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The Impact of Growth Environment and Economic Conditions on College Students' Irrational Consumption Behavior

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Abstract. Irrational consumption has become a prevalent issue among contemporary Chinese college students, yet its integrated environmental and economic determinants lack systematic empirical clarification. This study aims to explore how multi-dimensional growth environment and economic conditions influence college students' irrational consumption, defined as excessive borrowing and overspending. Based on the 2021 China College Student Consumption and Credit Behavior Survey (CSCFS) data of 261 valid samples, this research adopts the Probit model for quantitative analysis. The results indicate that family and school environments significantly inhibit irrational consumption, while the direct effect of social environment is insignificant. Students' disposable income positively predicts irrational consumption tendencies, whereas financial literacy effectively restrains risky and excessive consumption behaviors. This study clarifies the dual influencing mechanism of external growth environment and individual economic competence, providing empirical evidence for family-school joint consumption education and youth financial risk governance.

Keywords: Irrational consumption, growth environment, financial literacy, college students

1. Introduction

With the rapid development of digital consumption and online credit services, irrational consumption represented by impulsive overspending [1] and blind credit borrowing has gradually become a common behavioral problem among college students. As emerging young adults with partial financial autonomy but unstable income and insufficient social experience, college students are highly susceptible to materialistic temptation and peer consumption comparison, resulting in long-term financial pressure and unhealthy consumption values [2]. Existing studies have verified that psychological traits, social media atmosphere and family background are basic predictors of youth impulsive consumption [3-5]. However, most previous research separates environmental factors and economic conditions, ignoring the combined effect of family-school-social growth atmosphere and individual financial capacity. In addition, few studies distinguish the differentiated impacts of disposable income and financial literacy on irrational consumption, leading to incomplete theoretical framework and insufficient targeted empirical evidence.

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Against this backdrop, this study constructs an analytical framework integrating growth environment and economic conditions, adopting empirical methods to explore the influencing factors of college students' irrational consumption behavior. Different from previous studies focusing only on psychological impulse characteristics, this research defines irrational consumption as two practical behavioral dimensions of credit borrowing and excessive consumption, focusing on the predictive effect of long-term growth environment and financial cognitive ability. The findings are expected to supplement the theoretical system of youth consumption behavior and provide practical references for college financial education and family consumption guidance.

2. Literature review and research gap

Current research on college students' irrational consumption mainly covers influencing factors, behavioral characteristics and practical consequences. In terms of psychological factors, personality traits, self-esteem and self-control are confirmed to be core internal drivers [3, 5]. Negative emotions such as social exclusion [3] and nostalgia [6] significantly trigger impulsive buying, while stable self-identity and self-worth can effectively resist compulsive consumption [7]. From the perspective of external environment, the popularization of social media and mobile internet reshapes youth consumption decision-making [8]. Both active and passive social media use induce emotional consumption impulse [4], and long-term online immersion strengthens materialism and blind consumption comparison, further promoting online irrational purchasing behavior [7, 9].

Value orientation and financial competence also reshape consumption choices. Students' environmental awareness and risk perception affect sustainable consumption decisions [10-12], while financial literacy determines their ability to identify credit risks and control expenditure [13, 14]. In terms of behavioral consequences, irrational consumption not only causes personal debt pressure and financial burden [15], but also leads to psychological anxiety, declined academic performance and reduced physical well-being [16], hindering the comprehensive development of college students.

Despite abundant existing research, obvious research gaps remain. First, most studies focus on single psychological or digital environmental factors, lacking systematic discussion on the three-dimensional growth environment of family, school and society. Second, previous literature generally regards economic conditions as a single income indicator, failing to distinguish the opposite effects of disposable income and financial literacy on irrational consumption. Third, few empirical studies integrate environmental atmosphere and individual economic competence into a unified model, resulting in insufficient explanation for heterogeneous consumption behaviors among college students. This study fills the above gaps and improves the comprehensiveness of relevant research.

3. Theoretical foundation and research hypotheses

Bronfenbrenner's human development ecology theory points out that individual behavioral habits and value cognition are continuously shaped by multi-layered living environments [17]. The growth environment including family, school and society is not a passive background, but a decisive factor regulating individual decision-making and behavioral tendencies. Family is the earliest and most lasting socialization scene for forming consumption values. Harmonious parent-child communication and positive family functioning strengthen students' self-control [5, 18], while insufficient family support easily leads to compensatory consumption behavior [15, 18]. School education standardizes students' daily cognition and behavioral norms, and systematic financial and consumption education can effectively correct unreasonable consumption habits [19]. Social

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consumption atmosphere affects youth consumption cognition through peer interaction and public opinion, producing potential guiding effects on consumption choices.

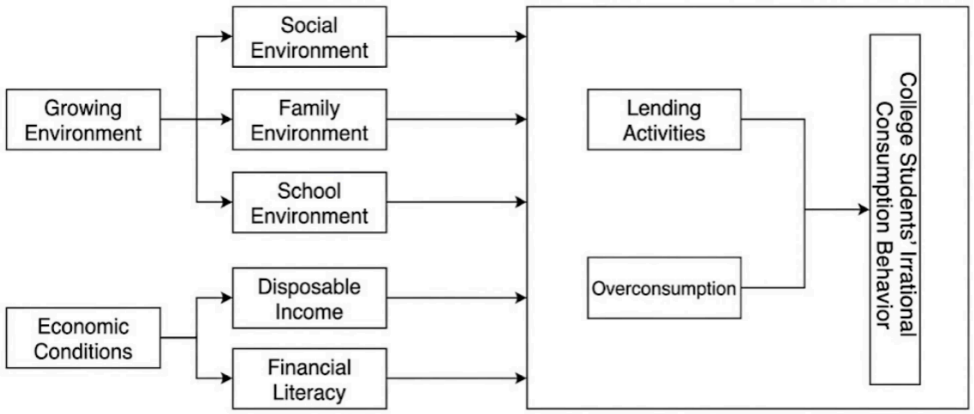


Figure 1. Theoratical framework of college students' irrational consumption

Economic conditions include both objective financial resources and subjective financial management competence. Higher disposable income relaxes budget constraints and reduces consumption self-restraint, thus increasing the probability of impulsive overconsumption [20]. In contrast, higher financial literacy enables students to accurately identify credit risks, distinguish reasonable demands and vanity consumption, and form rational expenditure habits [14, 21]. Based on the above theoretical logic and literature basis, this study proposes standardized research hypotheses.

H1: Growth environment exerts a significant negative impact on college students' irrational consumption behavior.

H1a: A more harmonious family environment reduces college students' irrational consumption.

H1b: A rational social consumption atmosphere inhibits students' irrational consumption behavior.

H1c: School consumption and financial education effectively restrain irrational consumption.

H2: Economic conditions have differentiated effects on irrational consumption.

H2a: Higher disposable income increases the tendency of college students' irrational consumption.

H2b: Higher financial literacy reduces college students' irrational consumption behavior.

4. Data sources and methodology

This study adopts data from the 2021 China College Student Consumption and Credit Behavior Survey (CSCFS). The sample covers multiple types of Chinese universities, including key universities, ordinary undergraduate colleges and vocational colleges, covering students of different majors and regions. After strict data cleaning and elimination of invalid responses, a total of 261 valid samples are retained for empirical analysis.

The dependent variable is college students' irrational consumption, constructed by standardizing and averaging two indicators: credit borrowing beyond daily needs and frequent purchase of non-essential goods, forming a 0-1 comprehensive index with higher scores indicating stronger irrational consumption tendency. The independent variables consist of growth environment and economic

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conditions. Growth environment includes family environment, school environment and social environment, all measured by standardized comprehensive scores based on multi-item survey questions. Economic conditions include standardized monthly disposable income and financial literacy, where financial literacy reflects students' mastery of credit, interest and investment risk knowledge. This study takes gender, education level, major and university tier as control variables and applies the Probit model for regression analysis.

5. Empirical results and analysis

5.1. Descriptive statistics

Descriptive results show that the average score of college students' irrational consumption is 0.458, indicating a moderate and common irrational consumption tendency among samples. The average score of growth environment is 0.631, reflecting a generally positive growth atmosphere for most students. The average economic condition score is 0.420, which means most students have limited disposable income and insufficient financial knowledge reserve, laying a practical foundation for analyzing consumption behavioral differences.

5.2. Baseline regression results

Stepwise regression results in Table 1 show that the family environment has a significant negative effect on irrational consumption (β=-0.386, $p<0.01$), verifying H1a. Good family communication and parental consumption guidance cultivate students' rational values and self-control ability, effectively restraining impulsive and credit consumption [5]. The school environment also presents a significant negative inhibitory effect (β=-0.276, $p<0.05$), supporting H1c. Systematic campus financial education makes up for students' cognitive deficiencies and standardizes daily consumption behaviors.

The social environment variable fails to pass the significance test, so H1b is not supported. The possible reason is that the influence of social consumption atmosphere is indirect, which acts on individual consumption decisions through intermediate factors such as family education and peer groups, resulting in no significant direct net effect. For economic factors, disposable income positively predicts irrational consumption (β=0.234, $p<0.05$), which supports H2a. Sufficient living expenses relax budget constraints and reduce consumption self-discipline, increasing overconsumption risks [20]. Financial literacy significantly inhibits irrational consumption (β=-0.215, $p<0.001$), verifying H2b. Professional financial knowledge helps students avoid blind consumption and risky credit behavior [14, 22].

Table 1. Regression results for factors influencing irrational consumption behavior

Variable	Model 1	Model 2	Model 3
Social Environment		-0.153 (0.215)	-0.124 (0.221)
Family Environment		-0.412** (0.187)	-0.386** (0.192)
School Environment		-0.298* (0.169)	-0.276* (0.171)

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Table 1. (continued)

Disposable Income			0.234* (0.128)
Financial Knowledge			-0.215*** (0.072)
Control Variable: Gender	0.086 (0.153)	0.092 (0.156)	0.078 (0.158)
Control Variable: Education level	0.041 (0.109)	0.038 (0.111)	0.035 (0.112)
Control Variable: Major	-0.097 (0.134)	-0.013 (0.136)	-0.095 (0.138)
Control Variable: University level	0.178 (0.147)	0.165 (0.150)	0.152 (0.152)
Constant	-0.521 (0.462)	-0.348 (0.478)	-0.267 (0.485)
Sample size	261	261	261
Pseudo R^2	0.031	0.089	0.142
Log likelihood	-168.24	-158.76	-149.38

*Note: Standard errors are reported in parentheses. ***, **, and * indicate statistical significance at the 0.1%, 1%, and 5% levels, respectively.*

5.3. Robustness test

This study conducts robustness test by adjusting the sample scope, retaining only ordinary undergraduate samples (N=128) and adopting both Probit and Logit models. The results show obvious sample heterogeneity. After sample adjustment, the coefficients of family environment, school environment and disposable income reverse directions, and financial literacy turns positively significant, while only social environment maintains stable negative effects. It indicates that the baseline conclusions are not fully robust across different university types, and the influencing mechanisms of variables have group differences. The reduced sample size also affects estimation stability, suggesting that the research conclusions cannot be generalized to all college student groups.

6. Conclusion and implications

6.1. Main conclusions

This study systematically analyzes the influencing factors of college students' irrational consumption from the dual perspectives of growth environment and economic conditions. The results demonstrate that harmonious family environment and standardized school education are core protective factors against irrational consumption, which can effectively reduce students' credit borrowing and excessive spending. Social environment has no significant direct impact on consumption behavior. In terms of economic characteristics, higher disposable income increases the risk of irrational

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consumption, while sufficient financial literacy plays a significant inhibitory role. In addition, empirical results have obvious sample heterogeneity among different types of universities, indicating that external environmental and economic factors produce differentiated effects on students from different educational backgrounds.

6.2. Practical implications

This study provides practical guidance for youth consumption governance. Families should attach importance to intergenerational consumption education, establish positive consumption demonstration, and strengthen parent-child communication on financial values to cultivate students' self-discipline in consumption [21]. Colleges and universities should integrate financial literacy and consumption education into general education, set up targeted courses and lectures to improve students' risk identification and budget management ability [22, 23]. Schools and families should focus on students with higher disposable income, carry out targeted financial planning guidance to avoid loose budget constraints leading to impulsive consumption. Meanwhile, college students should take the initiative to absorb financial knowledge, form the habit of rational expenditure, and resist blind comparison and compensatory consumption [13].

6.3. Research limitations and future prospects

This study has several limitations. First, the cross-sectional data cannot avoid endogenous problems, failing to strictly verify the causal relationship between variables. Future research can adopt panel data to track dynamic changes of consumption behavior. Second, all variables are measured by self-report questionnaires, which may be affected by social desirability bias. Third, the sample size is limited, and obvious subgroup heterogeneity exists. Subsequent research can expand the sample size and conduct grouped regression analysis for different university types to explore differentiated influencing mechanisms. In addition, future studies can optimize the measurement of social environment and explore the mediating or moderating variables between growth environment and irrational consumption, so as to further enrich relevant theoretical research.

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