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Research Article

Are Highly Intelligent People More Likely to Tolerate Risk in China? Evidence from China Family Panel Studies

Jing Zhang,[1] **Haijian Liu**,[2] **and Jiaming Xu**[2]

[1]*Faculty of Business, Huaiyin Institute of Technology, Huaian 223001, China*
[2]*Faculty of Humanities, Huaiyin Institute of Technology, Huaian 223001, China*

Correspondence should be addressed to Jing Zhang; zhangjing@hyit.edu.cn

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Understanding the correlation between cognitive ability and risk preferences is crucial for promoting technological progress and innovation in China. This study aims to investigate this relationship using survey data from the China Family Panel Studies. The results reveal a significant positive correlation between cognitive ability and risk tolerance. These findings have important implications for understanding the relationship between cognitive ability and risk preferences, as well as for informing policy decisions in areas such as financial investments and entrepreneurship incentives.

1. Introduction

The study of individuals' risk preferences in uncertain situations is an intriguing area in both economics and psychology. Among all potential determinants that influence the decision-making process, cognitive ability is an important factor that cannot be ignored [1]. The importance of cognitive ability and risk preferences has been demonstrated in numerous existing studies, as discussed by Dohmen et al. [2].

According to Kahneman and Tversky's theory, individuals who possess a strong understanding of the potential outcome and its associated probability may tend to exhibit a high tolerance for risk [3]. Although numerous studies have supported the conclusion that highly intelligent individuals are more inclined to take risks [1–4], conflicting findings have emerged in various contexts. For example, using macro data from the Global Preferences Survey, Potrafke [5] determined that high-IQ populations tend to be more risk averse. Similarly, Chapman et al. [6] discovered that participants with low cognitive ability were more likely to play the lottery than those with high cognitive ability. Their estimation results indicated that individuals with high cognitive ability generally exhibit greater loss aversion, based on a sample of 2,000 individuals from the U.S population.

As mentioned in the literature we have reviewed, the connection between intelligence and risk taking can differ depending on the specific domain or situation under investigation. However, there has been limited exploration of this relationship in the context of China. China possesses a significant number of highly educated individuals, which translates to a highly skilled labor force in the market. This high level of education indicates a heightened cognitive ability among the population, as Berry et al. [7] discussed in the literature. Therefore, understanding the correlation between cognitive ability and risk preferences in China holds significant importance for fostering technological progress and innovation in the country.

To achieve this target, the analysis utilized data from the China Family Panel Studies conducted in 2018 (CFPS2018). The survey, launched by Peking University, aims to collect longitudinal data on individuals, families, and communities in China. It covers a wide range of topics, including the economic and noneconomic well-being of the Chinese population [8].

As part of CFPS2018, literacy and numeracy tests were conducted to assess the cognitive abilities of respondents. The scores obtained from these tests represent their cognitive ability. In addition to measuring cognitive ability, a key objective was to elicit the risk preferences of the

respondents. CFPS2018 includes a multiple-price list with 5 experimental questions (see Table 1). Each question presents a safe option and a risky option, arranged in order. The respondents make their choice by evaluating the tradeoff between the stake and the potential payment. We assigned a code of 1–6 to participants based on their choice (see Section 2) to represent their degree of risk aversion or risk-seeking behavior.

Our study examined that individuals with higher intelligence in China exhibit a greater risk tolerance, which provides valuable insights into the relationship between intelligence and risk-taking behavior. The findings of this study have crucial implications for comprehending the relationship between cognitive ability and risk preferences as well as for informing policy decisions in various domains, such as financial investments and entrepreneurship incentives.

The rest of this paper is organized as follows. Section 2 describes the CFPS dataset and the measurement of risk preferences and cognitive ability. Section 3 presents the results and the findings of robustness checks. Finally, Section 4 concludes the paper and discusses the results.

2. Measurement of Risk Preferences and Cognitive Ability

2.1. Data Source. The data used in our study were obtained from CFPS. CFPS is a survey that considers the geographical diversity and complexity of China. The survey follows a multistage probability strategy, involving official administrative entities at the first stage, counties/districts at the second stage, and households from a sampled community at the third stage [9]. This approach allows CFPS to cover 94.5% of the total population in mainland China [8].

While CFPS is a longitudinal study, we only used individual data from CFPS2018. This decision was made because earlier CFPS surveys did not include a section for risk experiments, which hindered our ability to track changes in risk preferences over time. The CFPS2018 survey was conducted from June 2018 to March 2019 and gathered information from approximately 15,000 families and 44,000 individuals.

2.2. Measuring Risk Preferences. Similar to the design by Holt and Laury [10], the risk experiment section of the CFPS2018 survey questionnaire consists of five questions intended to assess respondents' risk tolerance. Each question presents the following two options: one offering a safe payoff and the other offering a coin-tossing game (please refer to Table 1 for the list of options used in the experiment). By comparing the size of stakes, we can determine respondents' attitudes towards risk.

Figure 1 illustrates the experiment workflow. The experiment begins with Question 1. For the risk aversion pathway, respondents who choose safe options in Questions 1–3 exhibit a high preference for risk aversion (risk decision = 1). Respondents who select safe options in Questions 1 and 2 but opt for the game play option in Question 3 have a medium preference for risk aversion (risk decision = 2). Respondents who choose the safe option in Question 1 but the game play option in Question 2 exhibit a low preference for risk aversion (risk decision = 3). For the risk-seeking pathway, respondents who choose the game play option in Questions 1 and 2 have a low preference for risk-seeking (risk decision = 4). Respondents who choose the game play option in Questions 1 and 4 but the safe payoff option in Question 5 have a medium preference for risk-seeking (risk decision = 5). Respondents who choose the game play option in Questions 1, 4, and 5 have a high preference for risk-seeking (risk decision = 6).

2.3. Measuring Cognitive Ability. The CFPS2018 assesses respondents' cognitive capability through literacy and numeracy tests. These tests consist of 34 Chinese character questions and 24 mathematical questions, varying in difficulty. The starting point for these tests depends on the following educational levels of the respondents: primary education or lower, secondary education, or tertiary education or higher. To minimize any interference from other household members, CFPS2018 includes multiple sets of literacy and numeracy tests. Different respondents within the same household answer different test questions. The tests conclude when three consecutive questions are answered incorrectly. Each respondent's score is determined by the level of the most challenging question answered correctly.

Figure 2 presents histograms of the test scores. To improve the interpretation of results and address the issue of multicollinearity between cognitive ability variables and related variables, we standardized all test scores. Graphs (a) and (b) show the distribution of literacy test scores and numeracy test scores, respectively. The distribution of literacy test scores is negatively skewed, while the distribution of numeracy test scores is positively skewed, indicating that respondents scored higher on the literacy test compared to the numeracy test. We standardized the cognitive scores by summing the standardized literacy and numeracy scores. Graph (c) displays the distribution of the cognitive scores, with a normal density distribution plotted. Unlike (a) and (b), the graph for (c) closely resembles a normal density distribution.

3. Results and Discussion

3.1. Description of the Selected Variables. The descriptive statistics of the selected variables are presented in Table 2 (refer to S1 for the complete summary). Columns (1)–(6) represent the risk levels, ranging from risk averse to risk seeking. Based on the data presented in Table 2, it is clear that the standardized scores for literacy, numeracy, and cognitive ability in Columns (5) and (6) are higher compared to the scores in the other columns. This indicates that respondents with higher scores may have a greater tendency to make risky choices in the sample data.

In addition to cognitive ability scores, basic personal characteristics such as age, gender, number of children, and marital status have been found to influence risk choices to

Table 1: List of options used in risk experiment questions.

Risk questions	Option 1 (safe option)	Option 2 (game play)	E(2)-E(1)
1	Receive 100 yuan	Receive 200 RMB if the coin lands on heads	0
2	Receive 80 yuan		20
3	Receive 50 yuan		50
4	Receive 120 yuan	Otherwise, receive nothing	80
5	Receive 150 yuan		50

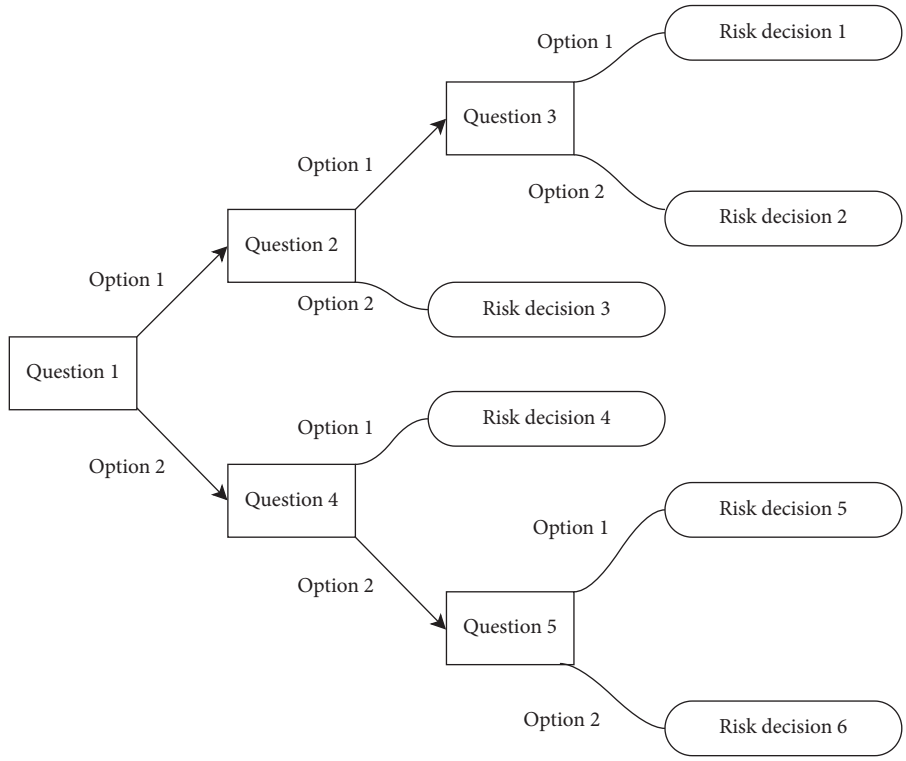

Figure 1: Workflow of the risk experiment.

accurately capture the relationship between cognitive ability and risk preferences. Numerous studies have indicated that younger individuals are more likely to take risks compared to older individuals [11–13]. Within the same age group, men tend to exhibit a higher propensity for risk-taking than women [14–17]. Furthermore, among adults, married individuals and those with more children generally display a lower inclination towards risk-taking (refer to S2 for further details).

Both educational attainment and financial status are important factors in this context [18]. It is worth noting that educational attainment not only increases knowledge and understanding of uncertainty but also improves cognitive ability and the financial status [2, 19]. When assessing the financial status, our specific focus is on household wealth, which refers to the total annual income of all family members, rather than individual wealth. We made this decision because it is believed that a household's financial situation has a greater impact on risk-related decisions in China [20]. The CFPS survey, which was conducted based on family units [8], found that respondents tended to make decisions based more on their family situation rather than their personal situation. In addition, household wealth has the advantage of reducing the correlation between education and financial status. The household wealth data were collected from a family survey dataset, which combined household data with personal data using the same family ID.

In our models, we included the Big Five variables as controls for personality traits. The Big Five model is a unique approach to assessing personal traits that impact personal values and behaviors [21]. For example, openness is linked to self-direction and universalism values, while extroversion is associated with achievement and stimulation values [22]. These distinct personalities can also affect how individuals behave in uncertain situations [23]. Individuals with high extraversion may be more likely to take risks, whereas those with high conscientiousness may be more risk averse [14]. Although the CFPS2018 questionnaire did not include questions specifically related to the Big Five, we selected five questions from the self-assessment section to evaluate personality traits. The Big Five assessment questions are given in the supplementary material.

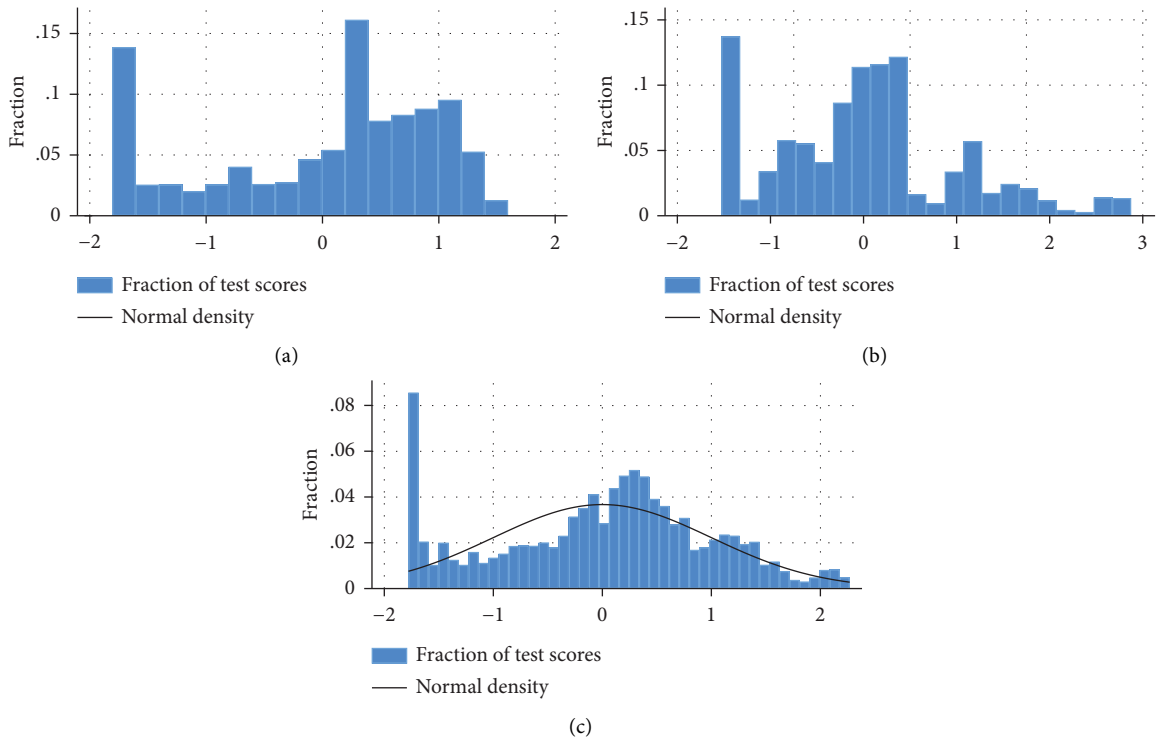

Figure 2: Distributions of standardized values of the (a) literacy test, (b) numeracy test, and (c) cognitive scores.

Table 2: Statistical summary of selected variables by risk preferences.

	(1)	(2)	(3)	(4)	(5)	(6)	Test[(e)]
Literacy scores	−0.135[(a)] (1.000)[(b)]	0.363 (0.886)	0.118 (1.006)	−0.000 (0.991)	0.377 (0.915)	0.235 (0.901)	<0.001
Numeracy scores	−0.149 (0.925)	0.394 (1.038)	0.164 (1.093)	0.019 (1.024)	0.434 (1.073)	0.193 (0.997)	<0.001
Cognitive scores	−0.152 (0.963)	0.404 (0.953)	0.150 (1.047)	0.010 (1.009)	0.433 (0.983)	0.228 (0.939)	<0.001
Age: 9–29 years	3,158[(c)] (18.0%)[(d)]	1,182 (33.0%)	1,138 (36.2%)	645 (33.1%)	718 (42.0%)	1,615 (38.9%)	<0.001
Age: 30–39 years	2,141 (12.2%)	794 (22.2%)	577 (18.3%)	309 (15.9%)	378 (22.1%)	784 (18.9%)	
Age: 40–49 years	2,955 (16.8%)	629 (17.6%)	480 (15.3%)	317 (16.3%)	286 (16.7%)	668 (16.1%)	
Age: 50–64 years	5,674 (32.3%)	698 (19.5%)	633 (20.1%)	428 (22.0%)	244 (14.3%)	777 (18.7%)	
Age: ≥65 years	3,663 (20.8%)	280 (7.8%)	317 (10.1%)	247 (12.7%)	85 (5.0%)	308 (7.4%)	
Female	9,159 (52.1%)	1,843 (51.4%)	1,647 (52.4%)	955 (49.1%)	660 (38.6%)	1,814 (43.7%)	<0.001
Male	8,432 (47.9%)	1,740 (48.6%)	1,498 (47.6%)	991 (50.9%)	1,051 (61.4%)	2,338 (56.3%)	
Education 1	13,944 (79.3%)	2,201 (61.4%)	2,134 (67.9%)	1,475 (75.8%)	1,010 (59.0%)	2,841 (68.4%)	<0.001
Education 2	2,303 (13.1%)	707 (19.7%)	527 (16.8%)	290 (14.9%)	351 (20.5%)	739 (17.8%)	
Education 3	1,344 (7.6%)	675 (18.8%)	484 (15.4%)	181 (9.3%)	350 (20.5%)	572 (13.8%)	
Household wealth 1	4,141 (23.7%)	511 (14.4%)	603 (19.4%)	438 (22.7%)	235 (13.8%)	679 (16.6%)	<0.001
Household wealth 2	3,258 (18.7%)	597 (16.8%)	552 (17.7%)	371 (19.2%)	319 (18.8%)	757 (18.5%)	
Household wealth 3	3,400 (19.5%)	699 (19.7%)	568 (18.3%)	386 (20.0%)	339 (20.0%)	808 (19.7%)	
Household wealth 4	3,374 (19.3%)	810 (22.8%)	661 (21.2%)	373 (19.3%)	372 (21.9%)	958 (23.4%)	
Household wealth 5	3,273 (18.8%)	935 (26.3%)	727 (23.4%)	361 (18.7%)	434 (25.5%)	900 (21.9%)	

Note. Columns (1)–(6) present a statistical summary of selected variables grouped by the risk decisions of respondents, ranging from risk-averse to risk-seeking levels. Literacy and numeracy scores represent the standardized values of literacy and numeracy test scores, respectively. Cognitive scores are the standardized values of the standardized literacy and numeracy test scores. Continuous variables are expressed as mean values (a) and standard deviations (b), whereas factors variables are presented as display frequencies (c) and proportions (d). (e) p values of the variable tests for equality between groups. Education 1 refers to education below junior high school (or the early years of middle school). Education 2 refers to education below high school (or technical secondary school, technical school, and vocational high school). Education 3 refers to college education or higher. Household wealth 1 corresponds to 0–30,000 RMB. Household wealth 2 corresponds to 30,001–50,000 RMB. Household wealth 3 corresponds to 50,001–79,000 RMB. Household wealth 4 corresponds to 79,100–121,980 RMB. Household wealth 5 corresponds to 121,995 RMB or more.

3.2. Basic Models. To reduce ambiguity in respondents' responses to the risk questions, we employed an interval regression model. This approach ensures that the risk preference answers are only known to fall within specific risk intervals rather than being precisely observed. To analyze the data using interval regression models, the risk-preference data were transformed into intervals, representing left- and right-censored data.

Table 3 presents the results of simple estimations that focus on the relationship between risk preferences and test scores. Regardless of how we measure cognitive ability, the scores showed a significant positive relationship with risk preference, as indicated in Columns (1)–(3).

3.3. Additional Results. Based on basic models shown in Table 3, we included various significant factors to comprehensively capture the detailed risk choices of respondents and evaluate the reliability of cognitive ability. The estimation results of our analysis are illustrated in Table 4.

Table 4 presents the results with additional variables. We included a provincial dummy variable in order to address regional complexities and differences in China. In Column (5), we added age, gender, education, and household wealth compared to Column (4). In Column (6), we further included variables such as the marital status and the number of children. In Column (7), we incorporated the Big Five personality traits into the analysis. The overall findings indicated that cognitive ability had a positive and statistically significant impact on risk preferences, which aligns with the same conclusion drawn from the basic models given in Table 3. Notably, when comparing Column (3) with Column (4), the coefficient of cognitive scores in Column (4) demonstrates a more significant result after accounting for provincial differences. This finding suggests that considering provincial differences helps to amplify the effects of cognitive scores on risk preferences.

To analyze the impact of variables on risk choice across different groups, we divided the variables into intervals. The age of the respondents was divided into five intervals. The number of children was categorized into three groups: no children, one child, and two or more children (see S2). The raw data on the marital status in CFPS2018 include categories such as single, married, cohabitation, divorced, and widowed. To simplify the marital status, we considered respondents as either married or unmarried. For education and household wealth variables, we divided them into three levels: low, medium, and high. Similarly, household wealth was divided into five quantiles. This categorization was done not only to observe the effects of different groups but also to minimize the risk of multicollinearity in our analysis model. After implementing these categorizations, the correlation coefficient between cognitive scores (including all score variables in the robustness check section) and the education and wealth variables remained below 0.5. This indicates a significantly low probability of multicollinearity in our regression models.

Considering these variables allows us to gain insights into how they shape individuals' risk-taking tendencies. In Columns (5)–(7), the coefficients of cognitive scores on risk preferences become smaller but remain relatively robust with the inclusion of additional variables. Consistent with existing literature, our results indicate that respondents generally decrease their risk choice as they age. In addition, gender differences influence individuals' inclination towards risk-taking. Furthermore, our regression results indicate that the marital status influences individuals' risk-aversion tendencies in line with existing literature [24]. Specifically, married individuals are more inclined to avoid risk compared to their unmarried counterparts.

Education has an impact on individuals' risk preferences, as indicated by the regression results of our models. Our findings demonstrate that individuals with higher levels of education are more inclined to take risks, which is consistent with the coefficients of cognitive scores. In addition, there is evidence that supports our finding that individuals with a higher educational background and financial knowledge in China are more inclined to invest in risky financial assets [25].

The accumulation of wealth in families improves risk tolerance in China [20]. Household wealth is contributed by every individual family member, and it is not solely determined by the educational attainments of the respondents. This lack of relevance between wealth and other characteristics of the respondents may lower the correlations. In our study, we found that the respondents with higher household wealth are more likely to make risk choices, as indicated by the coefficients of education. However, the statistical significance of these findings is not as high as expected. This could be because individuals might have made risk choices based solely on their understanding of the risk test questions, without giving much consideration to their financial status.

3.4. Robustness Check. Based on the abovementioned results, the conclusion appeared to be evident. However, an important concern that arose pertains to the test scores used to measure cognitive ability in our study, which primarily assessed general comprehension skills, reflecting the ability to understand words or perform basic calculations. This concern aligns with arguments put forth by Sohn [26].

CFPS2018 includes a small, selected sample used to conduct financial research at Tsinghua University. If selected for this subgroup, participants are required to respond to all of the standard survey questions and additional finance-related questions. These additional questions focus on investment knowledge and understanding of risk, including topics such as savings knowledge, basic currency inflation knowledge, and investment risk awareness (refer to the supplementary material for these questions and answer options).

Each question provides more than three options. To simplify interpretation, we assigned a score of 0 to incorrect answers and a score of 1 to correct answers. This approach enabled us to generate dummy variables for knowledge about savings, currency inflation, and investment. In addition, we established a risk score variable by summing all these scores. Therefore, respondents with higher risk scores demonstrated a better understanding of this knowledge.

Table 5 presents the influences of these scores on risk preferences while maintaining other variables constant, as in the previous models. From the table, it becomes evident that in the small sample, a positive causal relationship existed between the scores and risk preferences. This finding is consistent with the results presented in Tables 3 and 4.

Table 3: Relationship between risk preferences and test scores.

	(1)		(2)		(3)	
Literacy scores	0.873 (0.071)	***				
Numeracy scores			0.850 (0.056)	***		
Cognitive scores					0.929 (0.068)	***
Constant	0.086 (0.093)		0.100 (0.087)		0.078 (0.091)	
N	25359		25362		25356	

Note. Interval regression was applied with sample weights. Literacy and numeracy scores represent the standardized values of literacy and numeracy test scores, respectively. Cognitive scores are the standardized values of standardized literacy and numeracy test scores. The dependent variable is interval-censored risk choice. Robust standard errors are reported in parentheses. *** $p < 0.01$.

Table 4: Relationship between cognitive ability and risk preferences.

	(4)		(5)		(6)		(7)	
Cognitive scores	0.946 (0.062)	***	0.185 (0.060)	***	0.171 (0.064)	***	0.180 (0.063)	***
Age: 30–39 years			−0.570 (0.131)	***	−0.350 (0.169)	**	−0.316 (0.165)	*
Age: 40–49 years			−1.357 (0.139)	***	−1.119 (0.179)	***	−1.081 (0.177)	***
Age: 50–64 years			−2.162 (0.151)	***	−1.777 (0.190)	***	−1.750 (0.184)	***
Age: ≥65 years			−2.938 (0.187)	***	−2.174 (0.245)	***	−2.127 (0.240)	***
Male			0.499 (0.080)	***	0.535 (0.082)	***	0.485 (0.080)	***
Education 2			0.350 (0.132)	***	0.387 (0.141)	***	0.387 (0.137)	***
Education 3			0.537 (0.168)	***	0.576 (0.165)	***	0.568 (0.163)	***
Household wealth 2			0.168 (0.126)		0.207 (0.129)		0.208 (0.129)	
Household wealth 3			0.160 (0.142)		0.131 (0.141)		0.152 (0.141)	
Household wealth 4			0.233 (0.152)		0.281 (0.154)	*	0.282 (0.152)	*
Household wealth 5			0.287 (0.150)	*	0.310 (0.149)	**	0.305 (0.147)	**
Married					−0.260 (0.121)	**	−0.240 (0.120)	**
1 child					−0.335 (0.188)	*	−0.350 (0.186)	*
≥2 children					−0.724 (0.167)	***	−0.721 (0.166)	***
Constant	−1.149 (0.295)	***	0.280 (0.258)		0.099 (0.286)		1.388 (0.706)	*
Big five	No		No		No		Yes	
Provincial fixed effects					Yes			
N	25356		25356		23198		23112	

Note. Interval regression was used with sample weights to analyze the data. The dependent variable is interval-censored risk choice. Literacy and numeracy scores represent the standardized values of the literacy and numeracy test scores, respectively. Cognitive scores are the standardized values of the literacy and numeracy test scores. Age was divided into different intervals as follows: ≤29, 30–39, 40–49, 50–64, and ≥65 years. Education 1 refers to education below junior high school (or the early years of middle school). Education 2 refers to education below high school (or technical secondary school, technical school, vocational high school). Education 3 refers to college education or higher. Household wealth 1 corresponds to a range of 0–30,000 RMB. Household wealth 2 corresponds to 30,001–50,000 RMB. Household wealth 3 corresponds to 50,001–79,000 RMB. Household wealth 4 corresponds to 79,100–121,980 RMB. Household wealth 5 corresponds to 121,995 RMB and above. The number of children was categorized as none (0), one child, and two or more children. Robust standard errors are reported in parentheses. The significance levels are denoted as *** $p < 0.01$, ** $p < 0.05$, and * $p < 0.1$.

In the selected sample, it is noteworthy that age remains as a highly statistically significant factor in our robustness check models. Respondents tend to become more risk averse as they age, as well as when they have a higher number of children. The coefficients for the Big Five traits revealed an intriguing relationship between personal characteristics and risk-taking behavior. Respondents with higher levels of agreeableness and openness to new experiences are generally more inclined to take risks (for more detailed information about the robustness check table, refer to S3).

4. Concluding Remarks

People's attitudes toward risk are an interesting topic in both theoretical and empirical economics. In China, a country with a significant number of highly educated individuals, there is a social narrative suggesting that the more educated the people are, the less inclined they are to take risks. It is necessary to determine the truth behind this narrative. Moreover, individuals with higher education are often believed to have greater cognitive ability. Therefore, this study examined the relationship between cognitive ability and risk preferences in China, which we believe offers a broader perspective than solely examining the relationship between education and risk preferences. We used CFPS2018 to conduct our analysis. This dataset consists of risk questions and cognitive ability test questions.

The analysis of our study can be divided into three distinct steps. First, we examined the relationship between cognitive ability variables and the risk-preference interval variable. Next, we included additional variables such as age, gender, education, household wealth, number of children, and marital status to more accurately capture individuals' behavior under risk. We also incorporated a provincial dummy variable and the Big Five personality traits as control variables. Finally, we tested the consistency of the model by changing our data sample to the Tsinghua University financial research sample from CFPS2018.

Table 5: Robustness check.

	(8)		(9)		(10)		(11)	
Risk scores	0.301 (0.074)	***						
Savings knowledge			0.423 (0.109)	***				
Currency inflation knowledge					0.142 (0.155)			
Investment knowledge							0.512 (0.141)	***
Constant	2.576 (1.231)	**	2.688 (1.217)	**	2.862 (1.230)	**	2.701 (1.248)	**
Coefficients of full variables are given in S3								
Big Five					Yes			
Provincial fixed effects					Yes			
N	8468		8480		8482		8475	

Note. Interval regression was used with sample weights to analyze the data. The dependent variable is interval-censored risk choice. Savings knowledge, currency inflation knowledge, and investment knowledge are represented as dummy variables. Wrong answers were coded as 0, whereas right answers were coded as 1. Risk scores were calculated as the sum of responses to the three financial questions. Higher scores indicate a better understanding of these knowledge areas. Robust standard errors are reported in parentheses. Significance levels are denoted as $^{***}p < 0.01$.

In order to analyze the impact of variables on risk choice across different groups and reduce the likelihood of multicollinearity in our regression models, we categorized the variables into quantiles. The results reveal a positive correlation between cognitive ability and risk preferences in our sample, which aligns with existing literature. While not the main focus of this study, it is worth noting that older individuals tend to be more risk averse compared to younger individuals, as well as those who are married and have more children. Although household wealth accumulation improves individuals' tolerance for risk, its statistical significance is relatively low. We speculate that respondents did not consider their financial status when responding to these questions, as indicated by the low correlation coefficient (0.065) between risk and household wealth variables.

The primary objective of our research paper was to address the existing gap in the understanding of the connection between cognitive ability and risk preference in China. It is worth noting that the nature of this relationship has been a topic of debate among researchers. However, our comprehensive analysis and empirical evidence shed light on this matter and contribute to the growing body of literature that supports a positive association between cognitive ability and risk preference. In doing so, our study adds insights to the field and expands the current knowledge on this intriguing topic.

China faces numerous challenges, particularly in economic development. These challenges have driven China towards a greater emphasis on innovation and entrepreneurship, which in turn necessitates taking risks. Our paper aims to present our perspective on how a large number of highly educated individuals with high cognitive abilities can engage in risk tolerance. One important argument to consider is that as people age, they may become more conservative not only in politics but also in their risk-taking behavior [27, 28]. This raises concerns about an aging society in China, as it could potentially decrease individuals' capacity to confront challenges. To address this issue, improving wealth accumulation can help mitigate the conservative effects of an aging society [29].

The evidence presented in our paper is based on CFPS2018, which represents a short period of time. However, people's attitudes towards risks appear to be highly susceptible to factors such as the stake size and exogenous shocks. Therefore, it is crucial to investigate the dynamic aspects of risk preferences, particularly after the COVID-19 pandemic, where caution appears to be the dominant sentiment in China. A thorough examination of the stability of risk preferences is warranted, both from theoretical and empirical perspectives [30].

Data Availability

The data are from China Family Panel Studies (CFPS), funded by 985 Program of Peking University and conducted by the Institute of Social Science Survey of Peking University, and are available at https://www.isss.pku.edu.cn/cfps/en/index.htm.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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Supplementary Materials

The selected survey questions and Tables S1–S3 can be referred for full information. (*Supplementary Materials*)

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