Guidelines for Solving the Financial Problems of Students in the Lower Central Region

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Received: 2025-7-5; **Revised:** 2025-10-31; **Accepted:** 2025-10-31

Abstract

This study investigates the internal factors influencing financial planning behavior among university students in Thailand's lower central region. Grounded in Maslow's hierarchy of needs and the theory of emerging adulthood, the research examines the effects of basic needs, higher-order psychological needs, and age. Using a quantitative design, data were collected via a structured questionnaire from 418 undergraduates. Descriptive statistics and simple linear regression were applied. Results reveal that all three variables significantly and positively affect financial planning behavior ($p < .01$), with the model explaining 24.4% of the variance ($R^2 = 0.244$). These findings support theories in behavioral economics and developmental psychology, highlighting the role of need fulfillment and psychological maturity in fostering financial responsibility. Theoretically, the study affirms the relevance of motivation-based and developmental models in understanding youth financial conduct in emerging economies. Practically, it offers a foundation for developing targeted financial literacy programs, personalized counseling, and institutional policies to enhance resilience among emerging adults.

Keywords: Financial Planning Behavior, Financial Literacy, Psychological Drivers, Youth Economics, Emerging Markets

Introduction

1.1. Background and Problem Significance

In the context of ongoing economic change, financial planning has become a critical life skill—especially for university students transitioning from financial dependence to self-directed resource management (Arnett, 2000). This group faces numerous economic challenges, including rising tuition fees, living costs, and student debt, notably from Thailand's Student Loan Fund (SLF). Lacking financial planning skills during this formative stage may result in enduring vulnerability, with implications not only for individuals but also for broader socio-economic stability (Lusardi, 2019). Prior research has consistently found deficits in financial literacy and intrinsic motivation among students, particularly in budgeting, saving, and responsible spending (Shim et al., 2009).

In Thailand's lower central region—covering Bangkok, Nakhon Pathom, and Ratchaburi—students are increasingly pressured by financial demands such as tuition, accommodation, transport, and the need for digital learning tools. While financial assistance programs exist, many students remain ill-equipped to manage debt and financial responsibilities, often resulting in stress that adversely affects academic performance and well-being.

Despite growing concern, few Thai studies have examined internal psychological factors—such as basic needs, higher-order aspirations, and developmental stage—as predictors of financial behavior. This is particularly relevant in the lower central provinces, where the cost of living exceeds the national average. This study addresses that gap by presenting a conceptual framework tailored to the financial realities of Thai students entering adulthood. These localized concerns reflect international patterns, where poor financial literacy and disorganized debt behavior are linked to academic and long-term financial instability (Lim et al., 2014; Hancock et al., 2013).

Globally, the OECD (2020) reports that 62% of students in member countries experience financial instability and are unprepared for economic shocks. These trends point to systemic barriers, including insufficient financial knowledge and inefficient spending. As such, studying student financial behavior in emerging economies like Thailand is vital for informing macroeconomic policies and developing sustainable youth support systems.

Given these conditions, understanding financial behavior requires attention to internal psychological motivations that drive decision-making. These are often structured in hierarchical models such as Maslow's (1943) theory of needs, ranging from basic subsistence to self-actualization (Xiao & Noring, 1994). When integrated with the concept of emerging adulthood—a stage characterized by shifting priorities and financial experimentation (Arnett, 2000)—these motivational constructs offer a comprehensive framework for analyzing financial behavior in university populations.

1.2. Research Objectives

The primary objective of this study is to investigate the relationships between internal psychological factors—namely, basic needs, higher-order needs, and age—and financial planning behavior among university students in Thailand's lower central region. The study aims to reveal the psychological mechanisms and developmental pathways that shape financial decision-making during emerging adulthood. By identifying these behavioral patterns, the research offers insights for evidence-based interventions, institutional support programs, and policy strategies to enhance financial competence among young adults.

1.3. Research Hypotheses

Theoretical and empirical literature suggests that basic and higher-order needs—consistent with Maslow's hierarchy (1943)—influence financial behavior. These effects are especially evident during emerging adulthood, a period marked by heightened motivation

related to security, identity, and self-development (Xiao & Noring, 1994; Arnett, 2000). Studies by Lusardi (2019) and Shim et al. (2009) further show that age correlates positively with financial maturity, as older students tend to demonstrate greater planning capacity and discipline.

Accordingly, the study proposes the following hypotheses:

H1: Basic needs positively influence financial planning behavior.

H2: Higher-order needs positively influence financial planning behavior.

H3: Student age positively influences financial planning behavior.

1.4. Conceptual Framework

This study's conceptual framework integrates three theoretical perspectives. First, Maslow's (1943) hierarchy of needs presents motivation as a continuum from basic survival to self-actualization. Second, Xiao and Noring (1994) provide insight into financial behavior, focusing on saving and money management. Third, Arnett's (2000) theory of emerging adulthood introduces a developmental view of financial autonomy among youth.

The framework defines three independent variables—basic needs, higher-order needs, and age—and a single dependent variable: financial planning behavior. The model explores how internal psychological and demographic factors causally influence students' financial decision-making. This structure supports an examination of how motivation and development interact during a key transitional life stage.

The conceptual framework is illustrated in Figure 1.

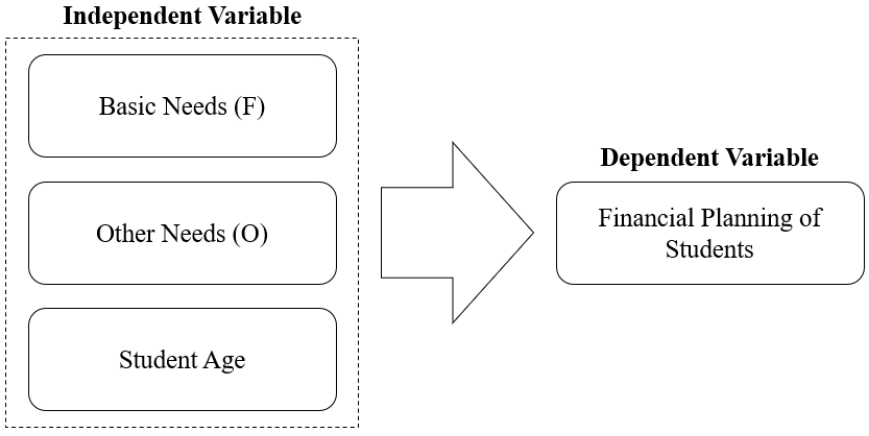

Figure 1 Conceptual Framework: The relationship between basic needs, other needs, and age, and financial planning behavior among university students.

Theoretical Foundations and Hypotheses Development

Understanding the determinants of financial planning behavior among university students requires a firm theoretical grounding in models of internal motivation and decision-making. In a volatile economic context, students face constrained incomes, rising expenses, and psychosocial challenges associated with a life stage marked by expanding responsibilities

and a drive for financial independence. As such, financial planning is shaped by both internal psychological factors and external socio-economic conditions.

This study focuses on three key internal variables—basic needs, higher-order needs, and age—each informed by behavioral economics, psychological finance, and developmental theory. The aim is to explain how these dimensions influence financial choices during emerging adulthood, a period defined by identity formation, financial experimentation, and the gradual acquisition of self-regulation.

2.1. Basic Needs

Basic needs are fundamental drivers of human behavior, directly influencing financial decision-making. According to Maslow's hierarchy of needs (1943), individuals must satisfy essential requirements—such as food, shelter, and safety—before advancing toward goals tied to self-growth and actualization. In financially constrained contexts, these needs shape how individuals prioritize and allocate resources.

Maslow's framework has been widely applied in studies of consumer and financial behavior, particularly among students who often experience limited income and access to essential goods (Xiao & Noring, 1994). Empirical research has shown significant links between the fulfillment of basic needs and effective financial behavior, especially among students living away from home or without consistent economic support (Shim et al., 2009; Hira & Loibl, 2005). For these students, financial planning often centers on covering essential costs—such as food, housing, and healthcare—reinforcing the importance of basic needs as predictors of financial competence.

2.2. Other Needs

Other needs refer to motivational drivers beyond basic survival, encompassing psychological, social, and self-developmental domains. These include aspirations for academic success, social connection, leisure, future investments, and self-image enhancement. Such needs become especially relevant during the transition to adulthood, a stage characterized by identity exploration and the pursuit of long-term stability (Arnett, 2000).

From a consumer behavior perspective, higher-order needs significantly influence financial choices. University students' financial behavior is often shaped by external stimuli such as media, trends, peer influence, and personal ambitions—including investments in education, digital devices, travel, or image cultivation (Norum, 2008; Sohn et al., 2012).

Research consistently shows that students prioritizing such needs are more prone to financial stress and poor resource allocation—especially if lacking goal-setting and planning skills (Shim et al., 2009; Serido et al., 2010). These needs not only drive behavior but also serve as indicators of students' capacity for rational and disciplined financial decision-making.

2.3. Age

Age is often used as a proxy for developmental maturity and financial competence. Its relevance is especially evident in emerging adulthood—a period typically from ages 18 to 25—marked by autonomy-seeking, role experimentation, and the development of independent judgment (Arnett, 2000). These traits shape key financial behaviors, including budgeting, debt handling, and long-term saving (Shim et al., 2009; Lusardi, 2019).

Behavioral economics and financial psychology suggest that age-related development improves cognitive ability, foresight, and self-regulation (Tang et al., 2015). Younger students may lack financial experience, making them more prone to impulsive or misinformed decisions—such as overspending or neglecting savings—which can undermine financial stability. These risks typically diminish with age as individuals gain emotional and financial maturity (Lusardi & Mitchell, 2014).

2.4. Hypotheses Development

A synthesis of theoretical models and empirical findings indicates that students' financial planning behavior is strongly influenced by internal motivational factors rooted in human needs. These motivations fall into two main domains: basic needs and higher-order needs. According to Maslow's (1943) hierarchy, individuals first meet essential requirements—such as food, shelter, and safety—before progressing toward psychological and social goals like belonging, esteem, and self-actualization.

Empirical studies have affirmed the role of basic needs in shaping financial behavior, particularly among students with limited resources or lacking family support (Xiao & Noring, 1994; Shim et al., 2009). Simultaneously, higher-order needs—such as aspirations for mobility, long-term goals, and identity-driven consumption—also influence students' spending and planning behavior (Sohn et al., 2012; Serido et al., 2010).

Age, commonly used as a proxy for maturity, has been linked to increased financial awareness, better prioritization, and greater preparedness for long-term planning (Tang et al., 2015; Lusardi, 2019). These trends are especially relevant during emerging adulthood, when individuals begin managing finances independently.

Based on these insights, the study proposes the following hypotheses:

H1: Basic needs positively influence students' financial planning behavior.

H2: Higher-order needs positively influence students' financial planning behavior.

H3: Student age positively influences financial planning behavior.

Research Methodology

This study employs a quantitative research design to examine the statistical relationships between internal psychological and demographic factors—specifically, basic needs, higher-order needs, and age—and financial planning behavior among university students. Simple linear regression is utilized as the primary analytical technique for hypothesis

testing, enabling the evaluation of both the magnitude and direction of influence exerted by each independent variable on the dependent variable.

The selection of a quantitative methodology aligns with prevailing research practices in the field of student financial behavior, which typically emphasize the use of structured questionnaires to generate standardized numerical data, followed by the application of statistical procedures to investigate inter-variable associations (Shim et al., 2009; Lusardi, 2019). This approach provides a systematic and replicable means of identifying significant predictors of financial behavior within the target population.

3.1. Population and Sample

The target population for this study comprises undergraduate students currently enrolled in higher education institutions within Thailand's lower central region, specifically the provinces of Bangkok, Nakhon Pathom, and Ratchaburi. This population segment was purposively selected for its direct relevance to the research objectives, as students in this developmental stage are beginning to navigate financial independence by managing their own income and expenditures.

A simple random sampling technique was employed to ensure representativeness and reduce selection bias. The sample was drawn from the broader student population across universities located in the aforementioned region. A total of 418 valid responses were obtained and subsequently used for statistical analysis. This sample size is considered adequate in accordance with the recommendation of Hair, Black, Babin, and Anderson (2010), who suggest that linear regression analysis can be reliably conducted with sample sizes exceeding 100, particularly when the number of independent variables is limited.

3.2. Research Instrument

The primary data collection instrument employed in this study was a structured questionnaire, designed in alignment with established theoretical frameworks and prior empirical research on financial planning behavior among university students. The questionnaire was organized into three principal sections: (1) demographic information, including age, gender, and educational level; (2) items measuring basic needs and higher-order needs, developed through an integration of Maslow's (1943) hierarchy of needs and behavioral motivation theory (Xiao & Noring, 1994); and (3) items assessing financial planning behavior, adapted from validated models in personal finance and youth economic behavior literature (Shim et al., 2009; Serido et al., 2010).

All questionnaire items were measured using a five-point Likert scale, ranging from 1 = "Strongly Disagree" to 5 = "Strongly Agree," to facilitate the quantification of attitudinal and behavioral constructs. Content validity was established through evaluation by a panel of three domain experts. Prior to full-scale data collection, a pilot study involving 30 participants with characteristics similar to the target population was conducted. Reliability testing using Cronbach's alpha yielded coefficients ranging from 0.70 to 0.83 across the respective sections,

indicating acceptable levels of internal consistency in accordance with conventional psychometric standards.

3.3. Data Collection Procedures

Data for this study were collected using a field-based approach involving a structured questionnaire that had undergone prior validation for both content accuracy and internal consistency. The target respondents were undergraduate students enrolled in higher education institutions located in Thailand's lower central region, specifically within the provinces of Bangkok, Nakhon Pathom, and Ratchaburi. Data collection was conducted in person across several approved university campuses within the designated region. The researchers personally distributed the questionnaires and provided each participant with a clear explanation of the study's objectives and procedures, ensuring that informed consent was obtained in accordance with ethical guidelines for research involving human subjects.

The data collection phase spanned a period of four weeks, during which the research team conducted pre-scheduled visits to each participating institution to systematically administer and monitor the distribution of questionnaires. This protocol was implemented to ensure that all respondents satisfied the inclusion criteria and that data integrity was maintained throughout the process. A total of 418 completed and valid questionnaires were returned, representing a satisfactory response rate and yielding a dataset sufficient for the statistical analyses conducted in this study.

3.4. Data Analysis Techniques

The dataset comprising 418 valid responses was processed and analyzed using the Statistical Package for the Social Sciences (SPSS). Initial procedures involved data screening to identify and exclude incomplete or anomalous entries, thereby ensuring the integrity and reliability of the dataset. Prior to inferential analysis, the internal consistency of each questionnaire section was evaluated using Cronbach's alpha. The results yielded alpha coefficients exceeding 0.70 across all measurement constructs, in line with the widely accepted threshold for reliability as proposed by Nunnally and Bernstein (1994).

Descriptive statistics were initially employed to summarize key demographic characteristics of the respondents—such as gender, age, and level of education—and to report the frequency distributions and mean scores for the core study variables. Following this, simple linear regression analysis was conducted to test the study's three hypotheses, examining the individual effects of each independent variable—basic needs, higher-order needs, and age—on the dependent variable, financial planning behavior. This analytic approach was selected based on its alignment with the study's primary objective: to isolate and assess the direct influence of each internal factor on students' financial behavior.

Simple linear regression was favored over more complex techniques, such as multiple regression or structural equation modeling (SEM), due to its suitability for the study's research design and sample size. As noted by Hair, Black, Babin, and Anderson (2010), linear regression

is particularly appropriate for moderate-sized samples and enables clear interpretation of causal directionality without the confounding effects of multicollinearity. Additionally, this approach enhances the accessibility and applicability of the findings for policy and program development.

The theoretical justification for employing this analytical method is further reinforced by Ajzen's (1991) Theory of Planned Behavior (TPB), which posits that behavior is driven by intention, itself influenced by attitudes, beliefs, and perceived behavioral control. The inclusion of internal psychological and demographic predictors—namely basic needs, higher-order needs, and age—accords with TPB's emphasis on intrinsic motivations. As such, simple linear modeling provides a theoretically grounded and methodologically robust framework for capturing the psychological mechanisms that underpin financial decision-making in the context of emerging adulthood.

Data Analysis and Results

4.1. Descriptive Characteristics of the Sample

The sample for this study comprised 418 undergraduate students residing in Thailand's lower central region, including Bangkok, Nakhon Pathom, and Ratchaburi. Descriptive statistics were used to summarize the demographic characteristics of the respondents, covering variables such as gender, age, education level, number of dependents, and financial obligations related to the Student Loan Fund (SLF). The detailed demographic profile is presented in Table 1.

Table 1 Demographic Profile of Respondents (n = 418)

Variable	Frequency (n)	Percentage (%)
Gender		
Male	213	51
Female	195	46.7
Prefer not to say	10	2.4
Age		
20–22 years	232	55.5
23–25 years	50	12
26–28 years	30	7.2
Over 28 years	39	9.33
Education Level		
Bachelor's degree	379	90.7
Master's degree	29	6.9
Doctoral degree	10	2.4
Number of Dependents		
0	55	13.2
1	172	41.1

Variable	Frequency (n)	Percentage (%)
2	144	34.4
More than 2	47	11.2
Student Loan Obligation (SLF)		
With obligation	195	46.7
Without obligation	223	53.3

The data in Table 1 indicate that a slight majority of respondents were male (51.0%), followed closely by females (46.7%), with a small percentage opting not to disclose their gender (2.4%). The largest age group fell within the 20–22 range (55.5%), aligning with the typical undergraduate demographic. In terms of educational attainment, the overwhelming majority held a bachelor's degree (90.7%), while smaller proportions were enrolled in master's (6.9%) and doctoral (2.4%) programs.

Regarding familial responsibilities, most students reported having either one (41.1%) or two dependents (34.4%), while 13.2% had none and 11.2% reported more than two. With respect to financial obligations, the proportion of students with SLF-related debt (46.7%) was nearly equivalent to those without such obligations (53.3%). These findings highlight the diversity of financial backgrounds and obligations among students in the region, reinforcing the relevance of examining internal factors that shape financial planning behavior within this population.

4.2. Reliability Assessment of the Research Instrument

Prior to distributing the questionnaire to the main sample, a pilot test was conducted with a group of 30 respondents whose demographic and behavioral characteristics closely resembled those of the target population. The primary objective of this preliminary phase was to assess the internal consistency of the research instrument. Reliability for each section of the questionnaire was calculated using Cronbach's alpha coefficient, a widely recognized statistical measure for evaluating the internal coherence of multi-item scales.

The results revealed that all three sections of the questionnaire demonstrated acceptable to high levels of reliability, with Cronbach's alpha values ranging from 0.70 to 0.83. These values are consistent with the reliability thresholds proposed by Nunnally and Bernstein (1994), which consider alpha coefficients above 0.70 to reflect acceptable internal consistency. A summary of these findings is presented in Table 2.

Table 2 Cronbach's Alpha Coefficients for Each Section of the Questionnaire

Section	Number of Items	Cronbach's Alpha
Basic Needs	10	0.7
Other (Higher-Order) Needs	10	0.83
Financial Planning Behavior	10	0.76

Note: All sections demonstrated Cronbach's alpha values exceeding 0.70, indicating acceptable levels of internal consistency in accordance with the guidelines set forth by Nunnally and Bernstein (1994).

These results confirm that the questionnaire utilized in this study exhibits a satisfactory degree of internal consistency, thereby validating its use as a reliable instrument for capturing quantitative data on the statistical relationships between internal psychological factors and financial planning behavior among students.

4.3. Descriptive Statistics

This section reports the central tendency and dispersion metrics for the study's core variables—basic needs, higher-order needs, financial planning behavior, and age—using mean and standard deviation as indicators. The first three constructs were measured on a five-point Likert scale, while age was obtained from the demographic portion of the questionnaire. Summary statistics for these variables are presented in Table 3.

Table 3 Means and Standard Deviations of Key Variables (n = 418)

Variable	Mean	Standard Deviation (S.D.)
Basic Needs	3.85	0.68
Other (Higher-Order) Needs	3.92	0.72
Financial Planning Behavior	3.78	0.65
Age (in years)	22.45	2.91

Note: All mean values are relatively high, indicating a general tendency toward positive perceptions and responses among the sample group.

As shown in Table 3, the highest mean score was recorded for higher-order needs (M = 3.92, S.D. = 0.72), followed by basic needs (M = 3.85, S.D. = 0.68). The mean for financial planning behavior was slightly lower at 3.78 (S.D. = 0.65). These findings suggest that respondents exhibited a relatively strong orientation toward both motivational constructs and financial planning behaviors. The average age of participants was 22.45 years, which is consistent with the normative age range for mid-level undergraduate students and further supports the appropriateness of the selected sample for investigating financial behavior during the transitional period of emerging adulthood.

4.4. Hypothesis Testing Results

To assess the relationships between the internal psychological and demographic factors—namely, basic needs, higher-order needs, and age—and students' financial planning behavior, a simple linear regression analysis was conducted using a composite model that incorporated all three predictors simultaneously. The analysis revealed that the model explained a meaningful proportion of the variance in the dependent variable, yielding an R^2

value of 0.244 and a standard error of estimate of 0.74262. These values suggest a moderate degree of predictive accuracy in forecasting financial planning behavior among university students.

At the .01 level of significance, all three independent variables demonstrated statistically significant and positive effects on financial planning behavior, thereby providing empirical support for Hypotheses H1, H2, and H3. These findings are congruent with Maslow's (1943) motivational framework, which suggests that the satisfaction of basic needs serves as a prerequisite for the pursuit of higher-order goals such as self-development and future financial security. Moreover, the results align with Arnett's (2000) conceptualization of emerging adulthood as a developmental period during which individuals begin to adopt more defined financial roles, with age operating as a proxy for maturity and behavioral regulation.

Although the model's explanatory power ($R^2 = 0.244$) is modest, it is consistent with previous studies employing similar designs—such as those conducted by Shim et al. (2009) and Sohn et al. (2012)—which reported R^2 values ranging from 0.20 to 0.30 in models without control variables. The standard error, remaining below 1.00, also indicates an acceptable margin of estimation error given the behavioral nature of the data and inherent individual variability.

It should be noted, however, that the present analysis focused solely on direct bivariate relationships and did not control for other potentially confounding variables, such as income level, financial literacy, or prior financial experience. Future research should incorporate such covariates to enhance the explanatory power and generalizability of the model. Nonetheless, the current findings offer valuable theoretical and practical insights for the development of policy interventions and targeted financial education programs aimed at students in transitional life stages.

Table 4 Summary of Hypothesis Testing Results

Hypothesis	Independent Variable	Dependent Variable	R^2 (Overall)	Significance Level	Hypothesis Status
H1	Basic Needs	Financial Planning Behavior	0.244	$p < .01$	Supported
H2	Other (Higher-Order) Needs	Financial Planning Behavior	0.244	$p < .01$	Supported
H3	Age	Financial Planning Behavior	0.244	$p < .01$	Supported

Note: All hypotheses were tested using a composite model based on simple linear regression, which jointly explained 24.4% of the variance in students' financial planning behavior.

Table 5 Regression Coefficients of Independent Variables

Independent Variable	Beta Coefficient (β)	t-value	Sig. (p-value)	Hypothesis Status
Basic Needs	0.317	5.106	< .001	Supported (H1)
Other (Higher-Order) Needs	0.273	4.817	< .001	Supported (H2)
Age	0.189	3.712	< .001	Supported (H3)

Note: All coefficients were derived from a combined model using the enter method, which simultaneously included all three predictors.

When all three predictors were entered into the regression model concurrently, each exhibited a statistically significant and positive association with the dependent variable ($p < .001$). Among the variables, basic needs exerted the strongest influence on financial planning behavior ($\beta = 0.317$), followed by higher-order needs ($\beta = 0.273$) and age ($\beta = 0.189$). These results suggest that while all three internal factors meaningfully contribute to financial planning, the fulfillment of basic needs constitutes the most potent motivational driver. The consistent directionality and significance of all regression coefficients further validate the model's internal coherence and statistical robustness.

Discussion

5.1. Interpretation of Findings

The results of this study reveal that basic needs, higher-order needs, and age each exert a statistically significant and positive influence on students' financial planning behavior at the $p < .01$ level. The model explained 24.4% of the variance in financial planning behavior ($R^2 = 0.244$), a figure that, while not exhaustive, represents a theoretically meaningful degree of explanatory power—particularly for a population navigating the transition from familial financial dependence to autonomous economic responsibility.

The influence of basic needs corresponds closely with Maslow's (1943) foundational theory of human motivation, which posits that individuals are primarily driven to fulfill physiological and safety-related requirements before attending to more complex psychological needs. In the student context, managing essential living expenses—such as food, housing, and personal security—provides a necessary foundation for the emergence of structured financial habits and goal-directed behaviors. The satisfaction of these fundamental needs appears to facilitate increased attentiveness to budgeting, saving, and long-term financial planning.

Similarly, the significant impact of higher-order needs—including aspirations for social belonging, self-esteem, and personal growth—highlights the role of psychosocial motivations in shaping financial conduct. These needs not only act as intrinsic motivational forces but also reflect a higher level of cognitive and emotional maturity. Arnett's (2000) theory of emerging

adulthood supports this interpretation, emphasizing the developmental shift toward greater independence and the formation of a self-directed identity. Within this transitional life phase, students begin to internalize long-term goals and adopt financial behaviors aligned with their evolving social roles and future aspirations. The present findings reinforce the idea that internal psychological drivers—particularly those related to self-development and social validation—can promote financial discipline even under external financial constraints.

The role of age as a significant predictor underscores the developmental trajectory of financial competence. Older students, through accumulated life experiences and increased exposure to economic responsibilities, are more likely to exhibit consistent financial planning behavior. Their enhanced capacity for foresight, prioritization, and strategic decision-making likely stems from engagement with activities such as managing income, handling debt, and preparing for life after graduation. These findings align with prior research by Shim et al. (2009) and Lusardi (2019), who observed positive associations between age and financial capability across various dimensions of economic behavior.

Although the model's explanatory power ($R^2 = 0.244$) is moderate in predictive terms, it aligns with expectations for behavioral research in educational contexts, where participant heterogeneity—including variations in income, upbringing, and financial socialization—is common. Similar R^2 ranges have been reported in studies by Sohn et al. (2012) and Sabri & MacDonald (2010), further validating the methodological robustness of the current analysis. Capturing nearly one-quarter of the variance in financial behavior based solely on internal psychological and demographic factors constitutes a noteworthy contribution in this domain.

In conclusion, the study affirms the significance of psychological and developmental variables—specifically, basic needs, higher-order needs, and age—in shaping financial planning behavior among university students in Thailand's lower central region. While the model does not encompass the full range of influencing variables, it identifies critical starting points for cultivating financial discipline and designing educational interventions tailored to students' transitional life stage. Beyond its theoretical contributions to the understanding of human motivation and emerging adulthood, the study offers practical implications for policy and curriculum design. Specifically, the findings can inform the development of targeted financial education programs and youth-focused planning tools aimed at enhancing financial resilience and autonomy.

5.2. Research Conclusions

This study set out to investigate the influence of internal factors—specifically, basic needs, higher-order needs, and age—on the financial planning behavior of university students in Thailand's lower central region. The findings indicate that all three independent variables exert statistically significant and positive effects on students' financial behavior at the $p < .01$ level. The proposed model accounted for 24.4% of the variance in financial planning behavior ($R^2 = 0.244$), suggesting a meaningful level of explanatory power for analyzing behavioral patterns in student populations.

A key insight emerging from the analysis is that both basic and higher-order needs function not only as intrinsic motivational forces but also as critical drivers of systematic behavior and deliberate financial decision-making. Age, serving as a proxy for developmental maturity, reinforces the behavioral implications of cognitive growth, life experience, and self-regulation among students. These findings lend empirical support to the theoretical frameworks of Maslow and Arnett by demonstrating how human needs and psychological motivations are intricately linked to economic behavior, particularly during the transitional phase of emerging adulthood.

The results are broadly consistent with prior empirical research. Shim et al. (2009), for example, reported significant associations between financial behavior, knowledge, and parental influence among first-year university students in the United States. Similarly, Sohn et al. (2012) underscored the role of financial attitudes and prior experiences in shaping the financial practices of youth in South Korea. These studies affirm the proposition that internal needs and developmental factors serve as foundational elements in the formation of financial planning habits. The significance of age observed in this study also echoes the findings of Hancock et al. (2013) and Lim et al. (2014), both of whom demonstrated that age-related maturity is positively correlated with financial management competence and confidence in handling debt, particularly among late-stage undergraduate students.

This study offers a notable contribution to the literature by addressing a gap in the understanding of psychological determinants of financial planning behavior in developing economies such as Thailand. While previous research has largely focused on financial literacy, socialization agents, and institutional factors (e.g., Shim et al., 2009; Sohn et al., 2012; Lusardi & Mitchell, 2014), the present research introduces a theoretically grounded perspective centered on internal motivations and developmental trajectories. These dimensions have received limited scholarly attention in the Thai context, especially in socioeconomically diverse regions like the lower central provinces. Accordingly, this study extends the academic discourse on youth financial behavior toward a more integrative and psychologically informed framework.

Theoretically, this research enriches our understanding of how internal motivational and demographic factors influence financial planning behavior among youth undergoing the transition to adulthood—an area that remains underexplored in emerging-market contexts. By empirically validating the relationships between fundamental needs, aspirational drivers, and age, the study reinforces the theoretical claims of Maslow and Arnett, namely that the fulfillment of basic needs enables progression toward more structured, intentional, and future-oriented behavior. The findings thus offer both a culturally specific account of financial planning behavior among Thai students and a potential foundation for cross-cultural comparative research on needs-based and psychologically driven economic behavior.

5.3. Policy Recommendations and Practical Applications

Based on the empirical findings of this study—demonstrating that basic needs, higher-order needs, and age significantly influence financial planning behavior among university students—a range of policy recommendations and practical applications can be proposed to enhance students' financial competencies and long-term economic well-being.

First, higher education institutions should develop and implement both curricular and co-curricular programs specifically aimed at fostering financial discipline. These programs should emphasize core competencies in everyday money management, including expense tracking, budgeting, saving strategies, and goal setting—skills that directly address the basic needs framework identified in this study. Integrating these topics into general education or student development courses would promote financial literacy from the outset of university life.

Second, institutions should offer psychological and motivational counseling services that cultivate self-worth, financial self-efficacy, and long-term goal orientation. These initiatives should particularly engage students motivated by higher-order needs such as social recognition, belonging, and personal development. Such programs would empower students to adopt structured, future-oriented financial behaviors by helping them recognize the intrinsic value of planning and delayed gratification.

Third, external stakeholders—such as the Student Loan Fund (SLF), financial institutions, and government agencies—should develop age-segmented financial education campaigns that correspond with students' developmental stages. Given that age is significantly associated with financial maturity and planning competence, tailoring financial content to the cognitive and emotional development of learners can increase program effectiveness and behavioral adoption rates.

Fourth, the study's findings can inform national educational policy reform, particularly the integration of financial literacy and planning into university-level curricula. Institutionalizing financial education as a standardized component of higher education would enhance students' long-term economic preparedness and contribute to the development of a financially responsible future workforce.

Beyond program-level interventions, the validated questionnaire used in this study presents an opportunity for system-level policy integration. The instrument could be employed as a standardized diagnostic tool by government agencies, such as the Office of the Higher Education Commission and bodies concerned with human capital development, to assess student financial readiness on a nationwide scale. Insights gained from such assessments could guide data-driven curriculum development, targeted financial interventions, and the design of preventive support mechanisms for at-risk student populations.

At the institutional level, relevant administrative units—such as academic departments, student affairs offices, and career guidance centers—should incorporate the study's insights into the development of tailored financial support services. For example, universities could offer workshops that combine motivational profiling with practical financial

education, segmenting students according to behavioral patterns or developmental needs. Institutions might also adopt preliminary screening instruments—such as a "Freshman Financial Readiness Assessment"—to personalize financial counseling services and monitor behavioral progress longitudinally. These initiatives would support a dynamic, context-sensitive approach to financial skill development that evolves with students' needs over time.

Furthermore, the implications of this study align with broader global development goals, particularly the United Nations Sustainable Development Goals (SDGs). Specifically, the study contributes to SDG 4: Quality Education and SDG 8: Decent Work and Economic Growth. By strengthening students' financial planning capabilities, institutions are not only equipping individuals to manage their personal finances more effectively during their academic journey, but also preparing them to enter the workforce as self-regulated and financially literate young professionals. In this context, fostering financial discipline transcends the individual—it becomes a strategic lever for sustainable human capital development.

5.4. Recommendations for Future Research

While this study has confirmed the statistically significant influence of basic needs, higher-order needs, and age on financial planning behavior among university students, the explanatory scope of the proposed model remains constrained. The coefficient of determination ($R^2 = 0.244$), although acceptable within the behavioral sciences, indicates that a substantial portion of variance remains unaccounted for. Future research should consider expanding the model to include additional independent variables—such as income level, financial knowledge, financial attitudes, debt management experience, sociocultural values, and peer influence—which may offer a more comprehensive and robust explanation of financial behavior in student populations.

Furthermore, the analytical approach employed in this study—simple linear regression—while appropriate for exploratory purposes, is limited in its capacity to capture complex interrelationships, such as mediation and moderation effects. These dynamic interactions may significantly shape financial outcomes in more nuanced ways. Future studies are encouraged to adopt advanced analytical techniques, including Structural Equation Modeling (SEM) and Path Analysis, to explore latent constructs and multidirectional causal relationships. These methods provide deeper insight into the psychological mechanisms and systemic factors that influence financial decision-making.

From a methodological standpoint, although the use of a structured quantitative questionnaire facilitated efficient data collection from a relatively large sample, future research may benefit from employing mixed-methods designs. The integration of qualitative techniques—such as in-depth interviews, focus groups, or case studies—can yield richer insights into students' motivational profiles, perceived financial security, and subjective decision-making processes. Such methodological triangulation would enhance both the interpretive depth and contextual relevance of findings.

Moreover, the geographical scope of the present study was limited to the lower central region of Thailand. Although this area is socioeconomically diverse, it does not capture the full spectrum of student experiences across the country. To improve the generalizability of findings, future research should broaden its sampling frame to include students from various regions, institutional types, and academic disciplines—including vocational colleges, private universities, and specialized training programs. Comparative analysis across these subgroups could uncover unique patterns of financial behavior that are shaped by contextual and cultural variables.

Finally, researchers are encouraged to develop a Financial Readiness Index—an integrative, multidimensional tool designed to assess students' financial understanding, attitudes, behaviors, and preparedness. Such an index could serve as a policy-relevant instrument for national education authorities, enabling regular assessment and longitudinal tracking of financial literacy outcomes. It would also provide universities and policy makers with actionable insights to guide curriculum development, resource allocation, and the design of targeted interventions to promote financial capability among emerging adults.

Acknowledgments

The authors wish to express their sincere appreciation to Rajamangala University of Technology Phra Nakhon for its unwavering institutional support and academic collaboration. This contribution played a pivotal role in facilitating the successful execution and completion of this research project.

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