 2025). This practice should be avoided because it significantly impacts students' financial management (Hasan et al., 2025; Hoang & Vo, 2026). Saving money for the future is much more important than following trends that have no benefits (Van Nguyen et al., 2022). Sound financial management needs to be honed from now on to make things easier in the future. Several limitations of the study have been identified. First, the sample in this study is limited to undergraduate students at UiTM Negeri Sembilan, which limits the generalizability of the findings. Therefore, future studies need to expand the data collection to other universities or to a different scope. Second, this study only focused on the impact of financial knowledge, financial attitude, and locus of control. Therefore, future studies are encouraged to develop this study model by including other variables. Third, this study uses a cross-sectional design, in which data is collected at a single point in time. This means that the researcher takes a "snapshot" of the population being studied. One of the main limitations of cross-sectional studies is their inability to determine cause-and-effect relationships. Cross-sectional studies can be vulnerable to selection bias, especially if the sample is not randomly selected or does not represent the target population. This can affect the generalizability of the study results. Therefore, future studies are encouraged to use a longitudinal method or qualitative approaches.

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