



An Empirical Study on the Current Situation of College Students' Financial Fraud and Its Influencing Factors

Xuezhou Zhang, Yan Qu*, Ting Zhu

Yunnan University of Finance and Economics, International Business School, Kunming, Yunnan, China 650221

*Corresponding author: e-mail: 954513856@qq.com

Abstract. With the gradual rise of the Internet financial industry, the incidence of fraud on university campus is higher and higher. This paper analyzes the current situation of financial frauds among college students on campus through the literature research method, and finds that there are problems such as continuous renovation of fraud methods and poor discrimination ability of college students. Based on 1075 questionnaires, this paper constructs logistic regression model and chi square test model to study the related factors of financial fraud among college students in Yunnan Province. The results show that the significance of indicators such as fraud identification ability and university majors are all less than 0.05, which are factors that affect college students' financial fraud. Finally, it is proposed that schools should strengthen publicity and popularize preventive lectures and other measures.

Keywords: college students; financial fraud; deceiving factor; preventive measures

1 Introduction

In recent years, with the continuous development of big data, cloud computing and other Internet technologies, people are not only enjoying the convenience of the Internet, but also shrouded by uncertain factors and risk factors. Fraud events occur one after another on campus, which not only causes property losses to students, but also causes great trauma to their hearts, endangers the security of campus, and has a serious impact on the country and society. With the rapid development of Internet finance, campus fraud is not only an internal management problem, but also an issue that the whole society needs to pay attention to.

In the related research of financial fraud, there have been a lot of research results on campus financial fraud, but there are few empirical studies based on actual cases. Therefore, this paper first conducts a field survey of universities in Yunnan Province to collect information about campus fraud of college students, and then uses qualitative and quantitative methods to understand the current situation of financial fraud of college students and the reasons for the high fraud rate. Finally, in order to reduce the probability of students being cheated, reasonable suggestions and countermeasures are given.

2 Literature review

2.1 Research on the Causes of Campus Financial Fraud

Many scholars have studied the causes of campus financial fraud, Wang MengYue (2020); Dong Zhi (2019) studies the ideological situation of college students and points out that college students have poor discrimination ability and awareness of prevention and are vulnerable to fraud by criminals. Xiao Xie and Huang Jiangying (2015) pointed out that information leakage and the concealment of the network make it impossible for college students to guard against it. Wu Qingfeng (2018) pointed out that the frequent occurrence of financial fraud is due to the lack of supervision by the government.

2.2 Research on the Methods and Types of Campus Financial Fraud

Michail G. Rachavelias (2019); Wu Rui (2018); pointed out that unlike previous fraud methods, online payment methods facilitate the occurrence of financial fraud by college students. Ma Jinxiao and Chen Sisi (2018) pointed out that the emergence of 5G and artificial intelligence technology has brought about the problem of information leakage, and the accurate information of fraudsters has increased the difficulty of distinguishing college students, providing opportunities for fraudsters.

2.3 Research on the Prevention and Treatment of Financial Fraud on College Campuses

Sarria Encarnacion et al. (2019) pointed out that college students should take the initiative to learn information security knowledge and build psychological defense. Chen Fu and Ma jiao (2014) proposed to establish and improve the safety education mechanism from the school side, and use the classroom for fraud prevention education.

To sum up, the research on campus financial fraud has achieved certain results, but most of them are based on theoretical analysis, and they are not combined with reality and have limitations. Therefore, this paper conducts a field survey of universities in Yunnan Province to understand the current situation of campus fraud, and quantitatively analyzes the reasons for the high incidence of financial fraud among college students.

3 Analysis on the current situation of college students' financial fraud

According to the information reviewed, financial fraud presents the following characteristics:

3.1 Scams Are Constantly Being Renovated

Nowadays, constantly updated fraud methods and methods have made college students unpredictable, and online part-time jobs, shopping refunds, and other fraud methods have become new methods. The current fraud team has a very high degree of organization and operational efficiency. The concealment of the Internet makes it difficult for public security organs to handle cases, and it is difficult for students to recover money after being defrauded.

3.2 Lack of Information Discrimination

First of all, contemporary college students themselves do not have much contact with the society and lack the ability to distinguish. Fraudsters can easily grasp the information of college students. College students are not defensive and easy to fall into the trap of fraud. Secondly, many students will participate in some social activities, internships and so on, but college students are not clear about the information on the network, so they are cheated.

3.3 Poor ability to resist temptation

On the one hand, college students are very easy to be attracted by the inflammatory words related to interests. When faced with the information of low threshold and high income, it is very difficult to resist the temptation and finally be deceived. On the other hand, the criminals seize the college students want to save money, save cost psychology, and guard against the heart is poor, easy to be exploited by the fraud Gang, and finally fall into the fraud trap.

3.4 Poor Effect of Prevention Publicity

Many colleges and universities are deficient in safety education management, and the traditional offline education methods of some colleges and universities can not meet the development of the times. They just float on the surface and can not play a role effectively.

4 Research design

4.1 Questionnaire Design

In view of the above-mentioned financial fraud status of college students, the questionnaire generally includes the basic personal information of the respondents, the cognitive level of financial fraud, whether they have experienced financial fraud, the reasons for encountering financial fraud, and the effective ways to combat financial fraud. A total of 17 questions will be set, and the percentages will be collected and summarized statistically.

4.2 Research Objects and Data Sources

Taking college students in the Internet era as the research object, the questionnaire is distributed by the questionnaire star network questionnaire platform. A total of 1200 students were randomly selected from various universities in Yunnan Province, including not only different undergraduate batches, but also different major categories, so the objects are representative. In order to improve the reliability of the questionnaire, the questionnaire was distributed anonymously and randomly, and 1075 valid questionnaires were collected, with a recovery rate of 89.5%. The survey samples were valid and representative.

4.3 Sample Description

According to the questionnaire, the basic information of the sample is sorted out. The basic situation is described as follows:

- Gender distribution: In this survey, boys accounted for 48%, 516 people, girls accounted for 52%, and 559 people, girls 4% more than boys.
- Distribution of student sources: 45.51% of the students are from cities and towns, 54.49% are from rural areas, and 8.89% more students from rural areas than from urban ones.
- Grade distribution: the proportion of freshmen and sophomores in the effective questionnaire was higher, which were 23.80% and 35.41% respectively. The proportion of junior and senior students is relatively small, 27.20% and 13.60% respectively. On the whole, the questionnaire of each grade is acceptable.
- Major distribution: Economic management and science and engineering students accounted for the highest proportion of students in this survey. The two accounted for a total of 71%, literature and history accounted for 10.9%, law and philosophy accounted for 5%, and art, Agro-medicine and education students account for a relatively low proportion, with a cumulative proportion of 10.3%, and 2.9% of students belonging to other majors. It can be seen that the survey involves a wide range of students and the survey results are valid.
- Distribution of student consumption level: 46.1% of the 1,075 students surveyed in this survey have monthly living expenses between 1,000 yuan and 1,500 yuan. Secondly, the proportion of students with monthly living expenses between 500 yuan and 1,000 yuan is 36.8%. 14.5% of the students above 1,500 yuan, the lowest proportion of students whose monthly living expenses are below 500 yuan, only 2.6%.

5 Model Setting and Variable Selection

5.1 Model Setting

In order to explore the reasons why college students suffer from financial fraud, “whether the college student has any financial fraud experience” becomes the explanatory variable, and the final result has only two endpoints, “yes” and “no”, which belong

to [0,1] binary categorical variables. That is a typical binary decision problem, so the binary Logistic regression model is used for analysis.

$$y = \ln\left(\frac{p_i}{1-p_i}\right) = B_0 + B_1X_1 + \dots + B_nX_n \quad (1)$$

In the above formula, y is the dependent variable, p_i is the probability of occurrence of an event, B_0 is a constant term, and B_1, \dots, B_n is the coefficient of the independent variable.

In order to explore the influence of other variables such as gender, major and grade on college students' financial fraud, chi-square test was used.

5.2 Selection of Variables

In order to verify the rationality of the theoretical model, we designed a measurement questionnaire to measure the related variables involved in the model. The questionnaire is measured by the Likert-5 scoring method

- Explained variable. The explained variable of this paper is the experience of financial fraud, corresponding to the questionnaire "Have you suffered financial fraud?" The answer "yes" means that the college student has suffered financial fraud, and it is assigned a value of 1, and "no" is 0.
- Explanatory variables. There are many factors that affect college students' financial fraud. According to the purpose of the research, the independent variables of this paper are gender, grade, major, fraud identification ability, material interest temptation tolerance, relevant information understanding, relevant departments' anti fraud propaganda and the imperfection of national law.

6 Analysis on the influencing factors of college students' financial fraud

6.1 Reliability and Validity of the Questionnaire

Before the statistical analysis of the questionnaire results, in order to ensure the consistency and stability of the questionnaire, the reliability and validity of the data were tested. The test results are shown in TABLE 1.

Table 1. RELIABILITY AND VALIDITY ANALYSIS

Alpha	0.753	
Number of items Q	16	
KMO measurement	0.827	
Bartlett test	Approximate chi-square	7937.497
	Degrees of freedom	190
	Significance	0.000

As can be seen from TABLE 1, the reliability coefficient of the questionnaire is 0.753, greater than 0.6, indicating that the reliability of the samples in the questionnaire is good. KMO value = 0.827, which is greater than 0.6. It shows that the questionnaire has good structural validity.

6.2 Results and Analysis of Binary Logistic Regression

The SPSS statistical analysis software is used to conduct a binary logistic regression analysis on the influencing factors of college students suffering from financial fraud. The dependent variable of the regression model is whether college students have the experience of financial fraud, the independent variables include the ability to identify fraud, the temptation of material interests, the degree of understanding of relevant information, the propaganda of relevant departments to prevent fraud and the imperfection of national laws.

According to TABLE 2, the significance of the Horth-Lemeshaw test is $P=0.991$, and the result is greater than 0.05, indicating that the information in the current data has been fully extracted.

Table 2. HOSMER-LEMESHOW TEST

Chi-square	degree of freedom	significance
1.612	8	0.991

The results of the current evaluation of indicators and the construction of the regression model of the deceived situation are shown in TABLE 3:

- In the relationship between college students' financial fraud and fraud behavior identification ability, the significance is 0.045, which is less than 0.05. It means that the ability of college students to recognize fraud is a factor that affects college students' financial fraud. Because college students have insufficient social experience and imperfect values, it is difficult to find new fraudulent methods hidden in the Internet. Therefore, students with poor ability to recognize fraud are more prone to financial fraud.
- In the relationship between college students' financial fraud and the ability to withstand the temptation of material benefits, the significance is 0.021, which is less than 0.05. It means that college students' poor ability to bear the temptation of material benefits is a factor that affects college students' financial fraud. The research on the causes of financial deception pointed out that criminals have used the greed of college students to get rich for nothing and get rich overnight. Therefore, college students who cannot resist the temptation often fall into the trap of criminals very easily.
- In the relationship between college students' financial deception and the degree of understanding of related information, the significance is 0.030, which is less than 0.05. It means that the degree of college students' understanding of relevant information affects the factors of college students' financial fraud. Today's scam methods

are constantly being renovated, and there are endless scams. Students who have incomplete understanding of various scam channels are more vulnerable to financial fraud.

- In the relationship between financial fraud of college students and the efforts of relevant departments to prevent fraud, the significance is 0.038, which is less than 0.05. It means that the efforts of relevant departments to prevent fraud are the factors that affect college students' financial fraud. Anti-fraud propaganda is an effective means to prevent fraud incidents. The greater the intensity of the propaganda about fraud incidents, the higher the students' anti-fraud awareness and the lower the possibility of financial fraud.

Table 3. BINARY LOGISTIC REGRESSION RESULTS

variable	B	Standard error	Wald	degree of freedom	Significance	Exp (B)
Scam recognition ability	1.546	0.772	4.010	1	0.045	4.691
Ability to bear the temptation of material benefits	1.811	0.782	5.357	1	0.021	6.115
Degree of understanding of relevant information	1.367	0.631	4.695	1	0.030	3.923
Anti-fraud propaganda efforts of relevant departments	1.590	0.766	4.309	1	0.038	4.904
The imperfections of national	1.230	0.765	2.585	1	0.108	3.422
Laws constant	-27.806	8.189	11.529	1	0.001	0.000

6.3 Chi-square Test Results and Analysis

To further study the degree of correlation between control variables such as gender, grade, and major, and the financial fraud of college students, use the cross-tab chi-square test.

- The relationship between cheating and gender. Significant $P = 0.11$, greater than 0.05. The difference is not statistically significant, indicating that gender is not an important factor affecting college students' financial fraud. That is to say, there is no significant difference between boys and girls on campus financial fraud.
- The relationship between College Students' being cheated and their majors. Significant $P = 0.001$, which is less than 0.05. The difference is statistically significant, which shows that the major is the influencing factor of College Students' financial fraud. Because the students of economics and management have more contact with financial knowledge and pay more attention to and understand financial fraud information, the students of economics and management have stronger identification and prevention ability. However, students of philosophy, art, medicine and other non

management majors pay less attention to it in their daily life, have less contact with it, have poor awareness of identification and prevention, and have a high rate of fraud.

- The relationship between College Students' being cheated and their grades. Significant $P = 0.045$, which is less than 0.05. The difference was statistically significant, which indicated that grade was the factor influencing college students' financial fraud. Because with the gradual increase of grades, more senior students will apply for part-time jobs online, or send their resumes, and use the Internet more frequently, so they have more opportunities to be exposed to online financial fraud, and the proportion of students who have experienced financial fraud has also increased significantly.

7 Conclusion

Based on the sample data of 1075 college students, it is found that most of the students have weak ability to identify financial fraud. Schools are an important position for fraud prevention education. Therefore, we must first carry out all-round and three-dimensional publicity to prevent network fraud, and adopt multiple forms of strengthening methods to continuously carry out publicity. Secondly, we should help students to establish a correct personal value orientation and healthy consumption concept, and face all kinds of temptations objectively. Finally, regular lectures on popularizing students' knowledge of laws and regulations, and columns on sharing relevant legal knowledge and prevention skills are set up to enhance students' awareness of vigilance and improve their ability of discrimination. Through the binary logistic regression model and chi square test model, we find that college students' financial fraud is affected by many factors, such as the ability to identify fraud behavior, the ability to bear the temptation of material interests, the degree of understanding of relevant information, the propaganda efforts of relevant departments to prevent fraud, the major of college students and the grade of college students.

Acknowledgement

Special thanks to the participants of the questionnaires carried out, both face-to-face and online, who give their data on this topic. And also, thanks to the reviewers who provide constructive feedbacks to this paper.

References

1. Chen Yun, Ma Jiao. An analysis of ways to cultivate college students' awareness of preventing Internet fraud[J]. Party History Bocai (Theory), 2014(05): 54-55. (in Chinese)
2. Dong Zhi. Research on financial risk prevention of college students under the background of Internet finance[J]. Marketing industry, 2019(21): 98+101. (in Chinese)

3. Ma Jinxiao, Chen Sisi, Han Xuan. Research on financial risk prevention of college students under the background of big data[J]. *China Business Review*, 2018(08): 23-24. (in Chinese)
4. Wang Mengyue, Ren Haibo. Countermeasures for the prevention and control of telecom fraud under the background of the information age: Focusing on the prevention of college students in Henan Province [J]. *Legal Expo*, 2019(18): 37-38+41. (in Chinese)
5. Wu Qingfeng. Preventing financial fraud: starting from improving public safety capabilities[J]. *Inspection Fengyun*, 2018 (24): 38. (in Chinese)
6. Wu Rui. Reasons and countermeasures for college students suffering from online fraud [J]. *Legal Expo*, 2018(33):201-202. (in Chinese)
7. Xiao Xie, Jiangying Huang. Research on the types, causes and countermeasures of college students being cheated on the Internet [J]. *Journal of Chongqing University of Posts and Telecommunications (Social Science Edition)*, 2015, 27(05): 67-72. (in Chinese)
8. Encarnación Sarriá, Patricia Recio, Ana Rico, Manuel Díaz-Olalla, Belén Sanz-Barbero, Alba Ayala, María Victoria Zunzunegui. Financial Fraud, Mental Health, and Quality of Life: A Study on the Population of the City of Madrid, Spain[J]. *International Journal of Environmental Research and Public Health*, 2019, 16(18).
9. Michail G. Rachavelias. Online financial crimes and fraud committed with electronic means of payment—a general approach and case studies in Greece[J]. *Springer Berlin Heidelberg*, 2019, 19(3).

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

