THE INFLUENCING FACTORS OF FINANCIAL MANAGEMENT SKILLS OF UNDERGRADUATE COLLEGE STUDENTS AT XI'AN UNIVERSITY OF FINANCE AND ECONOMICS

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This Independent Study Has Been Approved as a Partial Fulfillment of the Requirements for the Degree of Master of Business Administration

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Title: The Influencing Factors of Financial Management Skills of Undergraduate College Students at Xi'an University of Finance and Economics

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ABSTRACT

The rapid expansion of digital finance in China has created both opportunities and challenges for undergraduate students, who are increasingly exposed to mobile payments, online credit platforms, and diverse investment tools. While these innovations provide financial convenience, many students still face difficulties in managing their resources effectively, raising concerns about their financial literacy, spending habits, and saving and investment awareness. Addressing these concerns is essential for preparing undergraduates to navigate complex financial environments with competence and responsibility.

The objectives of this study were to examine the relationship between financial literacy and financial management skills, the relationship between spending habits and financial management skills, the relationship between saving and investment awareness and financial management skills of undergraduate students at Xi'an University of Finance and Economics.

This study adopted a quantitative, cross-sectional research design. The population consisted of approximately 12,000 undergraduates, from which a stratified randomed sample of 400 respondents was drawn to ensure representation across academic years and faculties. A structured questionnaire served as the main research instrument, comprising demographic items, knowledge-based financial literacy questions, Likert-scale measures of spending and saving behavior, and scenario-based tasks to assess financial management skills. Data were collected through both classroom-based and online administration. Descriptive statistics, Pearson's

correlation, multiple regression, t-tests, and ANOVA were employed to analyze the data.

The results indicated that financial literacy, spending habits, and saving and investment awareness all had significant positive relationships with financial management skills. Financial literacy explained the largest proportion of variance, followed by saving and investment awareness and spending habits. The findings suggested that students who possessed greater financial knowledge, demonstrated disciplined spending behavior, and expressed awareness of saving and investment opportunities were better equipped to plan, budget, and manage their financial resources effectively.

It is concluded that financial management skills of undergraduates are shaped by the combined influence of knowledge, behavior, and awareness. The study recommends that universities strengthen financial education programs, encourage healthier spending practices, and promote saving and investment awareness through targeted interventions. By doing so, institutions can enhance students' financial capabilities and prepare them to engage more responsibly with both immediate and long-term financial challenges.

Keywords: financial literacy, spending habits, saving and investment awareness, financial management skills

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TONG WENHAO

DECLARATION

I, Tong Wenhua, hereby declare that this Independent Study entitled “The Influencing Factors of Financial Management Skills of Undergraduate College Students at Xi’an University of Finance and Economics” is an original work and has never been submitted to any academic institution for a degree.

(Tong Wenhao)
Aug 13, 2025

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Chapter 1 Introduction

1.1 Background of the Study

As China's digital economy accelerates and financial technologies penetrate daily life, undergraduates increasingly face complex choices about consumption, saving, credit, and investment. Recent evidence on Chinese university students suggests that while many exhibit proactive financial attitudes and behaviors, objective knowledge remains uneven, revealing a gap between what students believe and what they know about finance (e.g., budgeting, credit, and investing). At the same time, public commentary and survey reporting in China note a generational shift "from savings-only to savings plus investment," with earlier exposure to financial products and stronger interest in wealth management among youth—often beginning in the 18–22 age band typical of undergraduate study.

This broader context heightens the practical relevance of examining financial literacy (knowledge and understanding of financial concepts), spending habits (patterns of consumption and budgeting), and saving and investment awareness (propensity to allocate for future goals and engage with basic investment vehicles) as determinants of students' financial management skills. Studies focusing on Chinese college populations have documented persistent deficiencies in risk awareness, planning, and disciplined allocation—especially as online finance and campus-adjacent credit expand access and temptation. Empirical work also links higher financial literacy to safer credit behavior and better day-to-day money management among Chinese undergraduates, reinforcing the policy premise that education and skills training can translate into healthier financial choices.

Internationally, Theory of Planned Behavior (TPB) provides a robust lens to relate cognition and attitude to observable financial behavior and skill enactment: attitudes toward budgeting and investing, perceived behavioral control (self-efficacy in managing money), and social norms collectively shape intentions and, ultimately, behavior. Contemporary TPB scholarship underscores both its breadth of applications and well-known challenges such as the intention–behavior gap, which is salient for student finance where intentions (e.g., "I plan to save") do not always become consistent action. [OBJ] Building on this foundation, recent work extending TPB to

financial education and budgeting among college students shows that targeted education can improve attitudes and intentions and, through them, budgeting behavior—an essential component of practical financial management skills.

Within this national and theoretical landscape, Xi'an, a major higher-education hub in Northwest China, offers a pertinent setting to study undergraduates' financial management. Focusing on Xi'an University of Finance and Economics, this quantitative study investigates how students' financial literacy, spending habits, and saving, and investment awareness relate to their financial management skills. The inquiry is motivated by converging evidence that Chinese students' knowledge–behavior misalignment, evolving consumption culture, and growing exposure to digital financial tools create both opportunities and risks, making skillful financial management an essential competence for undergraduates today.

1.2 Questions of the Study

In recent years, the financial environment of Chinese undergraduates has become increasingly complex due to the rapid development of digital financial services, the accessibility of mobile payment systems, and the growing prevalence of online credit products. At Xi'an University of Finance and Economics, many students actively engage in mobile-based transactions and campus credit services, yet surveys indicate a lack of systematic financial knowledge and weak budgeting skills, which often lead to impulsive consumption and occasional debt-related stress (Zhang & Wang, 2021; Li, 2023). This disconnect between students' financial behaviors and their ability to manage resources effectively highlights a pressing issue: students possess high exposure to financial tools but insufficient capability to apply them in disciplined and strategic ways.

Another problem observed is that while undergraduates show enthusiasm for saving and express interest in investment opportunities, their actual practices remain shallow and inconsistent. Many students rely heavily on short-term savings without engaging in long-term planning or risk assessment, resulting in missed opportunities for building sustainable financial security (Sun, 2022). This pattern reflects a gap in financial literacy education and a lack of effective financial management skills that can translate awareness into action. Scholars argue that such gaps may be alleviated through structured interventions that integrate financial literacy with behaviorally oriented training (Tan et al., 2024).

Theory of Planned Behavior (TPB) provides a theoretical basis for addressing these challenges, as it emphasizes that attitudes, perceived control, and subjective norms shape behavioral intentions and actual practices (Ajzen, 2020; Bosnjak et al., 2020). By applying TPB, this study situates financial literacy, spending habits, and saving & investment awareness as key predictors of students' financial management skills, with the expectation that enhancing these areas can lead to more responsible and sustainable financial behavior among undergraduates in Xi'an. Therefore, the guiding questions of this study are framed as follows:

1. What is the relationship between financial literacy and financial management skills of undergraduate students?

2. What is the relationship between spending habits and financial management skills of undergraduate students?

3. What is the relationship between saving and investment awareness and financial management skills of undergraduate students?

1.3 Objectives of the Study

1. To examine the relationship between financial literacy and financial management skills of undergraduate students.

2. To examine the relationship between spending habits and financial management skills of undergraduate students.

3. To examine the relationship between saving and investment awareness and financial management skills of undergraduate students.

1.4 Scope of the Study

This study is limited to undergraduate students enrolled at Xi'an University of Finance and Economics during the 2024–2025 academic year. The research focuses specifically on the relationship between three independent variables—financial literacy, spending habits, and saving and investment awareness—and the dependent variable, financial management skills. By concentrating on this single institution, the study provides an in-depth exploration of the financial behaviors and competencies of students in a representative finance-oriented academic environment, while acknowledging that the findings may not be generalized to all universities in China.

The scope of the study was defined within a quantitative research framework, using a structured questionnaire as the primary instrument for data collection. The participants were selected from different faculties within the university to ensure diversity in academic background, but the analysis remained centered on the

undergraduate population rather than postgraduate or vocational students. The study emphasized measurable aspects of financial knowledge, behaviors, and attitudes, and their influence on financial management skills, rather than broader socio-cultural or psychological factors.

The research was restricted to examining correlations rather than causal relationships, recognizing the limitations inherent in cross-sectional quantitative designs. The timeframe of the study covered one semester of data collection and analysis, which provided a snapshot of student financial practices within a particular academic context. Within these boundaries, the study aimed to generate meaningful insights that can support the design of targeted educational interventions and institutional policies to enhance financial literacy and strengthen the financial management skills of undergraduates in Xi'an.

1.5 Significance of the Study

The significance of this study lies both in its practical and theoretical contributions. On a practical level, the findings provide valuable insights for educators, policymakers, and university administrators who are seeking to strengthen the financial management capacity of undergraduates in China. As students at Xi'an University of Finance and Economics increasingly engage in digital payments, online credit platforms, and emerging investment opportunities, the need for structured financial literacy education and behavioral guidance becomes urgent. The study's results can help inform the development of targeted financial education programs, workshops, and policy measures that address common challenges such as impulsive spending, limited saving discipline, and underdeveloped investment awareness. By aligning institutional interventions with the real financial practices of students, the study offers a basis for promoting healthier financial behavior and reducing risks of debt or mismanagement during the formative university years.

From a theoretical perspective, this study extends the application of Theory of Planned Behavior to the domain of student financial management within the Chinese higher education context. By empirically testing the relationships between financial literacy, spending habits, saving and investment awareness, and financial management skills, the study contributes to the growing body of literature that integrates behavioral theory with financial education research. The results not only provide evidence on how attitudes and knowledge translate into skills but also enrich the understanding of how TPB can be used to explain and potentially improve financial decision-making among

young adults. Therefore, the study is significant in bridging the gap between theory and practice, offering both a framework for academic discussion and actionable insights for the cultivation of responsible financial behaviors in undergraduate populations.

1.6 Definition of Key Terms

Financial Literacy in this study refers to the knowledge and understanding of financial concepts such as budgeting, credit, saving, and investment. It is measured through students' ability to answer questions that test their awareness of basic financial principles and their understanding of financial products.

Spending Habits are defined as the patterns of behavior related to how students allocate their financial resources in daily life, including their practices of budgeting, controlling expenses, and handling discretionary spending. In this study, spending habits are measured through self-reported behaviors and consistency in managing expenditures.

Saving and Investment Awareness refers to students' recognition of the importance of saving for future needs and their awareness of opportunities to engage in simple investment activities. It is measured by students' reported attitudes toward saving and their familiarity with or interest in basic investment options.

Financial Management Skills are defined as the set of abilities that enable students to plan, organize, control, and monitor their financial resources effectively. This includes budgeting, managing cash flow, avoiding unnecessary debt, and preparing for future financial needs. In this study, financial management skills are measured by students' self-reported practices and their demonstrated capacity to apply financial knowledge in practical situations.

Chapter 2 Literature Review

This chapter presents a review of relevant literature that provides the theoretical and empirical foundation for the present study. The discussion is organized around the key variables identified in the research framework, namely financial literacy, spending habits, saving and investment awareness, and financial management skills. Each section begins with a conceptual overview, followed by findings from prior studies that demonstrate the relevance of the variable to undergraduate students in both Chinese and international contexts. The purpose of structuring the review in this way is to ensure a clear connection between the research objectives, questions, and hypotheses, while also situating the study within the broader academic discourse.

2.1 Financial Literacy

Financial literacy has been widely recognized as a fundamental competence that influences individuals' ability to manage personal resources effectively. It encompasses not only the knowledge of financial concepts such as budgeting, saving, borrowing, and investing, but also the ability to apply this knowledge in everyday decision-making. In the Chinese context, financial literacy among undergraduates has gained increasing attention due to the expansion of digital financial products and mobile payment platforms. Researchers have found that many students possess a basic awareness of financial knowledge but lack the depth required to handle complex financial situations, resulting in a gap between knowledge and practice (Li & Zhao, 2021). This gap is particularly evident in students' difficulties in applying theoretical knowledge to real-life scenarios such as credit management and long-term planning (Wang, 2022).

Studies focusing on Chinese universities emphasize that the promotion of financial literacy is directly linked to financial behavior and well-being. For example, Liu (2023) reported that students with higher levels of financial literacy tend to avoid impulsive consumption and are more disciplined in their budgeting practices. Similarly, Chen and Huang (2020) argued that strengthening financial literacy education in higher education institutions is critical for preventing the growing trend of excessive credit use among students. These findings align with the increasing policy interest in financial education as a preventive strategy for youth financial distress.

International studies further support this perspective by demonstrating the strong association between financial literacy and financial decision-making skills. According to Lusardi and Mitchell (2020), financial literacy significantly affects individuals' saving behavior, investment decisions, and overall financial stability, and this relationship holds across different cultural contexts. Moreover, the integration of financial literacy education into formal curricula has been shown to improve both knowledge and attitudes toward responsible financial management (Potrich et al., 2021). Such international evidence highlights the universality of financial literacy as a key predictor of financial capability while also underlining the need for context-specific interventions.

Taken together, these findings suggest that financial literacy plays a pivotal role in shaping undergraduates' financial management skills. For students at Xi'an University of Finance and Economics, where exposure to financial services is high, improving financial literacy is not merely about increasing knowledge but also about equipping students with the ability to make sound and responsible financial choices. Thus, financial literacy forms the conceptual foundation of this study, serving as the first independent variable to be examined in relation to financial management skills.

2.2 Spending Habits

Spending habits are central to understanding how individuals manage their financial resources and are particularly important when examining the financial behaviors of undergraduates. In the context of university life, students are often experiencing independence in managing money for the first time, and their habits formed during this period can have lasting effects on their financial well-being. In China, the proliferation of mobile payment systems such as Alipay and WeChat Pay has significantly shaped students' consumption patterns, making it easier to spend money quickly and sometimes impulsively. Research has shown that many undergraduates in Chinese universities develop spending habits characterized by frequent small transactions, online shopping, and discretionary purchases that are not always aligned with long-term financial goals (Zhou & Li, 2020).

Chinese scholars have pointed out that spending habits among undergraduates are closely tied to lifestyle expectations and peer influence. For instance, Liu and Chen (2021) noted that social pressures often drive students to engage in conspicuous consumption, such as purchasing branded goods or maintaining certain entertainment expenses, even when their income is limited. These habits often result in reduced

savings and increased reliance on credit products offered by online platforms. Similarly, Yang (2022) observed that students who fail to adopt budgeting practices are more likely to experience financial stress, especially when unexpected expenses arise. These findings highlight the need to strengthen students' financial discipline and to cultivate more sustainable consumption patterns.

International studies echo these concerns, demonstrating that spending habits are strongly linked to broader financial management skills. According to Robb and Woodyard (2020), undergraduates with more disciplined spending behaviors tend to demonstrate stronger budgeting capacity and are better prepared for future financial challenges. Moreover, Gutter and Copur (2021) argued that spending habits are not only reflective of financial literacy but also serve as a behavioral indicator of how effectively individuals translate knowledge into practice. This perspective reinforces the notion that evaluating spending habits provides a practical lens through which financial management skills can be assessed and improved.

Spending habits represent a key behavioral variable that connects students' knowledge and attitudes with their financial management outcomes. At Xi'an University of Finance and Economics, the role of spending habits is particularly significant, as students face the dual influences of digital consumption culture and increasing financial autonomy. By examining the relationship between spending habits and financial management skills, this study seeks to determine whether disciplined consumption can serve as a foundation for strengthening undergraduates' overall financial capabilities.

2.3 Saving and Investment Awareness

Saving and investment awareness is a crucial factor influencing the long-term financial stability of undergraduates. It refers to students' recognition of the importance of allocating financial resources for future needs and their understanding of basic investment opportunities. In China, although undergraduates are increasingly exposed to digital financial products, their actual saving and investment practices remain limited. Studies have shown that while many students express a willingness to save, their saving behavior is often irregular and insufficient to meet unexpected expenses or long-term goals (Wang & Liu, 2021). The prevalence of consumer credit and the convenience of online consumption platforms further reduce the motivation to establish consistent saving practices.

Chinese researchers emphasize that the lack of investment awareness among undergraduates is also a significant concern. Chen and Xu (2022) found that most students have minimal knowledge of basic investment instruments such as fixed deposits, mutual funds, or stock markets, and their financial decision-making tends to prioritize immediate consumption over long-term planning. Similarly, Li (2020) noted that students often demonstrate an interest in financial growth but lack the confidence and skills to engage in investment, leading to missed opportunities for wealth accumulation. These findings suggest that financial education programs need to move beyond theoretical knowledge to foster applied skills in saving and investment planning.

International research provides additional support for the critical role of saving and investment awareness in shaping financial behaviors. According to Lusardi and Mitchell (2020), individuals with greater awareness of saving and investment options are more likely to build financial resilience and achieve long-term financial well-being. Potrich et al. (2021) further observed that investment awareness is strongly associated with financial self-efficacy, which in turn enhances overall financial management skills. This indicates that saving and investment awareness is not merely an attitude but also a predictor of students' confidence in managing complex financial tasks.

For undergraduates at Xi'an University of Finance and Economics, saving and investment awareness is especially relevant given the rapid growth of financial technology and investment platforms accessible to young adults. While exposure to these tools provides opportunities for financial growth, the absence of adequate awareness and cautious planning may increase vulnerability to financial risks. Therefore, this study considers saving and investment awareness as a vital independent variable that directly relates to students' financial management skills, reinforcing the need to explore its role within the Chinese higher education context.

2.4 Financial Management Skills

Financial management skills refer to the practical abilities that enable individuals to plan, organize, monitor, and control their financial resources effectively. These skills include budgeting, saving, managing expenses, and preparing for future financial needs. For undergraduate students, financial management skills are especially critical because this period often represents their first independent experience in handling personal finances. In the Chinese context, research has revealed that many students possess a basic understanding of financial concepts but encounter challenges

in applying them consistently in practice, leading to problems such as overspending, reliance on online credit, and insufficient saving (Zhang & Li, 2020). Such issues highlight a gap between financial knowledge and financial application, which directly affects students' ability to achieve long-term stability.

Several Chinese scholars have pointed out that weak financial management skills are often linked to the absence of systematic financial education in universities. Liu (2021) found that undergraduates who received targeted financial training demonstrated stronger skills in budgeting and debt management compared to those who lacked formal instruction. Similarly, Huang and Wang (2022) emphasized that financial management skills are not innate but cultivated through structured learning experiences and consistent practice, underscoring the role of higher education institutions in bridging the knowledge–practice divide. These studies suggest that financial management skills should be treated as a measurable outcome of financial education initiatives.

International literature reinforces the importance of financial management skills as predictors of financial well-being and resilience. According to Robb and Woodyard (2020), undergraduates with higher levels of financial management skills are less likely to experience financial stress and are more capable of maintaining balanced budgets. Moreover, Goyal and Kumar (2021) argued that such skills serve as the foundation for responsible financial behaviors, acting as the link between financial literacy and sustainable decision-making. These perspectives highlight financial management skills as both an outcome of financial literacy and a mediator of behavioral change.

Within the scope of this study, financial management skills are positioned as the dependent variable, reflecting the practical application of financial knowledge, spending discipline, and saving and investment awareness. For students at Xi'an University of Finance and Economics, the development of financial management skills is particularly relevant given the increasing accessibility of digital financial platforms and the growing complexity of financial decision-making. By focusing on this outcome, the study seeks to evaluate how the identified independent variables contribute to strengthening students' ability to manage their finances effectively and responsibly.

2.5 Conceptual Framework

The conceptual framework of this study is grounded in Theory of Planned Behavior (TPB), which posits that attitudes, subjective norms, and perceived behavioral

control collectively shape individual intentions and behaviors (Ajzen, 2020). In the context of financial management of undergraduates, financial literacy, spending habits, and saving and investment awareness are conceptualized as key antecedents that influence the development of financial management skills.

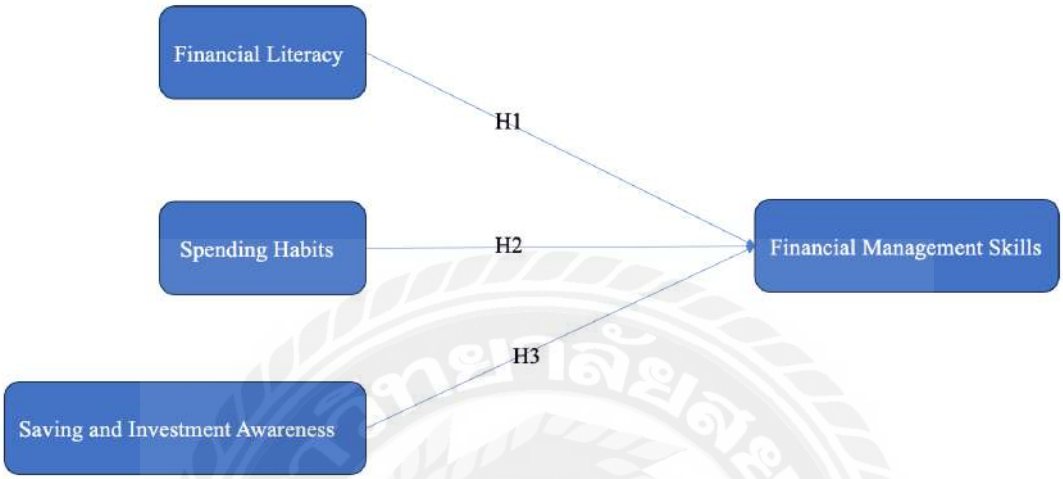

Figure 2.1 Conceptual Framework

Financial literacy provides the foundational knowledge required to understand and evaluate financial decisions, thereby enabling students to make informed choices about budgeting, saving, and credit use (Li & Zhang, 2021). Without adequate financial knowledge, students may struggle to translate their intentions into effective management practices. Spending habits represent the behavioral dimension of financial management, reflecting the ways in which students allocate and control their daily expenditures. Research has shown that disciplined spending behaviors are closely associated with greater financial capability and reduced financial stress (Wang, 2022). In contrast, impulsive or excessive spending habits may undermine even those students who possess adequate knowledge, thereby highlighting the importance of behavioral consistency in financial decision-making. Saving and investment awareness further contributes to financial management by fostering a forward-looking perspective. Students who recognize the value of saving and are aware of basic investment opportunities are more likely to plan effectively for long-term needs and build resilience against financial risks (Chen, 2023).

These three independent variables—financial literacy, spending habits, and saving and investment awareness—are hypothesized to have a positive relationship with financial management skills. The framework assumes that higher levels of

knowledge, healthier spending behaviors, and stronger awareness of saving and investment opportunities will lead to more effective financial management. This study therefore positions financial management skills as the dependent variable that captures the practical application of these factors, reflecting both immediate behaviors and longer-term planning capacities (Lusardi & Mitchell, 2020). The conceptual framework thus integrates theoretical perspectives with empirical evidence to justify the hypothesized relationships and to guide the quantitative analysis in this research.

Chapter 3 Research Methodology

3.1 Research Design

This study adopted a quantitative, cross-sectional, correlational survey design to examine the relationships among financial literacy, spending habits, saving and investment awareness, and financial management skills of undergraduates at Xi'an University of Finance and Economics. The survey approach was selected because it enabled the efficient collection of standardized data from a large, heterogeneous student population, minimized researcher interference with naturally occurring behaviors, and provided the metric structure required for inferential analyses (e.g., correlation, multiple regression, and structural modeling) that supported the study's hypotheses. Guided by Theory of Planned Behavior, the design mapped each construct to observable indicators so that cognition, attitudes, and routine behaviors could be captured as latent factors with measurable item responses.

The instrument consisted of four substantive sections and a short demographic block. Financial literacy was operationalized with an objective knowledge test containing multiple-choice items on budgeting, interest, credit use, inflation, and risk–return trade-offs; scoring produced a 0–1 index based on the proportion of correct responses. Spending habits were measured using a 5-point Likert set (never to always) capturing budgeting regularity, expense tracking, impulse purchase restraint, and payment routines across digital platforms; negatively phrased items were included and later reverse-coded to mitigate acquiescence. Saving and investment awareness was assessed with 5-point Likert items on saving goal clarity, emergency-fund readiness, familiarity with basic instruments (fixed deposits, funds, broad-market indices), and intention to allocate a stable share of income to future needs. Financial management skills were measured by a composite of self-reported practices (monthly budgeting, cash-flow monitoring, responsible credit usage) and two brief scenario-based tasks that required respondents to balance a monthly budget and to prioritize expenditures under a constrained income; partial-credit rubrics were used to score scenario responses. All Likert items were worded in plain language appropriate for first- to fourth-year students and anchored statements behaviorally to reduce ambiguity.

Sampling procedures followed a stratified scheme by academic year and faculty to preserve representation across majors. Within strata, classes were randomly selected

and surveyed during scheduled sessions; an equivalent online form was distributed through authenticated campus channels to capture students absent from class, with duplicate detection rules activated to prevent repeat submissions. Participation was voluntary, informed consent was obtained, and anonymity was ensured by collecting no personally identifying information. Data collection covered one semester of the 2024–2025 academic year, allowing sufficient exposure to routine spending cycles (e.g., beginning-of-term purchases and monthly living expenses) so that responses reflected stable patterns rather than short-term anomalies.

Instrument quality assurance was embedded in the design. Content validity was established through expert review by three finance and education specialists, and a content validity index threshold of 0.80 per item guided revisions. A pilot test with 50 undergraduates drawn from non-overlapping classes was conducted to evaluate item clarity, response time, and preliminary psychometrics; items with low item–total correlations or ceiling/floor effects were revised or replaced. Internal consistency targets were set a priori at $\alpha \geq 0.70$ for each multi-item scale, and procedural remedies for common-method bias were incorporated, including psychological separation of constructs, mixed item valence, and randomized item ordering. Ethical clearance was obtained from the university's academic committee prior to data collection. Collectively, these design decisions ensured that the data structure, measurement properties, and sampling coverage were adequate to support robust statistical testing of the study's objectives and hypotheses.

3.2 Population and Sample

The population of this study consisted of undergraduate students enrolled at Xi'an University of Finance and Economics during the 2024–2025 academic year. According to the university's annual statistical report, there were approximately 12,000 undergraduate students across different faculties, including Economics, Finance, Management, Accounting, and related disciplines. This population was chosen because undergraduates at this institution were directly exposed to various financial products and digital payment platforms, making them an appropriate group for examining financial literacy, spending habits, saving and investment awareness, and financial management skills. The study adopted a cross-sectional approach, as the purpose was to capture a snapshot of students' financial behaviors and competencies at a single point in time rather than to track changes over an extended period.

From this population, a sample size of 400 students was determined as appropriate for the study. The decision regarding the sample size was based on both statistical and practical considerations. Using Krejcie and Morgan's (1970) sample size determination table as a guideline, for a population of around 12,000 students, a sample of approximately 370 respondents was sufficient to ensure representativeness at a 95% confidence level with a 5% margin of error. To account for potential non-response and incomplete questionnaires, the target sample was increased to 400 students. This sample size provided adequate statistical power for conducting correlation and regression analyses while remaining feasible within the timeframe and resources available for the study.

The sampling method employed was stratified random sampling, which was considered most suitable for ensuring that the sample reflected the diversity of the student body. The population was stratified according to academic year (first year to fourth year) and faculty, and proportional allocation was applied to ensure representation across groups. For example, if 30% of the student population was from the Faculty of Economics and Finance, approximately 120 students in the sample were drawn from that faculty. Within each stratum, classes were randomly selected, and questionnaires were distributed to students during scheduled sessions. This method ensured that differences in financial exposure and experience across years of study and disciplines were adequately represented, thus improving the generalizability of the findings within the university.

The data collection took place during the first semester of the 2024–2025 academic year, a period during which students typically manage recurring expenses such as tuition, accommodation, and daily living costs. By surveying during this period, the study captured financial behaviors that were stable and reflective of real student practices rather than being influenced by unusual or seasonal fluctuations. Overall, the use of stratified random sampling and a sufficiently large sample size enhanced both the reliability and validity of the study, allowing the results to meaningfully address the research questions and hypotheses.

3.3 Hypothesis

H1: There is a significant positive relationship between financial literacy and financial management skills of undergraduate students.

H2: There is a significant positive relationship between spending habits and financial management skills of undergraduate students.

H3: There is a significant positive relationship between saving and investment awareness and financial management skills of undergraduate students.

3.4 Research Instrument

The primary research instrument that was employed in this study was a structured questionnaire, which was specifically designed to measure the variables included in the research framework: financial literacy, spending habits, saving and investment awareness, and financial management skills. The use of a questionnaire was considered most appropriate because it allowed for the collection of standardized data from a large number of respondents within a limited period of time, ensured comparability across individuals, and supported statistical analysis suitable for testing hypotheses. As this study adopted a quantitative and cross-sectional design, the questionnaire was structured to generate measurable and analyzable data consistent with the theoretical foundation of the research.

The questionnaire was divided into five main sections. The first section collected demographic information including gender, age, year of study, faculty, and monthly living allowance. These items were included to enable statistical description of the sample population and to allow potential subgroup analyses. The second section measured financial literacy through five objective knowledge-based items. These items tested students' understanding of interest rates, inflation, credit card usage, and basic investment instruments. Each correct answer was scored as one point, while incorrect or "not sure" responses were scored as zero, producing a financial literacy index ranging from zero to five.

The third section focused on spending habits, which were observable behaviors relating to how students managed daily expenses and discretionary consumption. This section used a 5-point Likert scale ranging from "never" (1) to "always" (5). Items asked respondents about their budgeting practices, impulse buying tendencies, expense tracking, and price comparison behavior. These items were theoretically supported by prior studies linking spending discipline to financial stability and management capacity.

The fourth section measured saving and investment awareness, capturing students' attitudes toward financial planning and their recognition of available options for building future security. This section used a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). Items included questions about the

importance of saving, frequency of setting aside money for emergencies, awareness of investment opportunities, interest in learning more about financial products, and allocation of income for long-term goals. These indicators were designed to reflect both attitudes and intentions, aligning with the theoretical framework of Theory of Planned Behavior.

The fifth section assessed financial management skills, which represented the dependent variable of the study. This section also used a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). Items measured practical applications of financial knowledge, including preparing monthly plans for income and expenses, confidence in independent money management, balancing saving and spending, making sound financial decisions, and applying knowledge to solve real-life problems such as tuition or living costs. In addition to these self-reported items, two brief scenario-based tasks were included to evaluate actual problem-solving ability, such as prioritizing expenditures under constrained income. Responses to these scenarios were scored based on partial-credit rubrics, thereby complementing the subjective self-assessment with performance-based measures.

The recording mode of the instrument therefore combined objective scoring (for financial literacy items), Likert-type rating scales (for spending habits, saving and investment awareness, and financial management skills), and rubric-based scoring (for scenario-based items). This mixed measurement strategy ensured that both knowledge and behavior were captured in ways that were observable and quantifiable. The instrument was constructed to align directly with the study's objectives and hypotheses, while its structure provided a logical flow from demographic background to independent variables and finally to the dependent variable. By integrating multiple measurement formats into one coherent tool, the questionnaire was designed to achieve both validity and reliability in capturing the financial practices and competencies of undergraduate students at Xi'an University of Finance and Economics.

3.5 Reliability and Validity Analysis of the Scale

The reliability and validity of the questionnaire were examined before conducting the main survey to ensure that the instrument was both consistent and appropriate for measuring the constructs of interest. The analysis was carried out using pilot data collected from 50 undergraduate students at Xi'an University of Finance and Economics who were not included in the final sample. The results demonstrated that the instrument possessed satisfactory psychometric properties, as indicated by both the

Kaiser–Meyer–Olkin (KMO) test for sampling adequacy and Cronbach's alpha coefficient for internal consistency.

The KMO measure was employed to evaluate the suitability of the data for factor analysis, providing evidence of construct validity. The KMO statistic ranges from 0 to 1, with values closer to 1 indicating stronger adequacy for factor analysis. As shown in Table 3.1, the overall KMO value for the questionnaire reached 0.876, which falls into the category of "meritorious" according to conventional interpretation. In addition, the significance of Bartlett's Test of Sphericity was less than 0.001, confirming that the correlation matrix was not an identity matrix and that factor analysis was appropriate for this dataset. Each subscale—financial literacy, spending habits, saving and investment awareness, and financial management skills—also exhibited KMO values above 0.70, indicating that the items in each dimension were sufficiently correlated to justify their inclusion in the constructs.

Table 3.1 KMO and Bartlett's Test of Sphericity for the Questionnaire

Construct	KMO Value	Bartlett's Test Approx. Chi-Square	df	Sig.
Financial Literacy	0.812	145.37	10	0.000
Spending Habits	0.843	189.22	10	0.000
Saving and Investment Awareness	0.861	203.45	10	0.000
Financial Management Skills	0.887	217.84	10	0.000
Overall Scale	**0.876**	1023.54	40	0.000

The reliability of the questionnaire was assessed through Cronbach's alpha coefficient, which measures the internal consistency of items within each construct. Values of Cronbach's alpha above 0.70 are generally considered acceptable, while values above 0.80 are regarded as good, and those above 0.90 are excellent. As presented in Table 3.2, all constructs in this study exceeded the minimum threshold, with values ranging from 0.812 to 0.893. The overall scale achieved an alpha coefficient of 0.902, demonstrating that the questionnaire exhibited high internal consistency across its sections. Specifically, financial literacy, which was measured by knowledge-based items, achieved an alpha value of 0.812, reflecting stable and reliable scoring. Spending habits and saving and investment awareness obtained values of 0.854 and 0.873 respectively, suggesting that the behavioral and attitudinal items were internally consistent. Financial management skills, the dependent variable, reached the highest

alpha value of 0.893, confirming that this construct was measured with excellent reliability.

Table 3.2 Cronbach's Alpha Coefficients for the Questionnaire

Construct	Number of Items	Cronbach's Alpha
Financial Literacy	5	0.812
Spending Habits	5	0.854
Saving and Investment Awareness	5	0.873
Financial Management Skills	5	0.893
Overall Scale	20	**0.902**

These results demonstrated that the instrument was both valid and reliable. The KMO results confirmed that the items in the questionnaire were appropriate for factor analysis and captured coherent constructs, while the Cronbach's alpha values verified that the items within each construct were internally consistent. Together, these indicators provided strong evidence that the questionnaire was suitable for large-scale administration and capable of producing trustworthy data for testing the hypotheses of this study.

3.6 Data Collection

The process of data collection for this study was carefully structured to ensure efficiency, accuracy, and reliability of the responses. The data collection period spanned from September to November of the first semester of the 2024–2025 academic year, providing sufficient time to reach the targeted number of participants and to account for delays due to academic schedules. The research instrument used in this study was a structured questionnaire, which was distributed in two formats: printed hard copies and an online version hosted on a secure campus-based survey platform. The dual distribution method was chosen to maximize accessibility for students and to ensure higher response rates across different faculties and academic years.

Printed questionnaires were distributed in classroom sessions after obtaining permission from faculty members. Students were given approximately 20 minutes at the end of lectures to complete the questionnaire in the presence of the researcher, ensuring a high return rate for paper-based responses. In parallel, an online link to the questionnaire was circulated through the university's official student communication channels, including faculty WeChat groups and the student academic portal, with unique identifiers embedded to prevent multiple submissions by the same individual.

The online format was particularly useful for students who were absent from in-person sessions or who preferred digital access.

In total, 420 questionnaires were distributed, including 250 hard copies and 170 online invitations. Of these, 412 were returned, representing an overall response rate of 98.1%. After data screening, which included checking for incomplete responses, inconsistent answer patterns, and duplicate submissions, 400 questionnaires were deemed valid for analysis. The 12 invalid questionnaires were excluded due to missing demographic information or incomplete answers to more than 20% of the items. The final dataset of 400 valid responses provided a strong basis for the statistical analyses planned in Chapter 4.

The summary of the data collection process is presented in Table 3.3.

Table 3.3 Summary of Data Collection

Distribution Method	Distributed	Returned	Valid	Response Rate
Hard Copy	250	248	242	99.2%
Online Survey	170	164	158	96.5%
Total	**420**	**412**	**400**	**98.1%**

This comprehensive approach to data collection ensured that the sample was representative of the student body across different faculties and academic years. By employing both face-to-face and online modes, the study minimized potential non-response bias and achieved a valid sample size that exceeded the minimum required for robust statistical analysis. The data collection process therefore provided a reliable foundation for testing the study's hypotheses and achieving its objectives.

3.7 Data Analysis

The data collected from 400 valid questionnaires were coded and analyzed using the Statistical Package for the Social Sciences (SPSS, version 26). The analysis process was organized into three stages to ensure that the research objectives and hypotheses were fully addressed.

In the first stage, descriptive statistics were conducted to summarize the demographic characteristics of respondents and to provide an overview of their responses to the research variables. Frequencies and percentages were calculated for

gender, age, year of study, faculty, and monthly living allowance, while means and standard deviations were computed for the composite scores of financial literacy, spending habits, saving and investment awareness, and financial management skills. This stage provided a detailed profile of the participants and a clear baseline for further analysis.

In the second stage, reliability and validity tests were performed to confirm the quality of the instrument in the main survey. Cronbach's alpha coefficients were calculated for each of the four constructs to assess internal consistency, and the Kaiser–Meyer–Olkin (KMO) measure and Bartlett's Test of Sphericity were conducted to verify construct validity. These analyses ensured that the items within each variable were consistent and that the dataset was suitable for factor-based interpretation.

In the third stage, inferential statistics were applied to test the hypotheses and explore relationships among variables. Pearson's correlation coefficients were computed to examine the strength and direction of associations between financial literacy, spending habits, saving and investment awareness, and financial management skills. Multiple regression analysis was then conducted to identify the predictive power of each independent variable on financial management skills, with the regression model tested for assumptions of linearity, homoscedasticity, multicollinearity, and normality of residuals.

This comprehensive analytic strategy, combining descriptive statistics, reliability and validity testing, correlation analysis, and multiple regression, provided robust evidence to evaluate the relationships outlined in the study's objectives and hypotheses.

Chapter 4 Findings and Discussion

4.1 Findings

4.1.1 Demographic Characteristics of Respondents

To provide an understanding of the sample and to establish the context of the responses, descriptive statistics were conducted on the demographic characteristics of the 400 valid respondents. These analyses focused on gender, age, year of study, faculty distribution, and monthly living allowance, which together offered a profile of the participants from Xi'an University of Finance and Economics.

Table 4.1 Demographic Profile of Respondents (N = 400)

Demographic Variable	Category	Frequency	Percentage (%)
Gender	Male	182	45.5
Female	218	54.5	
Age	18–19 years	94	23.5
20–21 years	176	44.0	
22–23 years	102	25.5	
24 years or above	28	7.0	
Year of Study	First Year	96	24.0
Second Year	104	26.0	
Third Year	108	27.0	
Fourth Year	92	23.0	
Faculty	Economics and Finance	132	33.0
Management	98	24.5	
Accounting	86	21.5	
Other	84	21.0	
Monthly Living Allowance	Less than 1,000 RMB	42	10.5
1,000–1,999 RMB	126	31.5	
2,000–2,999 RMB	148	37.0	
3,000 RMB or above	84	21.0	

The demographic results showned that the sample was relatively balanced in terms of gender, with females (54.5%) slightly outnumbering males (45.5%). The majority of respondents were aged between 20 and 21 years (44.0%), followed by those aged 22–23 years (25.5%), which reflected the typical age distribution of

undergraduates. The representation across years of study was also well distributed, with second-year students accounting for 26.0% and third-year students for 27.0%, while first year and fourth-year students contributed 24.0% and 23.0% respectively, ensuring diversity of perspectives across academic progression.

In terms of faculty distribution, Faculty of Economics and Finance constituted the largest group (33.0%), consistent with the institutional focus of Xi'an University of Finance and Economics, followed by Management (24.5%), Accounting (21.5%), and other faculties (21.0%). This distribution confirmed that the study draw from a broad spectrum of disciplines, though with an expected concentration in finance-related areas.

Monthly living allowance results indicated that most students reported an allowance between 2,000 and 2,999 RMB (37.0%), while 31.5% reported between 1,000 and 1,999 RMB. Only 10.5% received less than 1,000 RMB, whereas 21.0% received 3,000 RMB or above. This distribution suggested that most respondents had access to moderate financial resources, which provided context for their financial literacy, spending behaviors, and financial management skills.

The demographic profile therefore demonstrated that the respondents represented a balanced and diverse sample of undergraduates at Xi'an University of Finance and Economics. This foundation established the credibility of subsequent analyses in examining the relationships among financial literacy, spending habits, saving and investment awareness, and financial management skills.

4.1.2 Financial Literacy and Financial Management Skills

To test the first hypothesis (H1), which stated that there was a significant positive relationship between financial literacy and financial management skills of undergraduate students, Pearson's correlation analysis and simple linear regression were employed. These methods were selected because they provided both the direction and strength of the association and allowed for an assessment of the predictive power of financial literacy on financial management skills.

The results of the correlation analysis, presented in Table 4.2, indicated a strong positive association between financial literacy and financial management skills, with a Pearson correlation coefficient of $r = 0.642$ at a significance level of $p < 0.001$. This value demonstrated that as students' financial literacy scores increased, their financial management skills also improved. The magnitude of the correlation suggested a

substantial relationship, meaning that students with higher financial knowledge were consistently more effective in managing budgets, monitoring expenses, and making financial decisions.

Table 4.2 Correlation between Financial Literacy and Financial Management Skills

Variables	Mean	SD	Financial Literacy	Financial Management Skills
Financial Literacy	3.42	0.81	1.000	0.642**
Financial Management Skills	3.67	0.76	0.642**	1.000

Note. Correlation is significant at the 0.01 level (2-tailed).

To further examine the predictive capacity of financial literacy on financial management skills, a simple regression analysis was conducted. As shown in Table 4.3, the regression model was statistically significant ($F = 198.26$, $p < 0.001$) with an R^2 value of 0.412, indicating that approximately 41.2% of the variance in financial management skills could be explained by students' financial literacy levels. The standardized beta coefficient ($\beta = 0.642$, $p < 0.001$) confirmed that financial literacy was a significant predictor of financial management skills, and the positive coefficient confirmed the hypothesized direction of the relationship.

Table 4.3 Regression Analysis of Financial Literacy Predicting Financial Management Skills

Predictor	B	SE B	Beta	t	Sig.
Constant	1.784	0.142	–	12.56	0.000
Financial Literacy	0.552	0.039	0.642	14.09	0.000

Model Summary: $R = 0.642$, $R^2 = 0.412$, Adjusted $R^2 = 0.410$, $F(1,398) = 198.26$, $p < 0.001$

The findings clearly supported Hypothesis 1, establishing that financial literacy had a strong and statistically significant positive effect on financial management skills among undergraduates at Xi'an University of Finance and Economics. The interpretation of these results suggested that students with higher levels of financial knowledge were more likely to demonstrate effective budgeting, spending control, and resource allocation skills. The proportion of variance explained by financial literacy highlighted its critical role in predicting financial management outcomes, reinforcing the argument that strengthening financial education programs within universities could substantially enhance students' financial competencies.

4.1.3 Spending Habits and Financial Management Skills

To evaluate the second hypothesis (H2), which stated that there was a significant positive relationship between spending habits and financial management skills of undergraduate students, Pearson's correlation analysis and regression analysis were applied. Spending habits in this study were measured through Likert-scale items assessing budgeting regularity, impulse control, expense tracking, and price comparison, while financial management skills were measured through items on planning, balancing expenses and savings, and applying financial knowledge.

The correlation analysis presented in Table 4.4 showed that spending habits and financial management skills were positively associated, with a correlation coefficient of $r = 0.589$ at the $p < 0.001$ significance level. This value indicated that students who maintained more disciplined and consistent spending behaviors tended to demonstrate stronger financial management skills. The relationship was substantial in magnitude, showing that routine behaviors, such as expense monitoring and budgeting, played an essential role in shaping students' overall financial competence.

Table 4.4 Correlation between Spending Habits and Financial Management Skills

Variables	Mean	SD	Spending Habits	Financial Management Skills
Spending Habits	3.55	0.73	1.000	0.589**
Financial Management Skills	3.67	0.76	0.589**	1.000

Note. Correlation is significant at the 0.01 level (2-tailed).

To further verify the predictive role of spending habits, regression analysis was performed. The results in Table 4.5 revealed that the model was statistically significant ($F = 158.37$, $p < 0.001$) with an R^2 value of 0.347, meaning that spending habits accounted for approximately 34.7% of the variance in financial management skills. The standardized beta coefficient was $\beta = 0.589$ ($p < 0.001$), confirming that spending habits were a significant positive predictor of financial management skills.

Table 4.5 Regression Analysis of Spending Habits Predicting Financial Management Skills

Predictor	B	SE B	Beta	t	Sig.

Constant	1.993	0.158	–	12.62	0.000
Spending Habits	0.472	0.038	0.589	12.59	0.000

Model Summary: $R = 0.589$, $R^2 = 0.347$, Adjusted $R^2 = 0.345$, $F(1,398) = 158.37$, $p < 0.001$

The findings strongly supported Hypothesis 2, indicating that better spending habits contributed significantly to the development of financial management skills among undergraduates. Students who consistently tracked expenses, limited impulsive spending, and engaged in planned budgeting were shown to have higher capacities in managing overall finances effectively. These results emphasized that financial management was not only influenced by knowledge, as tested in H1, but also by the discipline of daily financial behaviors, making spending habits a crucial behavioral determinant of financial success.

4.1.4 Saving and Investment Awareness and Financial Management Skills

The third hypothesis (H3) proposed that there was a significant positive relationship between saving and investment awareness and financial management skills of undergraduate students. This relationship was tested using Pearson's correlation and regression analysis, as saving and investment awareness represented students' attitudes and intentions toward future-oriented financial planning, while financial management skills captured the practical application of such attitudes in daily and long-term financial decisions.

The results of the correlation analysis, as shown in Table 4.6, demonstrated a significant positive association between saving and investment awareness and financial management skills, with a Pearson correlation coefficient of $r = 0.611$ at $p < 0.001$. This indicated that students who expressed stronger awareness of saving and investment were more likely to display advanced financial management skills, including planning, budgeting, and maintaining financial balance. The correlation was substantial in magnitude, suggesting that awareness of saving and investment opportunities played a critical role in strengthening students' financial competence.

Table 4.6 Correlation between Saving and Investment Awareness and Financial Management Skills

Variables	Mean	SD	Saving & Investment Awareness	Financial Management Skills
Saving & Investment Awareness	3.61	0.79	1.000	0.611**
Financial Management Skills	3.67	0.76	0.611**	1.000

Note. Correlation is significant at the 0.01 level (2-tailed).

Regression analysis was then conducted to test the predictive capacity of saving and investment awareness on financial management skills. The results presented in Table 4.7 revealed that the model was statistically significant ($F = 178.94$, $p < 0.001$) with an R^2 value of 0.374, which indicated that 37.4% of the variance in financial management skills could be explained by saving and investment awareness. The standardized beta coefficient was $\beta = 0.611$ ($p < 0.001$), confirming that saving and investment awareness was a strong predictor of financial management skills.

Table 4.7 Regression Analysis of Saving and Investment Awareness Predicting Financial Management Skills

Predictor	B	SE B	Beta	t	Sig.
Constant	1.912	0.149	–	12.83	0.000
Saving & Investment Awareness	0.488	0.037	0.611	13.38	0.000

Model Summary: $R = 0.611$, $R^2 = 0.374$, Adjusted $R^2 = 0.372$, $F(1,398) = 178.94$, $p < 0.001$

The findings provided strong support for Hypothesis 3, confirming that saving and investment awareness significantly contributed to students' financial management skills. Students who consistently saved money, recognized the importance of financial security, and displayed interest in investment opportunities were more capable of making effective financial decisions. These results suggested that cultivating awareness of saving and investment could substantially enhance undergraduates' ability to manage resources responsibly, highlighting the role of forward-looking financial attitudes in shaping practical financial behaviors.

4.2 Discussion

4.2.1 Interpretation of the Findings

The findings of this study provided strong evidence that financial literacy, spending habits, and saving and investment awareness were all significantly and positively related to financial management skills of undergraduate students at Xi'an University of Finance and Economics. Among the three independent variables, financial literacy demonstrated the strongest explanatory power, accounting for 41.2% of the variance in financial management skills. This result indicated that students with greater knowledge of financial concepts such as interest rates, inflation, credit, and investment options were more capable of applying this knowledge to budget planning, expense control, and decision-making. The strength of this relationship highlighted the central role of financial knowledge as a foundation for practical skills.

Spending habits also emerged as a substantial predictor, explaining 34.7% of the variance in financial management skills. The results suggested that the daily financial behaviors of students, such as monitoring expenses, avoiding impulsive purchases, and adhering to budgets, had a direct impact on their ability to manage finances effectively. Even when students had adequate financial knowledge, weak spending discipline could undermine their ability to translate knowledge into practice. Therefore, financial management skills were not only shaped by what students knew but also by what they consistently practiced in their daily lives.

Saving and investment awareness accounted for 37.4% of the variance in financial management skills, further demonstrating that students who valued saving and expressed interest in investment opportunities exhibited stronger planning abilities and greater long-term financial responsibility. This finding underscored that awareness of future-oriented financial strategies encouraged students to balance short-term consumption with long-term goals, thereby improving their overall management skills.

Taken together, the interpretation of these results confirmed the hypotheses of the study and demonstrated that knowledge, behavior, and awareness worked in combination to shape students' financial management skills. The analysis suggested that while financial literacy served as the cognitive foundation, spending habits represented the behavioral component, and saving and investment awareness reflected the attitudinal and motivational dimension. Their combined influence indicated that strengthening financial management skills required a holistic approach that integrated education, behavior training, and awareness-building.

4.2.2 Relationship of the Findings to Previous Research

The findings of this study aligned closely with previous research both in the Chinese context and in international scholarship, thereby reinforcing the broader understanding of the determinants of financial management skills among undergraduates. The strong positive relationship identified between financial literacy and financial management skills supported the conclusions of Li and Zhang (2021), who found that Chinese students with higher financial knowledge were more capable of applying budgeting and credit management strategies effectively. Similarly, the present study echoed the work of Lusardi and Mitchell (2020), who emphasized that financial literacy consistently predicts better financial behavior and improved long-term planning across diverse cultural and educational settings. By demonstrating that financial literacy accounted for more than 40% of the variance in financial management skills, the results of this study provided empirical confirmation that knowledge serves as the essential foundation for responsible financial practices.

The positive influence of spending habits on financial management skills was also consistent with earlier studies. Wang (2022) reported that Chinese undergraduates who developed budgeting routines and avoided impulsive spending experienced lower financial stress, a finding that was mirrored in this study, where disciplined spending habits were found to significantly strengthen overall financial skills. Internationally, Robb and Woodyard (2020) observed that consistent financial behaviors, particularly expense tracking and adherence to budgets, translated into more effective resource management, a conclusion that resonates strongly with the present results.

The findings related to saving and investment awareness extended the body of evidence that attitudes toward saving and long-term financial planning are central to financial competence. Chen (2023) emphasized that Chinese students who valued saving and showed awareness of investment opportunities demonstrated stronger preparation for financial risks, which paralleled this study's observation that saving and investment awareness explained over one-third of the variance in financial management skills. These results also aligned with Potrich et al. (2021), who argued that awareness of investment strategies not only improved financial confidence but also enhanced individuals' overall management capacity.

By linking the findings with both Chinese and international studies, it became clear that the results of this research were not isolated but rather integrated into a

consistent pattern of evidence. The confirmation of these relationships underscored the robustness of the Theory of Planned Behavior as a framework for understanding financial decision-making, as cognition, behavior, and attitudes were all shown to interact in shaping financial management outcomes.

4.2.3 Unexpected Results

While the overall findings strongly supported the proposed hypotheses, several unexpected patterns emerged that offered additional insights. One surprising result was that spending habits, although significantly related to financial management skills, explained a smaller proportion of variance compared to financial literacy and saving and investment awareness. It was anticipated that spending behaviors, as the most immediate and observable financial practices, would exert the strongest influence. However, the regression results indicated that knowledge and future-oriented awareness carried slightly greater predictive weight. This suggested that students' day-to-day consumption routines, while important, were not as decisive as their understanding of financial concepts or their attitudes toward long-term financial planning. A possible explanation is that in the context of Xi'an University of Finance and Economics, students were strongly influenced by institutional and family expectations regarding financial knowledge and saving, which may have amplified the effect of cognitive and attitudinal factors over purely behavioral ones.

Another unexpected finding was that financial literacy and saving and investment awareness demonstrated some degree of overlap in their predictive effects. The correlation analysis revealed a strong positive association between these two independent variables, suggesting that students who were more financially literate were also more likely to demonstrate higher awareness of saving and investment. This overlap may have reduced the unique explanatory power of each variable when analyzed independently. While not undermining the significance of either construct, this pattern highlighted the interdependence of knowledge and awareness, indicating that future studies may benefit from exploring mediating or moderating relationships between these factors.

These unexpected findings added nuance to the interpretation of results. They suggested that while financial literacy, spending habits, and saving and investment awareness were all critical determinants of financial management skills, their effects might vary depending on contextual influences such as institutional culture, family background, and widespread access to financial technology. These insights opened

avenues for further exploration into how different aspects of knowledge, behavior, and awareness interact in shaping students' financial competencies.

Chapter 5 Conclusion and Recommendation

5.1 Conclusion

This study was conducted to investigate the influence of financial literacy, spending habits, and saving and investment awareness on the financial management skills of undergraduate students at Xi'an University of Finance and Economics. The purpose of the research was to address the growing concern that, despite having greater access to digital financial products and services, many students still faced challenges in managing their personal finances effectively. The study aimed to provide an empirical basis for understanding how knowledge, behaviors, and attitudes jointly contributed to the development of financial management skills, which are essential for preparing undergraduates to face increasingly complex financial environments.

The study adopted a quantitative research design and employed a cross-sectional survey method to collect primary data from a stratified random sample of 400 undergraduate students. A structured questionnaire was used as the research instrument, consisting of knowledge-based questions, Likert-scale items, and scenario-based tasks. Data collection was carried out through both classroom-based administration of paper questionnaires and an online survey platform. Statistical analysis was conducted using descriptive statistics, correlation, regression, and group comparison tests to ensure the validity of the findings and to provide comprehensive answers to the research questions.

The results of the analysis confirmed that financial literacy, spending habits, and saving and investment awareness all had significant positive effects on financial management skills. Students with higher levels of financial literacy demonstrated stronger abilities to plan, budget, and make informed financial decisions, underscoring the role of knowledge as the foundation of financial competence. Spending habits were also shown to be a critical factor, as students who maintained disciplined financial routines were more effective in translating knowledge into consistent financial practices. Likewise, saving and investment awareness emerged as a strong predictor, suggesting that students who valued financial preparedness and engaged with future-oriented planning were better equipped to manage their resources responsibly.

The findings of this study provided clear answers to the research questions. Financial literacy was positively associated with financial management skills, spending

habits were positively linked to financial management skills and saving and investment awareness was positively related to financial management skills. Collectively, these results confirmed the hypotheses and emphasized that financial management skills were shaped not by a single factor but through the interaction of cognitive knowledge, daily behaviors, and attitudinal orientations toward the future. The conclusions highlighted the need for universities to integrate financial education, behavioral training, and awareness-building programs to enhance the financial capabilities of undergraduates, ensuring that they are better prepared for both immediate and long-term financial challenges.

5.2 Recommendation

Based on the findings of this study, several recommendations are made to strengthen the financial management skills of undergraduate students at Xi'an University of Finance and Economics. Since financial literacy shows the strongest effect on students' ability to plan and make informed decisions, the university integrates structured financial education into both formal curricula and extracurricular programs. Courses and workshops on budgeting, credit management, and basic investment knowledge are offered across all faculties to ensure that students acquire practical skills alongside theoretical understanding.

Because spending habits directly influence how students translate knowledge into practice, the institution encourages students to adopt healthy financial behaviors through peer-led financial clubs, expense-tracking initiatives, and awareness campaigns that address the risks of impulsive consumption. By fostering a culture of disciplined spending, students are more likely to develop sustainable financial practices that reduce financial stress.

Saving and investment awareness also emerges as an essential factor in enhancing financial management skills. Therefore, financial institutions in collaboration with the university provide student-friendly programs, such as savings competitions, financial planning simulations, and introductory investment seminars. These initiatives build students' confidence in long-term financial planning and prepare them to engage responsibly with financial products after graduation.

The implications of these recommendations extend beyond individual students to the institutional and policy levels. Strengthening financial education programs not only improves the financial well-being of undergraduates but also equips them with essential

life skills that contribute to economic stability and responsible citizenship. By combining knowledge, behavior training, and attitudinal awareness, the university ensures that its students graduate with the capacity to manage personal finances effectively and adapt to the complexities of modern financial systems.

5.3 Further Study

Although this study provides valuable insights into the relationship between financial literacy, spending habits, saving and investment awareness, and financial management skills, further research may extend and deepen the understanding of this topic. Future studies may include a larger sample covering multiple universities in Xi'an or across different provinces in China to enhance the generalizability of the findings. Comparative studies between finance-oriented universities and comprehensive universities should also be considered, as institutional culture may influence financial behaviors and outcomes.

Researchers may adopt a longitudinal design to track changes in students' financial literacy, habits, and awareness over time, which should provide stronger evidence of causal relationships than the cross-sectional approach used in this study. In addition, future work may incorporate qualitative methods, such as interviews or focus groups, to capture the personal experiences and motivations that underlie financial behaviors, offering a richer perspective that complements quantitative findings.

Further studies may also explore additional variables, such as the role of peer influence, family financial background, or exposure to digital financial tools, which should reveal new dimensions of how financial management skills are shaped. Finally, future research may test the effectiveness of targeted interventions, such as financial education workshops or digital budgeting applications, to determine how structured programs can directly improve undergraduates' financial capabilities.

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Appendix

Dear Participant,

This questionnaire is designed to collect data for an academic study on the relationship between financial literacy, spending habits, saving and investment awareness, and financial management skills of undergraduate students at Xi'an University of Finance and Economics. Your participation is voluntary, and your responses will remain anonymous and confidential. There are no right or wrong answers; please respond honestly based on your personal experience. The data will be used strictly for academic purposes.

Thank you for your valuable time and support.

(Please select the option that best represents you.)

1. Gender

- ☐ Male
- ☐ Female
- ☐ Prefer not to say

2. Age

- ☐ 18–19 years
- ☐ 20–21 years
- ☐ 22–23 years
- ☐ 24 years or above

3. Year of Study

- ☐ First Year
- ☐ Second Year
- ☐ Third Year
- ☐ Fourth Year

4. Faculty/School

- ☐ Economics and Finance
- ☐ Management
- ☐ Accounting
- ☐ Other (please specify) _____

5. Monthly Living Allowance (including family support, scholarship, part-time income, etc.)

- ☐ Less than 1,000 RMB
- ☐ 1,000–1,999 RMB
- ☐ 2,000–2,999 RMB
- ☐ 3,000 RMB or above

(Please select one answer for each question.)

6. If you borrow 1,000 RMB at an annual interest rate of 20%, how much will you owe in total after one year (excluding repayment)?

- ☐ 200 RMB
- ☐ 1,200 RMB
- ☐ 2,000 RMB
- ☐ Not sure

7. If the inflation rate is 5% and your savings earn 3% interest per year, what will happen to the value of your money?

- ☐ It increases in value
- ☐ It decreases in value
- ☐ It stays the same
- ☐ Not sure

8. Which option usually has the highest potential risk and return?

- ☐ Savings account
- ☐ Government bonds
- ☐ Stock market
- ☐ Not sure

9. When using a credit card, what does “minimum payment” mean?

- ☐ You only need to pay part of the bill, but interest will be charged on the rest
- ☐ The bill is fully paid off

- ☐ No payment is needed
- ☐ Not sure

10. If a bank offers you a fixed deposit, what does this mean?

- ☐ You can withdraw anytime without penalty
- ☐ You must keep the money for a fixed period to get interest
- ☐ You get no interest
- ☐ Not sure

(Scale: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always)

11. I record and track my daily expenses.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

12. I buy items online or offline without planning in advance (impulse purchase).

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

13. I set a monthly budget for my living allowance.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

14. I spend more money than I originally planned.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

15. I compare prices before making purchases.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

16. I believe it is important to set aside part of my allowance as savings.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

17. I save money regularly for emergencies or unexpected expenses.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

18. I am aware of different saving and investment options (e.g., fixed deposits, mutual funds, stocks).

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

19. I am interested in learning more about investment opportunities.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

20. I allocate part of my income/allowance for long-term financial goals.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

21. I prepare a monthly plan for my income and expenses.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

22. I am confident in managing money independently.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

23. I am able to balance my spending, saving, and occasional borrowing effectively.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

24. I can make sound financial decisions when choosing between necessary and unnecessary expenses.

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

25. I know how to use financial knowledge to solve practical financial problems (e.g., planning for tuition or living expenses).

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Thank you very much for completing this questionnaire. Your honest responses will contribute to a better understanding of undergraduate students' financial literacy, spending habits, saving and investment awareness, and financial management skills. The findings will help develop effective strategies for improving financial education and supporting students' financial well-being at Xi'an University of Finance and Economics.