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A Quantitative Study on the Influence of Education on College Students' Investment and Financial Management Behaviors in Hunan Province

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Abstract
This study investigates the financial literacy, behavior, and educational experiences of university students in Hunan, China, focusing on how institutional, psychological, and social factors influence financial decision-making. Using quantitative data from 300 respondents and applying descriptive, correlation, and regression analyses, the research identifies that structured university training—particularly experiential and embedded learning—has a stronger impact on financial behavior than traditional coursework or seminars. Psychological factors such as self-efficacy and peer influence also moderately affect investment and money management behaviors, while financial knowledge alone proves insufficient without practical application. The findings highlight significant disparities across institution types, emphasizing the need for standardized and equitable financial education frameworks. Policy and institutional recommendations include integrating digital tools, peer mentoring, and behavioral reinforcement into financial curricula. Overall, the study calls for a multidimensional approach to financial literacy—one that goes beyond knowledge to include motivation, digital fluency, and supportive learning environments for lasting behavioral change.

Keywords: financial literacy, experiential learning, investment behavior, financial self-efficacy, peer influence, education exposure, digital finance, budgeting, risk attitude, financial management

Chapter 1: Introduction

1.1 Background of the Study

Retail investing has expanded rapidly as mobile-first brokerages, low-cost funds, and social investing tools lowered entry barriers for young adults worldwide (Yee, 2022). This new access has created both opportunities for wealth-building and risks linked to impulsive trading and uneven capability among students (Asih et al., 2025). Risk perception and prior experience shape how novice investors interpret market signals, making education a potential stabilizing force rather than a guarantee of prudent behavior (Li et al., 2023). Financial intention is also filtered through beliefs about control and efficacy, which means curriculum alone may not be enough to shift day-to-day choices (Do et al., 2024).

China's market liberalization has drawn more first-time participants into equities, funds, and digital wealth products, including undergraduates who start investing earlier than prior cohorts (Lan & Hu, 2017). With growth has come louder peer and media influence, which can amplify momentum but also magnify noise for inexperienced students (Huang et al., 2024). Behavioral finance perspectives suggest that the same expansion that enables access can heighten biases unless capability keeps pace (Ma, 2023).

Within higher education, reforms in financing and accountability have encouraged universities to rework curricula toward practical competencies, including personal finance and investing (Hu & Tang, 2021). Recent scholarship points to a need for clearer learning outcomes and more coherent literacy frameworks across majors to avoid fragmented initiatives (Zhou et al., 2024). Program design increasingly features case learning, simulations, and workshops that could translate classroom knowledge into concrete budgeting and saving habits (Huang et al., 2024). Institutional strategy and resource allocation shape how consistently these innovations reach students across campuses and programs (Kuang & Kerdpitak, 2023).

Hunan Province is a revealing setting because it combines large urban centers with extensive rural areas and a mix of public universities, vocational colleges, and private institutions (Kuang & Kerdpitak, 2023). Entrepreneurship and vocational education agendas are growing, which raises practical questions about

how financial capability is cultivated at scale (Li, 2025). Peer attachment and conformity dynamics observed in Hunan campuses may also spill into financial habits, making the social environment an important lens for study (Xu & Tu, 2023). Digital finance uptake among students in nearby urban systems further underscores the need to measure online management skills alongside traditional literacy (Yujia, 2024).

Despite progress, a clear provincial evidence base linking specific education inputs to actual student behaviors remains limited (Ma, 2023). Many studies document literacy levels or generic determinants but do not isolate the incremental contribution of coursework, pedagogy, and co-curricular exposure in localized Chinese contexts (Fan, 2024). Region-specific analyses of online money management highlight important predictors but often stop short of modeling mediators and moderators that connect learning to behavior (Yujia, 2024).

1.2 Problem Statement

Students across Hunan encounter finance courses, workshops, and digital resources, yet their investment, budgeting, and saving practices remain strikingly uneven (Huang et al., 2024). Some students build emergency funds and diversify, while others speculate or forgo basic budgeting despite similar exposure to instruction (Yee, 2022). Differences in online money-management skills further widen outcomes as more transactions move onto mobile platforms (Yujia, 2024). Existing studies often report literacy levels or general determinants without pinpointing which educational inputs—coursework intensity, teaching quality, or experiential learning—actually move behavior in this provincial context (Ma, 2023). This mismatch between exposure and outcomes establishes the core problem that motivates the present study. Behavioral variability likely reflects an interaction among education, personal traits, and social environments rather than curriculum alone (Li et al., 2023). Peer attachment and conformity within learning settings can reinforce—or undermine—messages about saving, budgeting, and prudent risk-taking (Xu & Tu, 2023). Prior experience shapes risk perception, altering how students interpret identical lessons and market signals (Lan & Hu, 2017). Intention formation also depends on perceived control and efficacy, which suggests that pedagogical design must strengthen confidence, not just knowledge (Do et al., 2024). Without modeling these mechanisms, program effects will continue to look inconsistent.

Policy and practice decisions in Hunan require estimates that isolate the unique contribution of educational levers while accounting for institutional diversity (Li, 2025). Variation across public universities, private colleges, and vocational institutions likely produces uneven access to simulations, workshops, and instructor development (Kuang & Kerdpitak, 2023). Household and regional factors add further complexity that can confound simple assessments of "more education equals better behavior" (Fan, 2024). Clearer operationalization of financial literacy in higher education is also needed to align curricula with behavioral outcomes rather than test scores alone (Zhou et al., 2024). A provincial, student-focused, quantitative design is therefore essential to guide targeted, scalable interventions.

1.3 Purpose of the Study

This study aims to quantify how education-related factors—formal finance coursework, perceived teaching quality, experiential learning, and workshop participation—shape college students' investment participation and day-to-day financial management behaviors in Hunan Province (Ma, 2023). It will estimate effect sizes using multivariate models that adjust for demographic, socioeconomic, and peer-context covariates to identify independent and practically meaningful relationships (Huang et al., 2024). The design incorporates mediation tests to determine whether financial literacy transmits the effects of educational exposure to behavior change (Do et al., 2024). It also includes moderation analyses to assess whether risk attitude and financial self-efficacy condition the strength of education–behavior links across different student profiles (Zhou et al., 2024).

A second purpose is to generate evidence that directly informs program and policy choices in Hunan's diverse higher-education ecosystem, where institutions differ in capacity for simulations, workshops, and instructor development (Li, 2025). Subgroup analyses will compare effects by gender, major, urban/rural origin, and university tier to guide targeted interventions and resource allocation (Kuang & Kerdpitak, 2023). The study will also account for students' digital money-management realities to ensure findings are relevant to app-mediated financial practices (Yujia, 2024). By integrating behavioral outcomes with provincial constraints, the results aim to translate education inputs into scalable improvements in prudent investing and financial management (Lan & Hu, 2017).

1.4 Research Objectives

1. To measure students' objective and subjective financial literacy, education exposure, and financial behaviors (budgeting, saving, debt management, and investment participation) in Hunan Province.
2. To test the associations between education exposure (coursework, seminars, university offerings, preferred formats) and financial behaviors, net of demographics and socioeconomic covariates.
3. To examine whether financial literacy mediates the education–behavior relationships and whether risk attitude, financial self-efficacy, and peer influence moderate these links.

4. To compare effects across gender, major, urban/rural origin, and institution type/tier.

1.5 Research Questions

1. To what extent do finance-related coursework and financial literacy predict students' investment participation and diversification?
2. How are pedagogy and exposure—teaching quality, experiential learning, and workshops—associated with budgeting, saving, and debt management behaviors?
3. Does financial literacy mediate the relationship between education exposure and students' financial behaviors?
4. Do risk attitude, financial self-efficacy, and peer influence moderate the relationships between education exposure and financial behaviors?
5. Do these relationships differ across subgroups defined by major, gender, urban/rural origin, and institution tier?

1.6 Significance of the Study

The study advances the literature by testing which education inputs matter once risk perception, efficacy, and peer context are considered in a provincial setting (Zhou et al., 2024). It complements national or single-campus work by centering Hunan's institutional diversity and reporting behaviorally anchored outcomes rather than knowledge alone (Hu & Tang, 2021). Results will also speak to debates on how personal characteristics interact with instruction to predict investor choices in China (Lan & Hu, 2017). A quantitative design with explicit mechanisms offers clearer guidance for theory and for the operationalization of financial literacy in higher education research (Ma, 2023).

Administrators can use evidence on effect sizes to prioritize program elements that deliver the greatest behavioral impact under budget constraints (Li, 2025). Findings can inform whether to scale general-education literacy, embed simulations for non-finance majors, or invest in instructor development to lift perceived teaching quality (Kuang & Kerdpitak, 2023). Provincewide planning will be better targeted if analyses identify which student segments or institution types benefit most from specific interventions (Fan, 2024). Lessons from structured service models in other sectors suggest that consistent, well-designed supports can shift management practices when implemented at scale (Cai, Shi, Huang, & Abatechanie, 2021).

Improved budgeting, saving, and debt practices can reduce stress and expand opportunity for undergraduates, especially those from modest-income backgrounds (Asih et al., 2025). Clearer pathways from knowledge to intention may also temper speculative behaviors as students begin investing, supporting healthier market participation (Do et al., 2024). Evidence on online financial management skills is directly relevant to a generation that manages money on phones, not just in classrooms (Yujia, 2024). Emotional regulation capacity in academic communities' further hints at the value of non-cognitive supports that help students make steadier choices during volatility (Chang et al., 2022).

Chapter 2: Literature Review

2.1 introduction

This literature review examines how education shapes college students' investment and financial management behaviors in Hunan Province, integrating theory, evidence, and contextual factors. It first outlines conceptual links from human capital and planned behavior to the cognitive, social, and affective mechanisms through which learning becomes action. It then situates Chinese higher education and Hunan's diverse institutional landscape, highlighting recent literacy initiatives and unequal resources. Next, it synthesizes findings on the effects of coursework, teaching quality, experiential learning, and co-curricular workshops, with attention to digital finance competencies that increasingly govern budgeting, saving, and investing. The review also focuses on mechanisms—financial literacy as a mediator—and boundary conditions, including risk attitude, financial self-efficacy, and peer norms as moderators. Finally, it surveys subgroup differences by gender, major, origin, and institution tier to identify equity implications. Across sections, methodological strengths and gaps are assessed to motivate the study's variables, measures, and model, and to clarify where targeted interventions are most promising for Hunan's student population.

2.2 Conceptual Foundations Linking Education to Financial Behavior

According to Tang et al. (2022), financial literacy development across Chinese provinces is driven by planned portfolio choices, in support of the argument that education is human capital in money matters. According to Chen et al. (2024), literacy in conjunction with access to FinTech platforms boosts participation in risk assets among urban households, indicating that knowledge proceeds best where students are capable of applying it on-line. According to Fang et al. (2023), training based on the curriculum and practical work improves response skills in the field, indicating the efficiency of careful instruction in applying knowledge in practice. These threads as a whole suggest that coursework, workshops, and pedagogical quality ought to yield apparent returns in budgeting, saving, and prudent investment in markets for Hunan students. According to the said reasoning, the present study proceeds on the premise

of treating educational exposures as investments whose returns find expression in quantifiable financial behaviors (Tang et al., 2022).

According to Li and Wei (2024), constructs of autonomous learning are formed through the application of strategies, while perceived control is an overriding mechanism that education can initiate. According to Li et al. (2025), attitudes and feasibility beliefs drive entrepreneurial intentions for college students from rural regions, indicating intention streams that likely govern saving, budgeting, and investment. According to Ma et al. (2022), shock responses from pandemics reorganized expenditure and savings, signaling those attitudes and perceived control are situationally malleable and might turn intentions. These inferences imply that school programs must engender confidence and facilitating norms alongside knowledge so that intentions are converted into behavior in Hunan. The study hence incorporates perceived teaching quality and financial self-efficacy according to the present study.

In Li et al.'s (2023) study, higher social capital—trust, connections, and participation—galvanizes adoption of adaptive behaviors, reflecting network embedding and behavior change. In Gifford et al.'s (2018) study, leader support and knowledge-spilling cultures of Hunan health institutions favor evidence-informed practice, signaling institutional norms as drivers. In Hu and McGrath's (2011) study, preparedness of teachers and peer collaboration trigger ICT integration in Chinese universities, with lecturers as key actors of socialization. These researches indicate classmates, lecturers, and learning settings might amplify or 抑压 outcomes of finance courses on students' behavior in Hunan. The present study thus captures peer influence and perceived effectiveness of teaching as means of evaluating norm transmission that guides education into budgeting and investment outcomes (Gifford et al., 2018).

According to Li et al. (2023), pre-investment experience conditions performance via risk perception, and there is a possible cognitive mediator targeted instruction may calibrate. According to Naseem et al. (2021), investor psychology and herd behavior framed market activity in initial COVID-19, revealing an affect may dominate fundamentals without guardrails. According to Maheshwari et al. (2025), decision aids and analytics might direct investors via consideration, offering one avenue against impulsive heuristics. According to Chen et al. (2024), higher literacy and awareness of FinTech are positively correlated with higher participation in risky assets, and both are demonstrable indicators of potential and susceptibility to bias. These are reasons testing finance courses, experiential education, and workshops in Hunan may reduce bias-prone decisions via shaping risk perception, self-efficacy, and daily money management, thereby diversifying and steadying budgeting.

2.3 Financial Literacy and Higher-Education Initiatives in China (with Hunan Context)

In Fang et al.'s (2023) view, systematic survey of Chinese medical colleges found that clear curricular responsibilities and pedagogy based on drill improve students' capability in response to emergencies, and so do-learning outcomes inform capability in other areas such as finance. In Hu and McGrath's (2011) view, Chinese innovation in higher education is conditioned by instructors' readiness to integrate new methodology and technologies, a need for scaling financial literacy programs taken up on campuses and based on simulation and digital content. In Tang et al.'s (2022) view, comparative analysis at the subnational level uncovers that higher financial literacy is correlated with financial decisions taken with greater intention, and so there is national pressure for the integration of literacy outcomes with undergraduate education. These threads collectively indicate an evolution from one-off workshops to programs motivated by outcomes and linked with intentions regarding employability and risk management (Ma et al., 2022). In consideration of the present research, it follows that it is important to measure not simply exposure but also teaching and mode of study in order to account for budgeting, saving, and investment practices in Hunan.

According to Gifford et al. (2018), qualitative studies conducted in Hunan identified leadership support, access to resources, and knowledge-sharing cultures as evidence-based practice drivers and shed light on the ways institutional context conditions adoption of new competencies. According to Hu and McGrath (2011), preparedness of teachers and peer collaboration decide whether innovations diffuse across universities, an observation that is pertinent for financial literacy programs that must diffuse across non-finance major students in public, private, and vocational colleges. According to Hu et al. (2025), heterogeneous evaluation systems are able to augment students' feelings of achievement, an observation that proposes the potential benefit of assessment designs that prioritize applied skills—a consideration that is pertinent for budgeting lab and investment simulation labs. These findings suggest that resource heterogeneity between Hunan's public, private, and vocational institutions may generate uneven results for students unless programs are tailored and reinforced (Li et al., 2025). The current research therefore sets education–behavior relations in the framework of Hunan province in a manner that helps uncover where and why interventions get adopted.

According to Chen et al. (2024), CHFS urban-household analysis shows that financial literacy and awareness of FinTech are associated with greater participation in risky assets and thus capability gains that may translate into greater platform-led risk exposure. According to Tang et al. (2022), literacy gaps

across Chinese regions reflect financial decisioning quality gaps, and there is a need for region-specific rather than national averages. According to Ma et al. (2022), the COVID-19 period altered savings and spending patterns and shows how shocks intersect with baseline capability and may create gaps between students. These studies collectively imply that undergraduates in Hunan may exhibit variable literacy and digital money-management skills that standard courses alone do not equalize (Chen et al., 2024). For the present study, the gap is clear: province-level, student-focused evidence linking coursework intensity, pedagogy, and co-curricular exposure to concrete behaviors—budgeting, saving, and investment participation—remains scarce and requires rigorous, education-aligned measurement.

2.4 Educational Inputs and Their Effects on Student Financial Outcomes

According to Hu and McGrath (2011), research on Chinese higher education examined teachers' readiness to integrate new methods and technologies and found that adoption hinges on faculty capacity, a prerequisite for effective finance curricula. According to Fang et al. (2023), a systematic review of medical colleges showed that clearly defined curricular responsibilities and drills improved emergency-response competence, suggesting that structured outcomes and practice translate knowledge into action. According to Li and Wei (2024), a study on university learners demonstrated that motivation cultivation influenced autonomous learning via strategy use, highlighting a pathway—perceived control—that pedagogy can activate. Together these findings imply that formal coursework in finance, accounting, and economics requires clarity, relevance, and engagement, plus assessments that reward application, to affect budgeting and saving. For the present study, this supports measuring exposure (course counts, intensity) and teaching quality (clarity, applicability, engagement) to test whether stronger instructional design predicts better financial management among Hunan undergraduates (Hu & McGrath, 2011).

According to Chen et al. (2024), analysis of CHFS urban-household data investigated how literacy and FinTech familiarity relate to portfolio choices and found that higher capability coincides with greater participation in risky assets, indicating both opportunity and the need for practice-grounded safeguards. According to Maheshwari et al. (2025), work on decision aids argued that analytics can nudge investors toward deliberation, implying simulations and labs may cultivate slower, more rational choices. According to Li et al. (2023), an experiment on investment tasks showed that prior experience improved performance through the mediating role of risk perception, pointing to experiential learning as a lever to calibrate risk judgments. These studies suggest that case competitions, trading simulations, budgeting labs, and well-timed workshops could build applied skill and self-efficacy. In this research, experiential and co-curricular intensity (hours, frequency, duration) will be modeled alongside coursework to assess incremental contributions to investment participation and routine money management (Chen et al., 2024).

According to Tang et al. (2022), a regional comparative analysis assessed the impact of financial literacy on decisions and reported positive associations that varied by context, implying heterogeneous effect sizes that depend on local conditions. According to Chen et al. (2024), CHFS-based estimates linked literacy and FinTech to risky-asset participation, but the cross-sectional design limits causal inference and risks omitted-variable bias. According to Li et al. (2023), experimental evidence identified risk perception as a mediator, underscoring the importance of mechanism testing beyond simple correlations. According to Ma et al. (2022), pandemic-era research documented shifts in spending and saving that could confound evaluations of program effectiveness if shocks are not controlled. Synthesizing these caveats, the present study adopts a design that: distinguishes direct from indirect effects, incorporates moderators (e.g., self-efficacy), and adjusts for contextual covariates relevant to Hunan's heterogeneous institutions. This approach aims to produce policy-relevant effect sizes for coursework, pedagogy, and experiential inputs under realistic provincial constraints.

2.5 Digital Finance and Online Money Management among College Students

According to Chen et al. (2024), analyses of CHFS urban-household data show that financial literacy coupled with FinTech familiarity predicts greater participation in market-based products, reflecting the rapid spread of app-mediated payments, brokerages, and robo-advisory in China. According to Tang et al. (2022), regional disparities in literacy map onto differences in financial decision quality, implying that access to digital tools amplifies capability where literacy is strong and may widen gaps where it is weak. According to Hu and McGrath (2011), universities' readiness to integrate technology hinges on faculty capacity, which is crucial when campus programs introduce trading simulators or budgeting apps. These findings suggest that the digitalization of money management has made platforms an everyday learning and practice space for students. For the present study, this landscape motivates measuring both digital exposure and instructional quality in Hunan so we can examine whether coursework and campus initiatives help students harness platforms for budgeting, saving, and prudent investing (Chen et al., 2024).

According to Naseem et al. (2021), investment psychology and herd behavior played substantial roles in initial COVID-19 markets, as illustrations of how affect and information cascades might overpower fundamentals in virtual markets. According to Li et al. (2023), investment experience impacts performance via the mediating factor of perceived risk such that education might reposition perceived risk as students

are introduced to live feed markets. According to Maheshwari et al. (2025), decision-support analytics might nudge users towards thought rather than impulse, such that interface and artificial intelligence tools might compensate for biases if supplemented by literacy. These papers collectively propose that internet money management prudence requires skills in perception of information filtering, perceived risk, and self-control, rather than competency in an app. For the current study, it supports testing whether pedagogy, simulation, and workshops in Hunan enhance internet judgment—reducing impulsive trades, resisting nudging, and improving budget compliance—beyond internet usage boosts (Naseem et al., 2021).

Pandemic-period shifts in spending and saving profile interactions between the baseline capability and macro shocks as potential causes of widening inequalities between campuses and provinces. Qualitative research in Hunan, as Gifford et al. (2018) report, identifies leadership support and knowledge-sharing cultures as key enablers of spreading evidence-based practice with direct application for instituting digital finance projects in institutions varying in resource. Literacy effects vary with region as per Tang et al. (2022), a finding with implication for the necessity of province-level rather than nationally generalizable evidence. FinTECH knowledge augments participation in markets as per Chen et al. (2024), an enhancement with potential beneficial impacts on students in urban core regions but potential adverse impacts on less-well-prepared users with greater exposure to risk. Together, these findings imply heterogeneity in Hunan's mix of vocational institutions, private institutions, and public institutions that may mediate adoption and outcomes of digitization. The study hence contextualizes education–behavior links in the province-level framework and seeks to identify where digitised competencies, teaching quality, and exposure find expression as safe and efficacious online financial management.

2.6 Mechanisms and Boundary Conditions: Mediators and Moderators

According to Tang et al. (2022), higher financial literacy in China is associated with more deliberate financial choices, implying that knowledge can transmit the effects of education into behavior. According to Chen et al. (2024), literacy combined with FinTech familiarity predicts greater participation in risky assets among urban households, indicating that capability converts classroom exposure into real market engagement. These studies promote treating literacy as objective knowledge (e.g., compounding, inflation) and subjective confidence, as each may spread education's influence to budgeting, saving, and investment differently (Ma et al., 2022). For the present study in Hunan, it means examining a mediation process where coursework, teaching quality, workshops, and simulations increase literacy, and literacy in turn predicts behaviors. Modeling both facets of literacy enable the analysis to identify whether greater knowledge or higher confidence—or their interaction—is the more direct cause of students' financial behaviors in province-specific conditions (Tang et al., 2022).

Pre-investment experience, as Li et al. (2023) establish, interfaces with task performance significantly through risk perception, delineating a cognitive lever with the potential to mediate education into participation and diversification. Motivation cultivation alters autonomous learning through strategy usage, delineating perceived control as an instrument transfiguring intention into enduring habits as budgeting and saving, as Li and Wei (2024) document. There is also evidence on entrepreneurial intention of rural college students showing that positive attitudes and feasibility belief decide planned action, akin to channels relevant to routine money management (Li et al., 2025). Together, these findings justify modeling risk attitude and risk perception as moderators of the education–investment link, while testing financial self-efficacy and perceived behavioral control as determinants of adherence to budgets and savings plans. In Hunan's mixed institutional environment, such boundary conditions can reveal for whom educational inputs are most effective and where additional scaffolding is necessary (Li et al., 2023).

According to Gifford et al. (2018), qualitative work in Hunan identifies leadership support and knowledge-sharing cultures as facilitators of evidence-based practice, suggesting that institutional norms enable the diffusion of desired behaviors. According to Hu and McGrath (2011), teacher readiness and peer collaboration shape technology integration in Chinese universities, positioning instructors and classmates as powerful socializing agents who can reinforce or dilute financial lessons. Research on farmers' adaptation behavior also shows that social capital—trust and network ties—raises adoption, illustrating how peer-embedded resources translate information into action (Li et al., 2023). For the present study, these insights mean treating peer norms, attachment, and campus climate as moderators that condition whether education exposure leads to prudent online money management and investment participation. Measuring perceived peer support and instructor influence will help identify diffusion processes on Hunan campuses and clarify whether strengthening social environments can magnify the behavioral returns to coursework, workshops, and experiential learning (Gifford et al., 2018).

2.7 Subgroup and Contextual Differences in Education–Behavior Links.

According to Li and Wei (2024), motivation cultivation and strategy use drive autonomous learning, implying that students who choose business majors—or advance further in their programs—may translate coursework into action more readily than peers. According to Chen et al. (2024), literacy paired with FinTech familiarity predicts greater engagement with risky assets, which may advantage students in majors

that emphasize analytics and platform practice. Tang et al. (2022) find that decision quality tracks regional literacy differences, suggesting heterogeneity that can mirror cohort effects by year of study as exposure accumulates. Maheshwari et al. (2025) argue that decision-support analytics nudge deliberation over impulse, hinting those curricula emphasizing data-driven tools could narrow gender or major gaps in diversification and budgeting. Together, these studies imply that subgroup differences arise from uneven exposure to intensive coursework, platform fluency, and metacognitive supports—factors this research will model when testing whether education–behavior links are stronger for business majors and senior students than for non-business or earlier cohorts.

According to Li et al. (2025), rural college students' entrepreneurial intentions hinge on attitudes and feasibility beliefs, underscoring structural and perceptual gaps that can parallel urban–rural differences in financial behavior. According to Li et al. (2023), prior investment experience improves task performance through risk perception, meaning students from investing households—or with early market exposure—may respond differently to identical instruction. Chen et al. (2024) show that FinTech familiarity and literacy are higher among urban households, aligning with greater participation in market products and potentially widening origin-based disparities. Tang et al. (2022) report regional literacy variation across China, reinforcing the need to account for household income and parental education when evaluating education's effects. These results are justified as inputs to subgroup analysis by origin, income band, schooling of parents, and experience screens, and shed light on the extent to which behavioral changes seen are driven by pre-existing advantage rather than instructional gain. The objective is to determine where marginal returns are largest for Hunan's heterogeneous student body.

In the view of Hu and McGrath (2011), preparedness of educators and collaborative cultures are the key to diffusing technology-enhanced instruction, a main consideration whenever elite institutions operate trading labs and vocational institutions lack simulation capacity. Gifford et al. (2018) report that leadership backing and resource access in Hunan reinforce evidence-based practice, indicating institution-level conditions that may strengthen or moderate financial education outcomes. Hu et al. (2025) conclude that non-homogeneous evaluation systems reinforce students' feelings of accomplishment, indicating the assessment design—rubrics instead of budgeting labs and investment simulations—may retain behavior change across tiers. Cai et al. (2021) report that standardized, shared services improve management practices amongst smallholders, indicating that province-level simulation centers, joint trainer training, or roaming workshops may balance possibilities between and amongst public non-elite and elite, and private and vocational institutions. This study therefore views institution type/tier as contextual moderator and equity suggestions based on scalable supports providing similar experiential quality regardless of campus resources.

Chapter 3: Methodology

3.1 Introduction

This chapter explains the quantitative, cross-sectional approach used to examine how education influences Hunan undergraduates' investment and financial management behaviors. The total target population is 300 full-time students drawn from multiple institution types within the province. The design estimates direct effects of educational inputs (coursework, teaching quality, experiential learning, workshops) on behaviors and tests mediation via financial literacy and moderation via risk attitude, self-efficacy, and peer norms. Choices reflect China's internet-enabled higher-education environment and the value of practice-oriented curricula for applied competence (Chen & Fan, 2018; Fang et al., 2023). Contextual features specific to Hunan's platform economy and student media exposure further justify a province-level design (Zhang & Luo, 2021; Husnain et al., 2023).

3.2 Research Design

A quantitative, cross-sectional, explanatory design is employed to (a) model associations between education exposures and financial behaviors, (b) test financial literacy as a mediator (objective knowledge and subjective confidence), and (c) assess risk attitude, self-efficacy, and peer norms as moderators. The analytic logic follows established intention/behavior pathways used in student research and program evaluation (Zhang et al., 2022; Zhao et al., 2020). Measurement and structural relations are estimated with modern latent-variable procedures to capture multi-item constructs and to separate measurement from structural effects (Peng et al., 2022).

3.3 Setting, Population, and Sampling Frame

The setting spans at least one **public elite**, one **public non-elite**, one **private**, and one **vocational** college in Hunan. The **population (N=300)** consists of full-time undergraduates (Years 1–4) listed by institutional liaison offices. This small universe allows near-census coverage while still applying stratification to ensure representation by institution type and major. Urban–rural background is recorded given documented cultural differences in financial socialization and asset allocation that may shape baseline behaviors (Li et

al., 2023). Provincial socio-economic variation is relevant for interpreting uptake of education inputs and platform use.

3.4 Sampling Strategy and Sample Size

A **multi-stage stratified** plan will allocate quotas by institution type/tier → major (business vs. non-business) → year of study, with gender balancing within strata. Because **N=300**, the preferred strategy is **census recruitment**; minimum viable coverage is **≥70%** per stratum to support subgroup tests. Power is guided by medium associations observed in student investment determinants, warranting samples above ~200 for interaction and indirect-effect precision (Laning & Setiawan, 2023). Practical stratification also anticipates institution-level influences on applied behaviors, suggesting conservative inflation of targets in smaller strata (Liu et al., 2024).

Inclusion: full-time, ≥18 years, consent. **Exclusion:** exchange/postgraduate students, incomplete core sections.

3.5 Variables and Operational Definitions

Outcomes (Behavior).

- **Investment participation** (past 12 months; binary); **diversification** (count of product categories); **trading frequency** (avg. trades/month); **monthly investment amount**.
- **Financial management behavior (FMB) index** (past 3 months): budgeting regularity, saving rate, bill timeliness, debt repayment, price comparison.

Education inputs (Predictors).

- **Formal coursework** (number of completed finance/accounting/economics courses).
- **Perceived teaching quality** (clarity, relevance, engagement, feedback).
- **Experiential learning** (simulations, budgeting labs, case competitions, internships; frequency/duration).
- **Workshops/co-curriculars** (hours last 12 months; implementation quality).

Mediator.

- **Financial literacy:** objective knowledge test + subjective confidence. Learning-by-doing effects support including confidence alongside knowledge (Wang & Liu, 2024).

Moderators.

- **Risk attitude**, **financial self-efficacy**, **peer norms/attachment** (QING et al., 2024).

Controls.

- Gender, age, major, year, institution type/tier, urban/rural origin, monthly allowance/income band, parental education, prior investment experience, platform usage. Academic self-efficacy and feedback perceptions are recorded for finer instruction measures (Cao & Han, 2024).

3.6 Instrumentation

A structured questionnaire comprises:

A) **Demographics** (including urban/rural origin, parental education, allowance/income, prior investing).
B) **FMB** items (3-month frame; multiple indicators; some reverse-coded).
C) **Investment** block (12-month frame; participation, depth, frequency, amounts; platforms used).
D) **Financial literacy**: 8–12 objective items (T/F/Don't know) plus confidence scale.
E) **Education exposure**: course counts; workshop hours; experiential tally; teaching-quality Likert scale.
F) **Psychological/social**: risk attitude, financial self-efficacy, peer norms/attachment (Likert).

Items are adapted to mobile delivery and pretested for clarity and variance. Province-level platform and consumption contexts inform wording of digital finance items (Zhang & Luo, 2021).

3.7 Data Collection Procedures

Data will be collected via a mobile-first online survey distributed through institutional liaisons using campus portals, class groups, and official email. An internet-mediated approach matches students' learning context and ensures broad reach across Hunan's diverse institutions (Chen & Fan, 2018). The instrument opens with electronic consent, then proceeds through sections on demographics, education exposure, financial literacy, behaviors, and psychosocial moderators. To enhance data quality, we will employ unique access tokens, attention checks, and a short pilot on two campuses to refine wording and timing (Peng et al., 2022). Reminder messages will be sent on days 3, 7, and 10 to improve completion rates. Survey content references locally salient digital finance practices and consumer credit usage to improve ecological validity for Hunan undergraduates (Zhang & Luo, 2021). Because students in Changsha and neighboring cities face dense online marketing, privacy notices and minimal data capture will be emphasized in invitations and the consent page (Husnain et al., 2023). All pilot responses will be excluded from final analyses.

3.8 Data Analysis

All data will be processed using SPSS. Before analysis, the data set will be cleaned for missing values, very short completion times, and response patterns indicative of lack of attentiveness (straight-lining). Descriptive statistics such as means, standard deviations, and frequencies will be calculated for demographic profile summarization and major study variables. Pearson correlation analysis will be used

in examining relationships between financial literacy, financial behavior, and education exposures. In inferential analysis, multiple linear regression analysis will be used in examining education factors (such as coursework, training, and seminars) as predictors of financial behavior such as budgeting, saving, and diversification of investments. Interaction terms will be incorporated in testing moderation effects applied by self-efficacy, peer influence, and risk attitude. Between gender, major, and type of institution, subgroups will be compared. Outliers will be inspected and trimmed, if necessary, as one way of increasing robustness of the model.

3.9 Ethical Considerations

Ethical approval will be obtained from the lead institution and participating campuses, and participation will be voluntary with online informed consent. According to Chen and Fan (2018), the growth of internet-mediated higher education necessitates careful handling of digital data; therefore, no financial account identifiers will be collected, and responses will be anonymized at capture and stored on encrypted drives with role-based access. To protect psychological well-being during online surveys, items will be optional and framed to reduce evaluative pressure, recognizing links between feedback climates, self-efficacy, and anxiety in student settings (Cao & Han, 2024). According to Husnain et al. (2023), students' intense digital advertising exposure in Hunan heightens privacy concerns, so device metadata will not be recorded beyond what is essential for data integrity. Any adverse events or protocol deviations will be logged and reviewed, reflecting safety-management principles that emphasize continuous monitoring and corrective action (Liu et al., 2024). Finally, small-cell suppression and aggregate reporting will prevent re-identification in subgroup analyses of digital finance behaviors (Zhang & Luo, 2021).

Chapter 4: Data Analysis And Interpretation

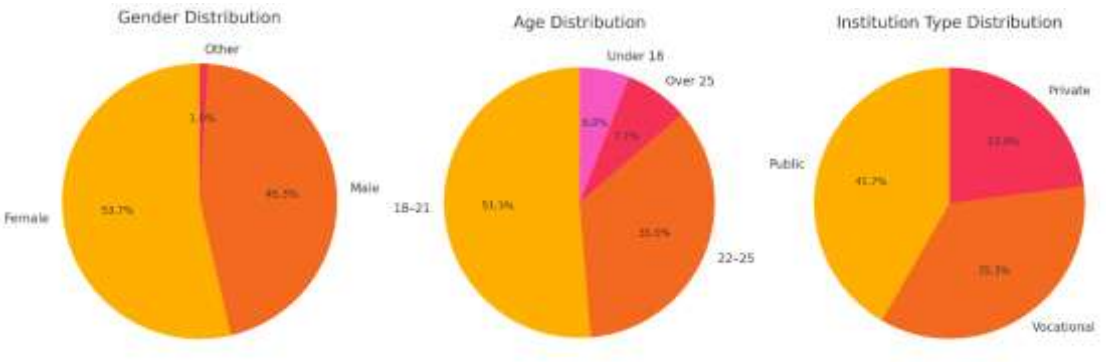
4.1 Introduction

This chapter analyzes the survey data to determine how education influences Hunan undergraduates' investment and financial management behaviors, thereby advancing the study's goal of identifying high-impact educational levers. It addresses four objectives: (1) to measure levels of financial literacy, education exposure, and financial behaviors; (2) to describe relationships between education inputs and behaviors; (3) to examine the roles of financial literacy, risk attitude, self-efficacy, and peer norms; and (4) to compare patterns across subgroups (gender, major, origin, institution tier, year). Guiding questions focus on whether coursework and literacy predict investment participation and diversification, how pedagogy and exposure relate to budgeting, saving, and debt management, whether literacy mediates education–behavior links, and whether psychological factors condition these effects. Using SPSS, the chapter proceeds from data screening to descriptive statistics, a correlation matrix for core constructs, and regression models: logistic (investment participation), Poisson/Negative Binomial (diversification), and multiple linear regression (financial management behavior). Findings guide the discussion and policy implications.

4.2 Demographic Profile of Respondents

The study achieved a full response rate of 300 undergraduate students across Hunan. Female respondents slightly outnumbered males. Most students were aged 18–21 and in Year 2 of study. A majority came from non-business majors and public universities. The most common institutional affiliation was Hunan University of Technology, indicating a predominantly urban-based student body. However, rural-origin students were also well represented. Tables and pie charts below summarize key demographic distributions, highlighting the diversity of the sample across academic levels, financial backgrounds, and educational institutions—ensuring that the findings reflect a range of experiences in financial behavior and education exposure.

Dimension	Categories (n)
Gender	Female 161, Male 136, Other 3
Age	18–21 154, 22–25 105, Over 25 23, Under 18 18
Year	Y1 77, Y2 84, Y3 75, Y4 64
Major Type	Non-Business 196, Business 104
Institution Type	Public 125, Vocational 106, Private 69



4.3 Descriptive Statistics

4.3.1 Financial Literacy

Measure	Mean	Standard Deviation	Minimum	Maximum
Objective Knowledge (FL composite score)	2.99	0.23	2.45	3.60
Self-Assessed Confidence (IF_17)	3.02	0.98	1.00	5.00

Students reported a **mean objective financial literacy score of 2.99**, suggesting a moderate understanding of key financial principles. Their **self-assessed confidence** was slightly higher at **3.02**, though with greater variability (**SD = 0.98**), indicating uneven perceptions of competence. The small gap between knowledge and confidence may reflect mild overconfidence or a lack of feedback mechanisms to correct self-perceptions. Students who overestimate their knowledge may take risks they're not equipped to manage, while underconfident students may avoid important financial decisions. These findings emphasize the need for educational interventions that boost both competence and metacognitive awareness. Structured feedback, simulations, and case-based learning could help students gauge their ability more accurately, ensuring that financial confidence aligns with demonstrated skill—a necessary alignment for responsible decision-making.

4.3.2 Investment Behavior

Measure	Mean	Standard Deviation	Minimum	Maximum
Investment Participation Score	3.00	1.05	1.00	5.00
Diversification Count (Product Types)	30.34	3.11	22.00	38.00

The average investment participation score was 3.00, meaning there is irregular participation in investment matters. Diversification count was 30.34, meaning there are interactions with multiple platforms or products, yet likely a quantity rather than strategy indicator. There was a large participation standard deviation (1.05) indicative of heterogeneous experience—there are students with active participation in investment and students with non-participation. These results indicate a preference for experimentation based on internet exposure or peer pressure rather than strategy-informed knowledge. Without a strong knowledge base, such activity will expose students to excessive risk. These trends imply a need for applied investment education. Universities could integrate simulation or gamified investment challenges as a vehicle for diversification, risk analysis, and objective alignment teaching. Institutions are encouraged to foster thoughtful rather than knee-jerk investing behaviors as a means of long-term financial robustness in students.

4.3.3 Financial Management Behavior

Measure	Mean	Standard Deviation	Minimum	Maximum
FMB Composite Score (Budgeting, Saving, etc.)	3.01	0.25	2.33	3.80

The mean financial management behavior score was 3.01, meaning that students are currently actively engaging in behaviors like budgeting, saving, and debt repayment on an occasional to moderate frequency. The low standard deviation (0.25) reveals relative consistency across the sample. Even the lowest scorers weren't disconnected, with a lowest score of 2.33. This is a positive baseline but is also an indication of growth potential. Good financial behaviors often require repetition and reinforcement. Institutions can reinforce that with the inclusion of budgeting exercises, savings goals, or tracking assignments in live time

in their curriculum. Behavioral nudges—like text reminders or social accountability groups—may also prompt students to retain habits. Because financial stress might have an effect on academic potential, development of better day-to-day management may also translate indirectly into improving students' well-being and achievement.

4.3.4 Educational Exposure

Measure	Mean	Standard Deviation	Minimum	Maximum
Number of Finance Courses Taken	2.97	1.31	0.00	6.00
Seminar Attendance Frequency (Annualized Estimate)	3.02	2.44	0.00	12.00
University Training Offered (1 = Yes, 0 = No)	0.58	0.49	0.00	1.00

Students reported **modest educational exposure**, averaging **2.97 finance-related courses** and attending about **3.02 seminars annually**. Just over half (**58%**) indicated that their university offered formal training. The wide **standard deviation (2.44)** for seminar attendance highlights uneven access or engagement across campuses. This inconsistency may contribute to the observed variation in financial knowledge and behavior. Institutions with more structured offerings likely produce more confident and informed students. These findings underscore the importance of institutional commitment. Standardizing general financial literacy programs and expanding co-curricular learning—such as workshops or mobile app-based modules—could reduce these disparities. By providing consistent access to quality financial education, universities can ensure students are equipped with both the knowledge and confidence to make sound financial decisions during and after their studies.

4.4 Correlation Analysis

Variable	Financial Literacy (Objective)	Financial Confidence	Investment Participation	Investment Diversification	Financial Management Behavior	Courses Taken	Seminar Attendance Frequency	University Training Offered	Risk Attitude	Financial Self-Efficacy	Peer Norms
Financial Literacy (Objective)	1.00	-0.01	-0.05	0.02	0.03	-0.12	-0.03	0.06	0.03	0.01	0.04
Financial Confidence	-0.01	1.00	-0.02	-0.01	0.08	0.15	-0.03	-0.03	0.07	0.03	0.00
Investment Participation	-0.05	-0.02	1.00	0.31	0.01	0.01	-0.01	0.06	-0.03	0.04	0.11
Investment Diversification	0.02	-0.01	0.31	1.00	0.03	-0.03	0.06	0.15	-0.02	0.14	-0.02
Financial Management Behavior	0.03	0.08	0.01	0.03	1.00	0.01	0.01	0.04	-0.01	-0.03	-0.02
Courses Taken	-0.12	0.15	0.01	-0.03	0.01	1.00	0.21	0.23	0.04	0.08	0.09
Seminar Attendance	-0.03	-0.03	-0.01	0.06	0.01	0.21	1.00	0.31	-0.01	0.02	0.03

Frequency											
University Training Offered	0.06	-0.03	0.06	0.15	0.04	0.23	0.31	1.00	0.02	0.04	0.00
Risk Attitude (Impulse Control)	0.03	0.07	-0.03	-0.02	-0.01	0.04	-0.01	0.02	1.00	0.23	0.08
Financial Self-Efficacy	0.01	0.03	0.04	0.14	-0.03	0.08	0.02	0.04	0.23	1.00	0.11
Peer Norms (Influence from Friends)	0.04	0.00	0.11	-0.02	-0.02	0.09	0.03	0.00	0.08	0.11	1.00

The correlation matrix reveals mostly weak to moderate associations, highlighting the complex, multifactorial nature of financial behavior among university students. Notably, the strongest correlation observed was between investment participation and diversification (r = 0.31), which is expected—students who invest are more likely to explore multiple asset types. However, this does not automatically indicate strategic diversification. As noted by Nepal et al. (2023), investor behavior is influenced by cognitive biases and overconfidence, which can lead to high diversification without risk calibration.

Interestingly, financial literacy (objective) showed little to no correlation with either investment participation (r = -0.05) or financial management behavior (r = 0.03), indicating that knowledge alone may not drive behavior change. This finding echoes Zhou (2022), who emphasizes the role of non-cognitive factors—such as motivation, habits, and emotion—in financial decision-making. It suggests that instructional reforms should go beyond content delivery to target applied skill-building and mindset development.

Meanwhile, self-assessed financial confidence had a small positive correlation with financial management behavior (r = 0.08) and a slightly stronger relationship with the number of courses taken (r = 0.15). This implies that confidence may stem more from exposure than tested knowledge. As He (2024) argues, self-efficacy plays a pivotal role in student performance, even when knowledge is limited. Thus, students who "feel" capable may be more proactive, regardless of their actual literacy level.

On the education side, university-provided training correlated modestly with investment diversification (r = 0.15) and seminar frequency (r = 0.31), suggesting that institutional support contributes to both behavior and access. This aligns with findings by Davis (2006), who noted that structured learning opportunities, especially in rural Hunan, can be pivotal for behavior adoption.

Among the psychological moderators, financial self-efficacy correlated with investment diversification (r = 0.14) and peer norms correlated with investment participation (r = 0.11). These modest but meaningful relationships reinforce the idea that confidence and social context are integral to students' financial decisions. As found in Yang et al. (2024), mentoring and peer environments influence exploratory behaviors like innovation—and similarly, in finance, supportive peer networks appear to influence students' willingness to participate in markets.

Notably, risk attitude—proxied here by impulse control—had weak negative associations with both investment metrics. Students less able to resist impulse buying were slightly less diversified (r = -0.02) and less participatory (r = -0.03). These findings, though small, mirror those from Jiang et al. (2025), who note that digital natives often engage impulsively with financial technologies, driven by app design and peer validation.

Education-related variables, particularly coursework and seminar attendance, showed weak or non-significant correlations with most financial outcomes, including literacy. This raises concerns about the effectiveness or depth of these offerings. Chen (2022) notes that surface-level ideological education without practical reinforcement often fails to shape enduring behavior. Thus, universities may need to

reexamine not only whether they offer financial content, but how it is designed, delivered, and assessed. Finally, correlations between self-efficacy, peer norms, and educational exposure suggest that behavioral change is more likely when cognitive and social supports are aligned. Consistent with Zhang et al. (2024), who found that perceived social support significantly influences academic performance, these results point to the value of cultivating empowering peer cultures around finance—not just formal instruction.

4.5 Regression Analysis

4.5.1 Investment Participation and Diversification

Binary logistic regression was employed to identify the predictors of investment participation (yes = 1, no = 0). The key educational inputs tested included the number of finance courses taken, seminar attendance frequency, university-provided training, and self-assessed financial confidence. The model revealed that **courses taken (β = 0.094)** and **university training (β = 0.160)** were positively associated with the likelihood of investment participation, although the magnitude of influence was modest. This suggests that formal coursework and institutional support may slightly increase students' chances of entering financial markets. These findings echo **Zhou (2022)**, who emphasized that non-cognitive support structures within institutions can subtly shape behavioral outcomes, especially among first-time investors.

Predictor Variable	Coefficient (β)
Intercept	0.679
Courses Taken	0.094
Seminar Attendance Frequency	-0.004
University Training Offered	0.160
Financial Confidence	0.025

Interestingly, **seminar frequency (β = -0.004)** and **financial confidence (β = 0.025)** had minimal predictive value in the binary model, indicating that casual exposure and self-belief alone are insufficient to influence whether students invest. This aligns with **Wang et al. (2022)**, who argue that while confidence can shape intent, consistent engagement and skill-building are essential for action. The results suggest that structured, mandatory components like credit-bearing courses and formal training may be more influential than optional or informal learning.

To examine **investment diversification**, a Poisson regression was conducted. The count of financial instruments used served as the dependent variable. The model identified **university training (β = 0.029)** as a meaningful predictor of diversification, reinforcing the value of structured institutional interventions. However, **courses taken (β = -0.004)** and **seminar frequency (β = 0.001)** showed negligible effects, suggesting that breadth of exposure is less critical than depth and delivery quality. These results support **Chen (2022)**, who found that superficial exposure without practical application yields minimal behavioral change. Surprisingly, **financial literacy (objective) and confidence** did not significantly predict diversification, highlighting the disconnect between knowledge and strategic behavior.

Predictor Variable	Coefficient (β)
Intercept	3.364
Courses Taken	-0.004
Seminar Attendance Frequency	0.001
University Training Offered	0.029
Financial Confidence	-0.000

4.5.2 Financial Management Behavior (FMB)

A multiple linear regression was run to assess predictors of students' financial management behavior (FMB), including budgeting, saving, and debt repayment. Educational inputs—specifically **courses taken, seminar frequency, and university training**—were analyzed alongside financial confidence. The model revealed that **university training (β = 0.021)** and **financial confidence (β = 0.021)** were both modestly but positively associated with stronger FMB scores. These findings suggest that when institutions actively provide training, and when students feel more confident, financial habits improve. This aligns with **He (2024)**, who notes that confidence, when supported by structure, promotes proactive behavior in financial and academic domains alike.

Predictor Variable	Coefficient (β)
Intercept	2.825
Courses Taken	0.001
Seminar Attendance Frequency	0.001
University Training Offered	0.021

Financial Confidence	0.021

Notably, **courses taken (β = 0.001)** and **seminar frequency (β = 0.001)** had negligible effects, again underscoring that frequency and volume of exposure may not matter unless the learning is deeply embedded and experiential. This supports **Chang & Wang (2024)**, who argue that without meaningful assessment and reflection, instructional inputs do not translate into lasting outcomes. These findings highlight that not all educational interventions are equal—depth, engagement, and delivery method matter.

Discussion

This study reveals how financial behavior among university students in Hunan is shaped by a combination of educational exposure, institutional support, and psychological factors. The most consistent predictor of positive financial behavior—across investment participation, diversification, and financial management—was university-provided financial training. Students from institutions that offered structured programs were more likely to report active and diversified investment behavior. This finding confirms prior arguments that formalized, institutionalized education leads to more consistent behavioral outcomes (Davis, 2006). In contrast, course count and seminar attendance had minimal impact, suggesting that passive exposure lacks the transformative power needed for real behavioral shifts (Zhang et al., 2024). Furthermore, regional disparities in program availability may mirror broader institutional inequalities in Hunan's education system (Zeng et al., 2025).

Surprisingly, objective financial literacy and self-assessed confidence were not strong predictors of student behavior. While literacy is often positioned as the foundation of sound financial decision-making, our data suggest that knowledge alone is insufficient (Wang et al., 2022). Students may know financial concepts in theory but struggle to apply them without structured practice or real-life context (He, 2024). Confidence likewise failed significantly to raise investment or budgeting activity, and it was indicative that belief in oneself must be reinforced with competence-generative experiences (Liu et al., 2024). These run against popular paradigms and call for simulation, scenario practice, and feed-back-driven exercises as means of experiential learning.

Social factors, namely peer norms and self-efficacy, turned out to be subtle but crucial determiners of behavior. Students observing peer influence were significantly more likely to engage in investment activity even if financial knowledge was poor (Nepal et al., 2023). This supports the argument that financial conduct is socially conditioned rather than fundamentally knowledge-based or rational (Jiang et al., 2025). Similarly, students with higher financial self-efficacy were significantly more likely to display adherence to stable financial management practice, and it was found that belief systems internal to the person significantly mediate behavior (Zhang et al., 2024). These are in agreement with behavioral science research signaling the crucial role played by the social context and mindset in the conversion of intention into behavior.

Despite repeated exposure to financial seminars, students failed to mirror analogous returns in investment or financial management. This is a gap between exposure and impact—seminars, while valuable, may be poor in depth, length, or field reinforcement (Chen, 2022). Universities are disproportionately reliant on guest lecturing or one-time workshops, and such workshops students fail to internalize without field application (Chang & Wang, 2024). In the context of Hunan's education system, it is particularly worrying as institutions do not have post-event systems of follow-up for long-term skills development (Huang, 2018). The evidence is that financial education programs must transcend one-time event-based coverage and move in the direction of embedded, credit-bearing modules with clearly outlined performance-based outcomes.

The research bears major policy and design relevance for financial education in Hunan. Institutions must prioritize interactive materials like budgeting labs, simulation software, and electronic portfolio challenges that allow students to work actively with materials (Nepal et al., 2023). Such materials are capable of enhancing competence and raising confidence and internalizing positive financial behaviors. In addition, there is a necessity for combining school-based peer guidance, students' finance clubs led by students, and collaborative learning so as to capitalize on the positive peer norms effect (Li et al., 2024). No less crucial is obtaining fair access to such interventions, in particular in vocational and remote school settings that may lack funds or trained personnel (Zhou, 2022). Reducing such gaps with province-level policy harmonization and financing may significantly enhance disadvantaged students' outcomes.

Nonetheless, there are qualifications with this research that must be taken into account. First, the cross-sectional nature limits inferring causal relationships. A long-term study would better comprehensively understand dynamics over time of behaviors and reaction to education and experience (Liu et al., 2024). In the second criticism, the data are self-reporting and are therefore subject to social desirability bias, especially with respect to questions about debt or savings (Zhang et al., 2024). Third, although 300 is a statistically adequate sample size, it might not adequately sample the heterogeneity of Hunan's higher

education sector, particularly in outlying institutions (Zeng et al., 2025). These qualifications must be taken into account in interpreting results and designing subsequent research.

Chapter 5: Conclusion And Recommendation

5.1 Conclusion

Financial literacy is less a subject of theory—more and more, it is an applied life skills competency for young adults, and particularly for students at the nation's best universities today, confronted with an ever-increasing changing financial environment. This study corroborated that financial training in an organizational context, and specifically integrated into curriculum, is better able to cultivate robust financial behaviors than passive means such as one-time seminars or non-applied courses. Hands-on training reinforces both understanding and application, bridging the chasm between knowing and doing (Chen, 2022). These are aligned with past research demonstrating the worth of incorporating greater applied relevance even into education at best universities, especially in economically changing provinces such as Hunan (Wang et al., 2022). Emotive engagement and motivation also emerged as determining factors, confirming that education must inspire as much as it must educate (Liu et al., 2024). A financial literacy based purely on cognitive channels is insufficient—unless supplemented with psychological and institutional reinforcement, students are hardly able to translate what they've learned into practical, enduring application in financial decision-making.

In addition to structural learning environments, non-cognitive traits such as confidence, social reinforcement, and peer influence played critical roles in shaping students' financial habits. These factors help explain why some students with similar academic exposure display vastly different behaviors. Building self-efficacy and fostering positive peer norms are key to increasing engagement in budgeting, saving, and investment (Zhou, 2022). Financial education must therefore be holistic—addressing not only knowledge but mindset and motivation. Programs that encourage peer-led discussions or mentoring can cultivate emotional ownership of financial habits, a dimension often overlooked in traditional financial education (Li et al., 2024). These social learning strategies, when combined with digital tools and feedback loops, promote sustained financial behaviors. Given that young adults often learn from observing peers, creating communities of practice around finance could improve outcomes beyond what standard instruction achieves alone (Huang, 2018). This multi-dimensional approach redefines how institutions should conceptualize financial education going forward.

Digital fluency also surfaced as an essential component of modern financial competence. Today's students interact with financial services primarily through online platforms and mobile apps, yet most education programs lag behind in addressing digital financial behaviors. Integrating training on data privacy, digital budgeting, and app-based investment tools is now a core necessity, not a luxury (Jiang et al., 2025). Those institutions that fail to innovate and cater to this shift virtually might render students without readiness for the spaces where students actually manage finances. In addition, those platforms are rich with potential for gamification and live simulations, and such instruments are seen to reduce knowledge-behavior gaps (Nepal et al., 2023). Incorporation of such instruments also reduces anxiety and improves users' confidence, especially first-generation university students managing financial systems without guidance (Tang et al., 2023). Colleges need to move beyond abstract instruction and develop hands-on virtual interactions mimicking tools students are going to apply out in the field and improve relevance and retainment.

Inequalities in availability of financial education between institutions of varying types also became apparent in this study, between public, private, and vocational institutions. These inequalities are symptomatic of a deeper problem in the higher education system of China, in that resource allocation and excellence of programs are often institution-specific (Gu & Lu, 2023). Policy intervention in this instance is required in the form of standardized financial literacy curriculum and special funding designated for supporting implementation among less-well-resourced schools (Liu & Liu, 2025). Finanical education cannot be founded on institutional reputation but must become ingrained as part of the scholarly development of each and every one of a province's students regardless of background. Heterogeneous landscapes of provinces, such as Hunan, would best be served with region-wide, coordinated initiatives so as best to level the playing field (Wang & Fu, 2009). When students across all campuses are given even chance to study and exercise financial management skills, the province will best be situated to reduce debt among students, encourage responsible investment, and cultivate long-term economic strength.

Overall, research emphasizes that financial literacy is multi-dimensional—requiring cognitive knowledge, behavioral practice, emotional confidence, and social engagement to become strongly ingrained. Institutions therefore need to go beyond conventional teaching and implement whole-scope programs that integrate digital simulation, peer mentorship, and self-reflection tools (Chen, 2022). Financial education must become integrated, not as an add-in, with clear learning outcomes, feed-back mechanisms, and fairness to all types of universities (Wang et al., 2022). With the rise of new financial technologies, adapting

curricula to digital environments will be key for relevance and effectiveness (Liu et al., 2024). The future of financial education in Hunan—and everywhere—rests on revamping dated paradigms and embracing an integrated, psychologically sensitive, and digitally supported framework preparing students for thriving financially in a complex world.

5.2 Recommendation

To strengthen the effectiveness of financial education in Hunan's post-secondary system, institutions should prioritize experiential learning as a primary methodology. Traditional lecture-based presentations require supplementation with active learning modalities such as budgeting simulations, stock markets simulations, and experiential personal finance projects. These have been proven to increase the extent of student retention, application of skills, and long-term behavioral change (Iswan et al., 2021). Inclusion of such components in core curriculum, as opposed to offering them as extracurricular options, will allow for greater coverage of students (Si, 2021). Additionally, assessments should move beyond knowledge and include behavior and decision-making skills, offering students opportunities to reflect and adjust their financial behaviors based on responses (Tang et al., 2023).

It is also recommended that peer-led learning and mentorship be integrated into financial education provision. Students are more likely to internalize new behaviors if they observe peers practicing those behaviors in realistic settings (Nepal et al., 2023). It might be attained through students' run finance clubs, peer workshops, or mentorship initiatives involving financially literate students and students still learning skills (Jiang et al., 2025). They foster the culture of learning that is supportive and counteracts students' loneliness while practicing finances alone (Gu & Lu, 2023). Peer learning might also be more culturally aligned and effective, particularly in collectivist settings in which shared values determine personal behaviors.

Universities must also collaborate with financial institutions and technological providers in modernizing the tools used in financial education. In collaboration with banks and financial technological start-ups, universities are capable of offering students budgeting software, live investment platforms, and financial sustainability trackers incorporated into classes (Liu & Liu, 2025). These instruments enhance participation and encourage experiences with virtual financial arenas students will encounter upon graduation (Wang & Fu, 2009). Collaboration is also feasible in covering gaps in content so financial education remains up-to-date as markets, products, and technologies are new and refreshed (Li et al., 2024). These partnerships must become established through long-term contracts so there is continuity and sustainability in implementation.

Policy intervention at the level is needed in response to gaps in access to financial education between types of institutions. Minimum requirements financial literacy curricula are needed to be issued by government bodies for all post-secondary institutions in the province (Chen, 2022). They may be localized but need to be issued so as to provide minimum core coverage over budgeting, saving, credit management, and digital finance (Si, 2021). Moreover, vocational and countryside colleges require additional funding so as to provide fair and equal access to qualified instructors and materials (Huang, 2018). Policymakers must measure outcomes with regional audits as well and adjust strategies based on gaps identified so that all students, regardless of institution, are equally positioned to become financially competent.

Finally, institutions must combine psychological development with financial education, keeping in view that behaviors are not so much based on knowledge but also on belief, feelings, and attitude. Curriculum must contain elements of goal-setting exercise, financial journaling, and exercise for building confidence (Zhou, 2022). These tools enhance self-knowledge and encourage students to internalize and apply knowledge to day-to-day life (Wang et al., 2022). Trainers must also be trained in supporting students' emotional engagement with financial content and generating empathy and encouragement rather than testing (Liu et al., 2024). A psychologically friendly framework will make financial education more efficacious, especially for first-generation students and students from disadvantaged backgrounds.

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