CHAPTER I

INTRODUCTION

1.1 Research Background

The convergence of China's digital revolution and its profound socioeconomic transformation has fundamentally restructured the financial behaviors of Generation Z. As "digital natives," this demographic demonstrates consumption patterns and decision-making logic that not only exemplify how technological innovation shapes individual behavior but also foreshadow the future trajectories of the consumer market (Wang et al., 2021). Empirical evidence substantiates the magnitude of this phenomenon, with industry reports indicating a substantial increase in credit card delinquency rates among the 18-29 age demographic (iResearch, 2023). This trend is facilitated by fintech infrastructure, such as Huabei and Baitiao, which has democratized credit access through risk assessment mechanisms based on big data analytics (Gomber et al., 2018; Zavolokina et al., 2016).

This technological shift is exacerbated by psychological and cultural dimensions, where traditional values of frugality have been superseded by consumerist ideology and social media-driven identity construction that triggers impulsive purchasing (Cheng et al., 2023; Lou & Yuan, 2019). Furthermore, the phenomenon of "social comparison anxiety" propels symbolic consumption beyond financial capacity for the sake of peer validation (Djafarova & Bowes, 2021; Chai & Schutt, 2021). These dynamics unfold within a challenging macroeconomic

context characterized by labor market uncertainty (National Bureau of Statistics of China, 2023), which paradoxically precipitates "present-biased" consumption behaviors among university students lacking adequate practical financial literacy (Frederick et al., 2002; OECD, 2020), effectively transforming advanced spending from deliberate decisions into unconscious behavioral habits (Xiao & Porto, 2021). Wuhan, as a representative "new first-tier city," provides an optimal empirical setting for investigating this phenomenon due to its significant economic profile, substantial GDP, and a student population exceeding 1.2 million, positioning it as a quintessential "university city." As a national central city and a core node within the Yangtze River Economic Belt strategy, Wuhan reflects China's urban hierarchy and economic geography more accurately than megacities like Beijing or Shanghai, where exceptional income levels may yield unrepresentative findings. The high penetration rates of mobile payment systems and internet consumer finance products in Wuhan closely mirror national averages for urban areas, thereby ensuring sample representativeness in research concerning digital financial behaviors.

Specifically, Wuhan University of Technology (WUT), a Ministry of Education "Double First-Class" institution, serves as a strategic research site with an enrollment of over 36,000 full-time undergraduate students across nine comprehensive disciplines spanning engineering, science, management, economics, literature, and law. This disciplinary diversity generates substantial heterogeneity in students' knowledge structures, career trajectories, and anticipated income profiles. Such diversity allows for robust intra-sample comparisons to

examine how variations in financial literacy influence consumption behaviors across different academic backgrounds and socioeconomic contexts, as well as how formal education interacts with exposure to digital financial instruments.

The primary theoretical framework of this research is rooted in the concept of financial literacy as a critical determinant of individual well-being. Lusardi and Mitchell (2014), in their seminal work, define this construct as encompassing three core dimensions: (1) cognitive knowledge of fundamental financial concepts, including interest rates, inflation, and risk diversification; (2) behavioral competencies in budgeting, saving, and investment execution; and (3) attitudinal orientations toward long-term financial planning. Their empirical evidence consistently demonstrates that individuals with higher financial literacy exhibit superior debt management, greater retirement savings accumulation, and reduced susceptibility to financial fraud, serving as a foundational basis for analyzing student behavior.

However, recent scholarship extends the critique that conventional financial literacy assessments are inadequate for capturing the digital financial competencies that are increasingly critical in technology-mediated consumption environments (Morgan & Trinh, 2020). Existing literature has focused disproportionately on adult populations in developed economies, with limited examination of financially dependent populations particularly university students in emerging markets where the rapid digitalization of financial services creates unique vulnerabilities (Lusardi et al., 2021). Consequently, modern financial literacy theory must integrate an understanding of algorithmic pricing, platform business models, and data privacy

implications as integral components of Digital Financial Competency.

To bridge behavioral aspects, this research adopts the "choice architecture" framework proposed by Thaler and Sunstein (2008). This study conceptualizes internet consumer credit platforms as constructors of decision environments that systematically exploit cognitive biases including present bias and anchoring effects to encourage borrowing behaviors. The seamless integration of credit mechanisms into consumption interfaces constitutes a form of "reverse nudging," wherein platform designs subtly guide users toward actions that maximize platform revenue but frequently contradict the users' long-term financial interests. Within this model, financial literacy functions as a protective factor, enhancing an individual's capacity to recognize and resist these manipulative choice architectures (Fernandes et al., 2014).

Recent empirical investigations within the Chinese context reveal alarming deficiencies in financial literacy among university students, a significant majority of whom fail to calculate the effective annual percentage rate (APR) from the daily interest rates quoted by credit platforms a critical cognitive deficit given that real interest rates often exceed 18% (Xiao & Porto, 2021). Research has also documented that a significant proportion of students experience repayment difficulties, with some engaging in "multi-platform borrowing" (*duo tou jie dai*) and practices of "borrowing to repay loans" (*yi dai yang dai*), which precipitate debt spirals (Er et al., 2021). These behavioral mechanisms are elucidated through the psychology of hyperbolic discounting, where students with lower financial knowledge demonstrate a steep preference for immediate rewards over larger future

benefits (Meier & Sprenger, 2010), a pattern significantly amplified in contexts influenced by social media (Djafarova & Bowes, 2021).

Despite these valuable contributions, existing literature exhibits critical limitations due to the predominance of cross-sectional designs that fail to elucidate causal mechanisms (Kaiser & Menkhoff, 2020), the neglect of psychological mediating pathways such as self-control (Strömbäck et al., 2017), and insufficient attention to the unique context of platform algorithms (Jagtiani & Lemieux, 2019). This study addresses these gaps by: (1) employing Structural Equation Modeling (SEM) to examine both direct effects and mediated pathways between financial literacy and consumption behavior; (2) incorporating platform-specific factors, including algorithm awareness and digital Digital Financial Competency, into the analytical framework; and (3) utilizing a large-scale representative sample from Wuhan University of Technology to generate findings generalizable across the network of comprehensive universities in China's provincial capital cities.

The urgency of this research is underscored by its policy relevance, particularly given recent regulatory interventions targeting internet consumer lending to students, while financial education implementation in universities remains fragmented and overly theoretical, rendering it less effective for behavioral change (Kaiser & Menkhoff, 2017). Understanding the mechanisms linking financial literacy to advanced consumption behaviors carries systemic implications; if current student cohorts establish habits of chronic debt, the long-term consequences include reduced capacity for homeownership and retirement security (Lusardi & Mitchell, 2014). Conversely, effective financial literacy interventions

during the formative university years offer the potential to generate lasting improvements in financial capability with positive spillover effects throughout the individual's life course (Bruhn et al., 2016), making this research crucial for both individual financial stability and intergenerational wealth accumulation.

1.2 Problem Identification

Based on the background of the study previously expounded, several critical problems regarding the financial behavior of university students in the digital economy can be identified. The convergence of ubiquitous fintech accessibility and evolving consumption norms has generated a complex matrix of challenges that can be categorized as follows:

1. The Paradox of "Refined Poverty" and Liquidity Mismatch

   There exists a fundamental misalignment between the consumption aspirations of Generation Z students and their actual financial capacity. While students at institutions such as Wuhan University of Technology represent an intellectual elite, a significant cohort exhibits a pattern of "refined poverty," characterized by high-frequency consumption of status-signaling goods funded through debt. The problem lies in the normalization of advanced consumption (spending future income in the present) without a corresponding increase in income stability, creating a precarious liquidity mismatch that predisposes students to default risks and cyclical debt accumulation.

2. Asymmetry between Platform Algorithms and Digital Digital Financial Competency

A critical information asymmetry exists between internet consumer credit platforms and student users. While fintech platforms utilize sophisticated "choice architectures" and big data algorithms to facilitate instant gratification and minimize friction, students generally possess low levels of "algorithm awareness." The specific problem is that traditional financial literacy (understanding basic interest rates) is no longer sufficient; students lack the specific digital competencies required to decode complex fee structures, dynamic pricing models, and data privacy implications inherent in platform-based lending, rendering them vulnerable to predatory "reverse nudging" mechanisms.

3. The Exploitation of Cognitive Biases and Lack of Self-Regulatory Mechanisms

   The digital consumption environment is engineered to exploit psychological vulnerabilities, specifically present bias and hyperbolic discounting. The problem is not merely a lack of knowledge, but a failure of self-regulatory mechanisms in the face of hyper-targeted social media marketing and seamless payment interfaces. There is a lack of understanding regarding how specific psychological mediators such as self-control and social comparison anxiety interact with financial literacy to either inhibit or accelerate impulsive borrowing behaviors.

4. The Disconnect between Academic Achievement and Practical Financial Capability

   Despite the high academic standing of students in "Double First-Class"

universities, there is a distinct gap between general academic intelligence and practical financial capability. The problem is that the current higher education curriculum in China remains fragmented regarding financial education; it focuses predominantly on theoretical knowledge rather than behavioral modification or practical decision-making skills. Consequently, students enter the sophisticated financial marketplace equipped with abstract cognitive skills but devoid of the applied defensive strategies necessary to navigate the risks of the digital credit ecosystem.

5. Invisibility of Causal Pathways in the Digital Context

   While the correlation between low financial literacy and debt is recognized, the specific causal pathways within the Chinese digital context remain obscured. The problem is a lack of clarity regarding whether financial literacy acts as a direct inhibitor of overconsumption or if it operates indirectly by enhancing psychological resilience. Without identifying these specific mechanisms, policy interventions and educational programs remain untargeted and potentially ineffective.

1.3 Scope of Research

To ensure the feasibility, depth, and validity of the research, and to avoid an overly broad generalization of the findings, the scope of this study is circumscribed by the following limitations:

1. Focus on Internet-Based Consumer Credit

   This study specifically examines "advanced consumption behavior" funded through internet consumer finance platforms (e.g., Ant Group's *Huabei*, JD

Finance's *Baitiao*, and similar fintech lending products). It expressly excludes traditional commercial bank loans (such as mortgages or business loans), government-subsidized student tuition loans, and informal borrowing from family or peers. The focus is strictly on the interaction between students and algorithmic credit systems designed for daily consumption.

2. Institutional and Demographic Scope

   The research population is limited to full-time undergraduate students currently enrolled at Wuhan University of Technology (WUT). While WUT is a representative "Double First-Class" university in a new first-tier city, the study does not purport to represent the entire higher education population of China, particularly students in vocational colleges or those in distinct economic regions (e.g., rural areas or top-tier megacities like Beijing/Shanghai) where consumption patterns may diverge significantly.

3. Dimensionality of Financial Literacy

   The measurement of financial literacy is limited to three specific dimensions as defined by the theoretical framework: Cognitive Financial Knowledge (understanding rates, inflation), Financial Behavior (budgeting, saving), and Financial Attitude (orientation toward money). Additionally, the study incorporates Digital Digital Financial Competency (awareness of platform algorithms) as a modern extension of literacy. It does not cover broader economic theories or advanced investment portfolio management skills irrelevant to the student context.

4. Selection of Psychological Mediators

   While numerous psychological factors influence spending, this study limits its investigation to specific behavioral constructs identified in the "Choice Architecture" framework: Self-Control. Other psychological traits (e.g., personality types such as the Big Five) are excluded unless they directly intersect with the specified variables.

5. Cross-Sectional Methodology

   The study employs a quantitative approach using cross-sectional data collected via questionnaires at a specific point in time. Consequently, while the study employs Structural Equation Modeling (SEM) to infer potential causal relationships, it is limited in its ability to observe longitudinal changes in behavior or the long-term evolution of financial literacy throughout the entire four-year university cycle.

1.4 Research Problem

Based on the research framework and identified gaps, this study seeks to determine the causal relationships between financial literacy, psychological mediators, and consumption behavior. The specific causal research questions are:

1. Does financial literacy significantly influence advanced consumption behavior?
2. Does digital financial competency significantly influence advanced consumption behavior?
3. Does financial literacy significantly influence self-control?
4. Does digital financial competency significantly influence self-control?

5. Does self-control significantly influence advanced consumption behavior?
6. Does self-control significantly mediate the causal relationship between financial literacy and advanced consumption behavior?
7. Does self-control significantly mediate the causal relationship between digital financial competency and advanced consumption behavior?

1.5 Research Purpose

Aligning with the problem formulation, the primary objective of this study is to empirically examine the structural relationships and causal mechanisms driving student consumption in the digital economy. The specific objectives are as follows:

1. To analyze the direct influence of financial literacy on advanced consumption behavior among undergraduate students, determining whether possessed financial knowledge effectively mitigates the propensity for debt-funded consumption.
2. To examine the direct influence of digital financial competency (specifically algorithm awareness) on advanced consumption behavior, verifying whether understanding platform mechanisms serves as a distinct protective factor.
3. To examine the direct influence of financial literacy on self-control.
4. To examine the direct influence of digital financial competency (specifically algorithm awareness) on self-control.
5. To examine the direct influence of self-control on advanced consumption behavior.

6. To investigate the mediating role of self-control in the relationship between financial literacy and advanced consumption behavior, aiming to understand if literacy translates into action through enhanced behavioral regulation.
7. To investigate the mediating role of self-control in the relationship between digital financial competency and advanced consumption behavior, aiming to understand if literacy translates into action through enhanced behavioral regulation.

1.6 Significances of The Study

This study aims to provide substantial contributions to both the academic understanding of financial behavior in the digital age and the practical formulation of educational and regulatory policies. The specific contributions are delineated as follows:

1.6.1 Theoretical Significance

1. Expansion of the Financial Literacy Construct

   This research contributes to the literature by expanding the traditional definition of financial literacy to include Digital Financial Competency and Algorithm Awareness. By empirically testing these variables, the study updates existing theoretical frameworks to reflect the realities of the platform economy, arguing that in a fintech-dominated landscape, the ability to understand algorithmic pricing and platform mechanics is as critical as traditional numeracy.

2. Integration of Behavioral Economics into Financial Education

The study theoretically enriches the field by synthesizing Financial Literacy Theory with the "Choice Architecture" framework (Thaler & Sunstein). It creates a novel conceptual link that views internet credit platforms as "reverse nudging" mechanisms. The research elucidates how financial literacy functions not merely as a knowledge base, but as a cognitive shield that interacts with psychological mediators Self-Control, Risk Perception, to resist manipulative design features.

3. Elucidation of Causal Pathways

   Unlike prevalent cross-sectional studies that establish simple correlations, this research employs Structural Equation Modeling (SEM) to map the specific causal pathways between variables. It contributes a granular understanding of *how* financial literacy influences behavior, distinguishing between direct effects and indirect effects mediated through psychological self-regulation mechanisms.

1.6.2 Practical Significance

1. Evidence-Based Policy Formulation

   The findings provide empirical data to inform regulatory bodies (such as the China Banking and Insurance Regulatory Commission and the Ministry of Education) regarding the governance of internet consumer finance. By identifying the specific vulnerabilities of university students, the study supports the development of more targeted consumer protection regulations, particularly concerning the transparency of algorithmic credit scoring and the marketing of credit products to youth.

2. Pedagogical Innovation in Higher Education

   For educational institutions, specifically comprehensive universities like Wuhan University of Technology, the research offers a blueprint for curricular reform. The findings justify a shift from theoretical, lecture-based financial education toward applied, behavioral-focused pedagogy. The study highlights the necessity of integrating digital literacy and psychological training (e.g., impulse control strategies) into standard financial capability programs.

3. Enhancement of Student Financial Well-being

   At the individual level, the study serves to raise awareness among students and their families regarding the risks of "refined poverty" and the hidden costs of digital credit. By identifying the psychological drivers of overconsumption, the research provides a basis for developing intervention programs and counseling services aimed at preventing debt spirals, thereby safeguarding the long-term financial security and intergenerational wealth accumulation of the younger generation.