

Money Intuition in Digital Financial Behavior: The Impact Mechanism of Mobile Payment and Credit Consumption on Financial Risk Perception among Quasi-Digital Natives

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Abstract

The deep popularization of digital payment has profoundly influenced the consumption behavior and money cognition of young people, but it has also raised concerns about the weakening of financial risk perception. This paper introduces the core concept of “money perceptibility,” which refers to individuals’ subjective judgment of the authenticity of money’s value and their comprehensive psychological perception during spending. Based on this, the paper constructs a theoretical analysis framework of “payment method—money perceptibility—financial risk perception.” It explores the impact mechanisms of mobile payment and credit consumption on the financial risk perception of quasi-digital natives through three pathways: sensory, cognitive, and emotional. Accordingly, the paper proposes countermeasures from three levels—family and school education, corporate product design, and government regulatory protection—aiming to help young people reshape healthy money cognition and enhance their ability to guard against financial risks in the digital era.

Keywords

digital payment, money perceptibility, financial risk perception, quasi-digital natives, payment pain, credit consumption

1. Introduction

1.1 Statement of the Problem

The rapid development of the digital economy has become a key feature of China’s economic and social transformation (the opening of the “14th Five-Year Plan for Digital Economy Development” states that “the digital economy is the main economic form following the agricultural and industrial economies”). The high-speed development of the information age has also led to the rapid growth of digital payment, which now dominates the consumption behavior of people in daily life, especially among young people. According to data from the People’s Bank of China, banks processed 210.98 billion mobile payment transactions in a year, with a transaction value of 563.70 trillion yuan. The payment system operated smoothly, and the volume of non-cash payment business continued to increase steadily [1,2]. Additionally, the 54th “Statistical Report on

Internet Development in China” released by the China Internet Network Information Center (CNNIC) shows that as of June 2024, China had nearly 1.1 billion netizens (1.09967 billion), of whom 969 million used online payment services, accounting for 88.1% of all netizens [3]. This indicates that digital payment has deeply integrated into economic and social life and has become a core force driving the development of the digital economy. The user penetration rate of credit consumption tools such as Pinduoduo’s “pay later” and Alipay’s Huabei continues to rise. The digital transformation of securities trading and online lending has further simplified large-sum fund transfers into mere changes in numbers on a screen. The physical attributes of money are gradually being dissolved, and digital symbols have become the primary form through which contemporary young people perceive money. At the same time, this raises questions about contemporary young people’s perception of financial risk. Does this digitized way of understanding money weaken young people’s risk sensitivity?

Although existing studies have confirmed the impact of payment methods on consumption behavior and the influence of credit consumption on debt risk, and have proposed related theories such as “payment pain” and “mental accounting,” significant research gaps remain. Most existing studies focus on post-90s and post-00s groups, with relatively little attention paid to the “quasi-digital natives”—the late Z generation and early Alpha generation (born between 2005 and 2015)—who grew up highly dependent on digital payment and had limited exposure to physical currency [4,5]. Based on this, the present paper takes the “quasi-digital natives” as the research object, proposes the core analytical concept of “money perceptibility,” systematically analyzes the internal mechanisms by which digital payment and credit consumption affect young people’s financial risk perception, identifies potential risks, and offers targeted recommendations. It seeks to answer the core question: “How does the digital era shape young people’s money intuition?”

1.2 Research Significance

1.2.1 Theoretical Significance

The theoretical contributions of this paper can be summarized in three aspects.

First, this study is the first to systematically and rigorously define the concept of “money perceptibility” as individuals’ comprehensive perceptual ability regarding the physical attributes, value attributes, and risk attributes of money. This effectively fills the theoretical gap in existing literature concerning the money cognition of digital natives and opens a new perspective for research on the relationship between digital payment and financial risk perception [6].

Second, by integrating the “payment pain” theory from behavioral economics, the embodied cognition perspective from psychology, and sociological analyses of the generational characteristics of “digital natives,” this paper constructs a theoretical framework suitable for China’s highly digitalized context, thereby providing a more solid understanding of “how digital payment reconstructs individuals’ money cognition patterns” [4,6].

Third, by conducting a clear and insightful examination of the “quasi-digital natives” group, this paper breaks through the long-standing limitation in relevant research that has largely overlooked this cohort and focused primarily on post-90s and post-00s adult users. It not only expands new empirical samples for consumption behavior research from an intergenerational difference perspective but also lays a foundation for future studies on the financial behavior of late Z generation and early Alpha generation individuals.

1.2.2 Practical Significance

From a practical perspective, this study offers three layers of real-world value.

First, by clarifying the various consequences of the lack of “money perceptibility,” the paper provides references for financial institutions, educational platforms, and regulatory authorities in designing financial literacy courses, risk warning tools, and related policies, thereby effectively helping “quasi-digital natives” develop healthy money intuition and rational consumption habits.

Second, in optimizing the design of digital financial products and risk control mechanisms, it must be recognized that mainstream payment and credit products such as Huabei, JD White Bar, and “pay later” services deliberately weaken users’ sense of payment pain during design, thereby diminishing users’ perception of their own assets and inadvertently inducing debt tendencies. The concept of “money

perceptibility” proposed in this paper can naturally serve as a new indicator for evaluating product experience, guiding enterprises to appropriately retain “payment salience” while ensuring service convenience, and truly achieving a balance between commercial benefits and user rights.

Third, from the perspective of national digital economy governance and financial stability strategy, as the penetration rate of digital payment continues to increase, issues such as debt risk and irrational investment among young people have become more prominent. Starting from micro-level psychological mechanisms, this paper provides clear and insightful analysis on “how the digital environment shapes the consumption behavior of the new generation,” thereby offering policy recommendations for preventing systemic financial risks.

2. Literature Review and Conceptual Framework

2.1 Research Status and Theoretical Gaps

The impact of payment methods on individual consumption behavior is a classic and well-researched topic in behavioral economics and consumer psychology. Existing literature is primarily based on two major theoretical frameworks: the “Pain of Paying” theory and the “Mental Accounting” theory. The “Pain of Paying” theory, proposed by Prelec and Loewenstein (1998), presents a clear and powerful logical chain: the physical attributes of the payment medium directly affect consumers’ perception of payment pain. Cash payments require physical handover and bill counting, allowing consumers to directly and fully perceive the reduction in their assets. This process activates brain regions associated with pain and thereby inhibits impulsive consumption [4,5]. In sharp contrast, non-cash payment methods such as credit cards and digital payments, due to their abstract, non-immediate, and lack of physical contact nature, significantly weaken this pain sensation, leading to increased spending. More recent studies have further rigorously verified that mobile payment reduces payment salience more than traditional card swiping, causing consumers to more easily overestimate their purchasing power and underestimate total expenditure.

Literature in the field of credit consumption has appropriately applied Thaler’s “Mental Accounting” theory to explain young people’s debt behavior. Tools such as Huabei and JD White Bar, which operate on a “buy now, pay later” model, cleverly exploit the separation between the “consumption moment” and the “payment moment,” reconstructing users’ mental accounts. At the moment of consumption, users only perceive the use of credit limits rather than the depletion of their own assets, deferring repayment pressure to a future point. This implicit feature makes it easier for users to underestimate the actual cost of debt [5]. Complementing this, intergenerational difference research on “Digital Natives” notes that this group grew up in an internet environment with a natural affinity for digital technology. However, current academic research has mostly focused on post-90s and early post-00s groups, with relatively little attention paid to the “quasi-digital natives” born between 2005 and 2015 [6]. More importantly, this group is in a critical transitional period from “having cash memory” to “having no cash memory,” so the logic of their money cognition formation differs fundamentally from that of previous generations.

Domestic scholars have conducted solid and multi-layered localized research on this topic. Liu Wenchang (2026) argued that digital payment reduces payment pain and reconstructs mental accounts, thereby leading to fragmented and irrational consumption decisions [5,7]. Nevertheless, existing literature still has two clear and important research gaps: first, the research subjects are incomplete, with no dedicated analysis of “quasi-digital natives”; second, mechanism exploration is not sufficiently deep. Current studies mostly discuss consumption amounts directly from payment methods without clarifying the psychological transmission mechanisms—namely, individuals’ psychological perception process of the authenticity of money—which is precisely the research value of the core concept “money perceptibility” defined in this paper.

2.2 Definition of the Core Concept: Money Perceptibility

Addressing the research deficiencies mentioned above, this paper proposes “Money Perceptibility” as the core analytical concept. It does not refer to the physical form of currency itself, but rather to individuals’ comprehensive subjective experience of the authenticity, scarcity, and psychological pain associated with money’s value during spending situations. In short, it is the intensity of individuals’ psychological perception of the authenticity of money as a resource.

Specifically, this paper divides “money perceptibility” into two typical states:

(1) High Money Perceptibility:

Individuals have a clear perception of the amount and value of their held funds and regard them as limited resources. In this state, individuals experience strong psychological pain during spending, and their consumption decisions tend to be cautious and rational. This typically corresponds to scenarios with strong physical feedback, such as cash payments.

(2) Low Money Perceptibility:

Individuals have a vague perception of the amount and value of their held funds and tend to view money as digital symbols without clear boundaries. In this state, individuals experience very low or even no psychological pain during spending, easily overlook the scarcity and potential risks of money, and are prone to impulsive consumption decisions. This typically corresponds to scenarios with weak physical feedback, such as mobile payment and credit payment.

This paper argues that digital payment reduces young people’s “money perceptibility” by stripping away the physical attributes of money, thereby leading to a blunting of their financial risk perception. This concept integrates the emotional dimension of “payment pain” from behavioral economics and the cognitive dimension of “money form effects,” providing a new theoretical perspective for explaining the irrational tendencies in young people’s financial behavior in the digital era [4,8].

2.3 Theoretical Model and Research Hypotheses

Based on the definition and deconstruction of the core concept of “money perceptibility,” this paper posits that digital payment and credit consumption are not direct causes of young people’s risky financial behavior. Instead, they exert their effects through a hidden psychological mediating mechanism—the weakening of “money perceptibility.” This process constitutes the core analytical logic of this paper and can be broken down into three deductive links:

First, the evolution of payment methods reshapes the foundation of individuals’ money perception. Traditional cash payments possess distinct physical attributes. The tactile sensation of paper money, the weight of coins, and the actions of counting create a multi-sensory “embodied cognition” experience that allows individuals to intuitively confirm the reduction of assets and maintain high money perceptibility. However, digital payment abstracts money into symbols on a screen, severing the multi-sensory feedback during the payment process. Credit payment tools such as Huabei and JD White Bar further separate “consumption” from “payment” in time, blurring the boundaries of mental accounts [5]. For “quasi-digital natives,” who have grown up almost entirely in a cashless environment, the de-physicalized and de-immediate characteristics of these payment methods reduce their perception of the authenticity and scarcity of money, significantly lowering “money perceptibility.”

Second, the absence of money perceptibility is the key trigger for the blunting of financial risk perception. When individuals are in a state of “high money perceptibility,” every expenditure is accompanied by a clear “sense of loss” and psychological resistance. This instinctive emotional response forms the first line of defense against financial risk, prompting cautious decision-making. Conversely, in a state of “low money perceptibility,” spending becomes “painless” and “imperceptible.” In this psychological state, individuals’ vigilance toward capital outflows and debt accumulation decreases significantly. In other words, it is precisely the lack of “money perceptibility” that makes it difficult for young people to generate appropriate risk anxiety when facing high-value consumption or credit temptations, leading to a decline in risk perception.

Third, generational characteristics amplify this transmission mechanism. Compared with post-90s or earlier generations, quasi-digital natives have a highly distinctive growth trajectory: they are in a critical transitional period from “having cash memory” to “having no cash memory,” and some have never even developed experience with physical currency. The absence of this “experience anchoring” with cash makes them more adaptable to the abstract features of digital payment, but it also means their money perceptibility is more easily weakened by the digital environment. Therefore, in the transmission chain of “payment

method → money perceptibility → risk perception,” the effect observed among “quasi-digital natives” will be more significant and thorough than in previous generations.

3. Mechanism Analysis: Pathways Through Which Digital Payment and Credit Consumption Affect Money Perceptibility and Financial Risk Perception

Digital payment and credit consumption do not directly affect individuals’ rational decision-making capacity. Instead, they systematically and hierarchically erode the “money perceptibility” of quasi-digital natives through three interconnected psychological pathways—sensory, cognitive, and emotional—thereby blunting financial risk perception. This outcome is essentially the result of the interaction of multiple mechanisms.

3.1 Sensory Pathway: Discussion on the Stripping of Money’s Physical Attributes and the Breakage of the Embodied Cognition Chain

In traditional cash transactions, money possesses distinct and perceptible physical attributes: the texture of paper bills, the weight of coins, the sound of counting, and the hand movements during delivery. These factors together constitute a complete sensory experience of cash transactions. Visual, tactile, and auditory stimuli interconnect to form individuals’ typical “embodied cognition” of the existence of money. More importantly, behavioral neuroscience has provided clear and rigorous evidence that physical contact activates brain regions in the insular cortex directly associated with pain and loss, thereby generating an intuitive “pain of paying” and forming a physiological barrier that inhibits impulsive consumption [4].

However, the emergence of digital payment completely severs the original sensory feedback chain: payment is simplified to changes in numbers on a screen, fingerprint, or facial recognition. Consequently, the physical carrier of money has been replaced by abstract codes. For “quasi-digital natives,” the abstraction of digital payment is not merely a change in payment method; it is fundamentally a systematic reconstruction of the underlying logic of money cognition. Since they have had little exposure to the physical feedback of cash decreasing transaction by transaction, account balances in their cognition resemble a set of digital symbols without clear boundaries. Therefore, it is reasonable to introduce the concept of “de-physicalization”: it directly leads to a substantial increase in the “payment pain” threshold [4]. Without immediate sensory feedback, it becomes difficult to generate psychological resistance during spending, making capital outflows painless and imperceptible. In other words, sensory numbness is the primary pathway for the weakening of money perceptibility and serves as the physiological foundation for the blunting of financial risk perception.

3.2 Cognitive Pathway: Blurring of Mental Accounts and Distortion of Value Perception

Beyond the stripping at the sensory level, digital payment and credit consumption also actively and systematically blur the boundaries of “mental accounts,” thereby exerting a clear influence on individuals’ cognition of money’s value [5]. Thaler’s mental accounting theory illustrates this point: people spontaneously categorize funds from different sources and for different purposes into separate mental accounts and apply different spending rules to each. In the cash transaction era, the sources of funds were clear (salary, pocket money) and their purposes well-defined (salary for savings, pocket money for entertainment), resulting in distinct account boundaries. Expenditure directly meant an absolute reduction in the balance of a particular account [5].

In digital credit consumption scenarios, however, the original stable cognitive structure is broken. Tools such as Huabei, JD White Bar, and “pay later” services clearly separate “current consumption” from “future repayment” in both time and space. Thus, at the moment of consumption, users perceive only the use of credit limits rather than the depletion of their own assets, easily creating the illusion of “not spending their own money” and readily categorizing the expenditure into a “future account.” This leads to the typical phenomenon of blurred mental account boundaries characterized by the “separation of consumption from payment,” with the cost of funds being rendered implicit and deferred [5]. For “quasi-digital natives,” whose cognitive control abilities are still developing, this ambiguity easily causes distortion in value perception: underestimating the true cost of current consumption, overestimating future repayment capacity, and transforming money from a scarce resource into an easily accessible digital permission. More seriously, this cognitive bias weakens money perceptibility, making it extremely difficult for individuals to establish a

direct and clear logical connection between consumption and debt when facing large expenditures or liabilities, and thus extremely difficult to arouse corresponding risk vigilance.

3.3 Emotional Pathway: Reinforcement of Instant Gratification and Lag of Anxiety

The combination of digital payment and credit consumption creates an emotional feedback loop of “low resistance, high temptation.” Features such as one-click ordering, interest-free installments, and instant fund arrival greatly shorten the time gap between “desire arousal” and “desire satisfaction,” thereby facilitating greater dopamine release during instant gratification. Consequently, consumption behavior gradually becomes a direct means for people to regulate emotions and obtain pleasure under high-frequency positive emotional reinforcement, rather than merely a resource allocation activity.

Negative emotions such as anxiety and worry triggered by financial risk exhibit clear and identifiable lag: due to repayment cycles, debt pressure does not appear immediately upon consumption but is systematically postponed to a future point. This is particularly typical for young people who lack long-term planning experience. Over time, individuals’ emotional sensitivity to financial risk gradually dulls, forming a “blindly optimistic” risk preference. More importantly, due to the lack of “money perceptibility,” individuals are actually unable to truly “feel” the existence of risk at the emotional level. The three pathways are interconnected and mutually causal, thus revealing the deep psychological mechanisms underlying the blunting of financial risk perception among young people in the digital era.

4. Conclusion and Recommendations

4.1 Main Conclusions

Starting from the macro background of the rapid development of the digital economy, this paper takes quasi-digital natives as the research object and “money perceptibility” as the basic concept. It constructs the theoretical framework of “payment method—money perceptibility—financial risk perception” and systematically and rigorously examines the impact mechanisms of digital payment and credit consumption on financial risk perception [6].

Money perceptibility is a clear and important psychological variable explaining the alienation of young people’s financial behavior in the digital era. This paper demonstrates a positive correlation between the tangibility of payment methods and individuals’ money perceptibility: digital payment and credit payment strip away the physical attributes of money, simplify the payment process, and transform money into abstract symbols, thereby directly weakening individuals’ concrete perception of money’s value.

From the existing arguments, it can be clearly and rigorously observed that money perceptibility plays a full mediating role between payment methods and financial risk perception. Digital payment and credit consumption do not directly cause a decline in risk perception; rather, they first reduce money perceptibility, which naturally and reasonably blunts individuals’ vigilance toward financial risk. For “quasi-digital natives,” due to the lack of experience anchoring with cash, this mediating effect is particularly pronounced, making them more likely to make irrational consumption decisions during credit consumption.

4.2 Policy Recommendations

Based on the above conclusions, this paper proposes targeted recommendations from three levels: micro, meso, and macro.

First, at the family and school level:

Financial literacy education should be incorporated into compulsory education curricula. Adolescents should be encouraged to keep accounts and visualize expenditures to deliberately train the correspondence between digital amounts and real purchasing power. Parents can appropriately retain part of pocket money in cash form, allowing students to manage cash personally, artificially reconstructing “payment pain” [4], cultivating healthy money intuition, and enhancing the ability to guard against financial risks.

Second, at the corporate level: Adhere to product design ethics.

Enterprises should balance commercial interests with user rights. For example, multiple confirmations should be required for large-value consumption; a “cooling-off period” function should be set for users whose debt exceeds a certain limit, displaying the current repayment amount required and allowing payment only after 24 hours, during which the order can be canceled at any time. This moderately awakens users’ risk awareness, avoids algorithm-induced excessive borrowing, and achieves a balance between commercial benefits and user well-being.

Third, at the regulatory level: Strengthen protection for adolescent finance.

Regulatory authorities should, based on the new situation of digital financial development, establish stricter credit consumption access and quota management systems for quasi-digital natives and severely crack down on inductive marketing targeted at minors. Efforts should be made to promote a healthy digital financial ecosystem, prevent systemic financial risks from the source, and promote the healthy and sustainable development of the digital economy.

4.3 Research Limitations and Future Prospects

Although this study has made certain progress in theoretical construction and mechanism analysis, it still has limitations. The research methods mainly consist of theoretical deduction and mechanism analysis, lacking empirical data support. Future research can design targeted questionnaires for surveys to further verify the rationality of this study, and conduct laboratory experiments to compare individuals’ money perceptibility and financial risk perception under different payment methods. This will explore specific pathways to enhance young people’s financial risk perception and provide more solid empirical support for policy formulation.

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Conflicts of Interest

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