

The Influence of College Students' Consumption Concept and Behavior under the Background of Normalization of Novel Coronavirus Pneumonia

Qiongqiong Zhang¹, Huopo Pan²

¹Wenzhou Polytechnic, Wenzhou 325000, China;

²China Mobile Wenzhou Branch, Wenzhou 325000, China.

Abstract

Under the background of normalization of Novel Coronavirus Pneumonia in 2020, College Students' consumption concept and behavior presents new characteristics. This paper uses the data of college students in Wenzhou as an example to research changes of college students' consumption concept and behavior under the background of normalization of Novel Coronavirus Pneumonia. Through the research it finds that, affected by Novel Coronavirus Pneumonia, some college students' consumption level is lower than before and some college students have retaliatory consumption. The main reasons for the decrease of college students' consumption level are precautionary savings, minimizing travel and rational consumption; Low consumption level, living in villages or towns, parents' career instability and educational background of parents have a significant impact on precautionary savings, minimizing travel and rational consumption. Therefore, under the background of normalization of Novel Coronavirus Pneumonia, universities need to pay more attention to students, and establish some preferential policy of offering part time jobs, scholarship evaluation and so on.

Keywords

College Students' Consumption; Novel Coronavirus Pneumonia; Logit Model.

1. Introduction

Novel Coronavirus Pneumonia swept through China in early 2020. According to official data, China's GDP growth rate decreased by 6.8% year-on-year in the first quarter of 2020, which is the lowest growth rate since the reform and opening. Household consumption was also deeply affected. After deducting the price factor, the per capital consumption expenditure of national residents in the first quarter decreased by 12.5%. Under the background of the normalization of Novel Coronavirus Pneumonia, the trend of the consumer market has become a hot topic between the government and the academia. Some suspect that Novel Coronavirus Pneumonia will affect the income of residents, and the overall consumption level of residents will decline [1]. Some suspect that after Novel Coronavirus Pneumonia, national residents will carry out retaliatory consumption [2]. Others suspect that the impact of Novel Coronavirus Pneumonia on residents' consumption is temporary and will not change the trend of consumption upgrading [3].

Under the background of the normalization of Novel Coronavirus Pneumonia, the impact of the Novel Coronavirus Pneumonia on consumption has spread to college students. How will it influence college students' consumption? How will the consumption concept of college students change? What are the reasons for the changes? In order to find the answers of the above questions, this paper analyzes the factors that affect college students' consumption concept and behavior and make recommendations to university management decision-making.

2. Literature Review

Researches on individual consumption concept and behavior are mostly carried out in normal economic and social environment. A few researches on the impact of emergencies mainly focus on natural disasters. Some studies point out that natural disasters will reduce the income level [4-5] of

residents or increase loans [6], thus reducing consumer spending; Other studies which focusing on individual psychology, point out that natural disasters will change residents' psychological expectations and result in "nothing to lose" psychology, thus increasing consumption[7] or generating preventive savings motivation [8]. Some studies believe that the effective intervention policy of the government will narrow the income gap of the affected people [9]. Some studies point out that the individual's educational level and the diversity of income sources will also affect the individual's ability to avoid natural disaster risk [10].

At present, there are few studies focusing on the impact of epidemic public health emergencies on individual consumption behavior at home and overseas. This paper is a useful exploration in this research direction. Based on the questionnaire, this paper analyzes the impact of Novel Coronavirus Pneumonia on college students' consumption concept and behavior and the causes, which provides a useful reference for colleges and universities to carry out relevant policies and measures.

3. Analysis of Novel Coronavirus Pneumonia influence on College Students' consumption concept and behavior

3.1 Data analysis

3.1.1 Reliability analysis

The Cronbach coefficient of this questionnaire was 0.82 which showed that the overall reliability of the questionnaire was good and the survey results were reliable.

3.1.2 Validity analysis

The KMO coefficient of this questionnaire was 0.613, and the significance was less than 0.01, which showed that the overall validity of the questionnaire was good and the survey results were effective.

3.2 Current Situation of College Students' Consumption

Through the survey of the sample statistics found that: 8.45% of students spend less than 1000 RMB per month; 73.29% of the students spend 1000-2000 RMB per month; 12.32% of the students spend 2000-3000 RMB per month; 5.94% of students spend more than 3000 RMB per month. Therefore, the average monthly consumption level of Wenzhou University was mainly concentrated in 1000-2000 RMB.

Table 1. Monthly consumption level of College Students

Monthly consumption level	Proportion
Less than 1000 RMB	8.45%
1000-2000 RMB	73.29%
2000-3000 RMB	12.32%
More than 3000 RMB	5.94%

From the source of students' living expenses, 66.21% of the students were all supported by their parents; 22.6% of the students were supported by their parents and part-time jobs; 22.6% of the students were supported by their parents and awards/grants; 3.65% of the students earned money by themselves.

Table 2. Sources of students' living expenses

Source of students' living expenses	Proportion
All supported by parents	66.21%
Supported by parents + part-time jobs	22.60%
Supported by parents + awards/grants	6.62%
All by themselves	3.65%
Others	0.91%

From the perspective of whether Novel Coronavirus Pneumonia had changed the consumption expenditure level of college students, 57.31% of the students spent as same as before, 21.46% of the students spent less than before, 21.46% of the students spent more than before.

Table 3. The influence of Novel Coronavirus Pneumonia on College Students' consumption behavior

Consumption level	Proportion
As the same as before	57.31%
Less then before	21.46%
More then before	21.23%

From the survey, most students didn't change their consumption attitudes and behaviors, some students had retaliated consumption, and some students had lowered their consumption levels under the background of normalization of Novel Coronavirus Pneumonia.

3.3 Influencing factors of College Students' consumption

According to the characteristics of Novel Coronavirus Pneumonia and the sources of College Students' income, this paper listed several possible reasons for college students whose consumption level was lower than before to choose In the questionnaire:

- 1) The allowance given by their parents decreased. The outbreak of Novel Coronavirus Pneumonia affected the family income of college students, resulting in a reduction of college students' allowance.
- 2) Precautionary saving motivation increased. The outbreak of Novel Coronavirus Pneumonia affected college students' panic and anxiety about the uncertainty of the future, resulting in preventive savings motivation.
- 3) There existed a tendency of rational consumption psychology. Due to the outbreak of Novel Coronavirus Pneumonia, college students realized that some previous expenses were actually unnecessary and their consumption behavior tended to be rational.
- 4) Minimizing travel. In order to avoid going to crowded public places to reduce the risk of infection or due to the requirements of the school, college students tried their best to arrange extracurricular activities on campus, so the associated consumption expenditure reduced naturally.
- 5) Affected by Novel Coronavirus Pneumonia, the overall income of college students' families reduced, and the allowances given by the families also reduced accordingly

Through data analysis, this paper finds that preventive saving, minimizing travel and rational consumption tendency are the main factors to change college students' consumption behavior. Among them, minimizing travel has the greatest impact, followed by rational consumption tendency and preventive savings.

Table 4. Influencing factors of College Students' consumption under the background of Novel Coronavirus Pneumonia

Influencing factors	Proportion
Minimizing travel	39.36%
Rational consumption tendency	27.66%
Precautionary saving motivation	20.21%
Reduction of part-time jobs opportunities	5.32%
Reduction of family allowances	4.26%
Others	3.19%

Through the above analysis, nearly one fifth of college students had reduced consumption expenditure after the outbreak of Novel Coronavirus Pneumonia, which is mainly affected by three factors: preventive savings, minimizing travel and rational consumption tendency. But why did college students have the above behavior changes? This phenomenon can not be explained by simple data analysis. In order to understand the formation mechanism of these factors. This paper will empirically analyse and deeply explore the causes of college students' precautionary saving, minimizing travel and rational consumption tendency to analyze the consumption concept and behavior of college students. It can provide the basis for the more targeted measures to eliminate the adverse effects in colleges and universities.

Due to the enhancement of precautionary savings, minimizing travel and the existence of rational consumption tendency, this paper divided them into two situations: Yes and no, which can be expressed by 1 and 0. They are typical binary discrete random variables. Therefore, this part mainly analyses how Novel Coronavirus Pneumonia reduces the consumption behavior of college students by using Logit model.

The form of binary Logit model is as follows:

$$P_i = F(Y) = \frac{1}{1+e^{-Y_i}} = \frac{1}{1+e^{-(\alpha_i+\beta_i X_i)}} \tag{1}$$

To explain Variable Y_i , when $i=1, Y_1=1$ expresses the increase of the motivation of preventive savings and $Y_1=0$ expresses the decrease of the motivation of preventive savings. When $i=2, Y_2=1$ expresses the decrease of the frequency of travelling and $Y_2=0$ expresses the increase of the frequency of travelling. When $i=3, Y_3=1$ expresses the existence of rational consumption tendency and $Y_3=0$ means that it does not exist rational consumption tendency.

The form can be deformed as follows:

$$\ln\left(\frac{P_i}{1-P_i}\right) = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_8 X_8 \tag{2}$$

In formula (2), $\ln\left(\frac{P_i}{1-P_i}\right)$ has two kinds of logarithms of chance ratio, ($i=1,2,\dots,8$), which obeys logical distribution. The explanatory variable X_i includes the characteristic variable of the investigated college students and the characteristic variable of family economic pillar. The former includes gender, grade, sources of cost of living, average monthly consumption expenditure level, habitual residence of the respondents. The latter includes the family economic pillar, family role, the highest education level, occupation type of family economic pillar. The descriptive statistics of specific variables are shown in Table 5.

Table 5. Variable description and simple statistics

Variable name	Variable description	Average value	Standard deviation
Precautionary savings	Preventive savings after Novel Coronavirus Pneumonia is 1, otherwise it is 0	0.2032	0.4024
Minimizing travel	Minimizing travel after Novel Coronavirus Pneumonia is 1, otherwise it is 0	0.3105	0.4627
Rational consumption tendency	Rational consumption tendency after Novel Coronavirus Pneumonia is 1, otherwise it is 0	0.2717	0.4448
Gender	Male is 1, female is 2	0.4361	0.4959
Grade	The first year is 1, the second is 2, the third is 3, the fourth is 4, and the graduate student is 5	1.7648	0.8846
Sources of cost of living	All given by parents is 1, given by parents + part-time income is 2, given by parents + awards/grants is 3, all by themselves is 4	1.5046	0.8433
Average monthly consumption expenditure level	Less than 1000 RMB is 1, 1000-2000 RMB is 2, 2000-3000 RMB is 3, more than 3000 RMB is 4	2.5959	1.2619
Habitual residence	City is 1, village or town is 0	0.3699	0.4828
Family economic pillar	Father is 1, mother is 2, others is 3	1.3584	0.6494
The highest education level of family economic pillar	Junior high school and below is 1, senior high school is 2, undergraduate is 3, master is 4, doctor and above is 5	1.6621	0.8248
Occupation type of family economic pillar	Civil servants or institution is 1, state-owned enterprises is 2, private enterprises is 3, self-employed enterprises is 4, self employment is 5, others is 6	4.0046	1.4110

Table 6 shows the empirical results of precautionary savings, minimizing travel and the existence of rational consumption tendency. As the regression coefficient has little economic meaning in Logit model. Table 6 shows more meaningful average marginal effects.

First of all, this paper analyzes the influencing factors of preventive savings. According to table 6, the attribute of habitual residence has a significant impact on preventive savings. The marginal effect

is -0.0699, which indicates that the proportion of preventive savings of college students who live in villages or towns is 6.99% higher than that of urban college students. It means that the income source of urban college students' families is wider and more stable, and they are more resistant to risks. Preventive savings is negatively correlated with the stability of the profession in which the family economy pillar is engaged. The more stable occupations the family economic pillar is engaged in (such as civil servants, institutions), the lower precautionary saving motivation is. The more unstable occupations the family economic pillar engaged in (such as self-employed, self-employed), the higher precautionary saving motivation is. The more unstable the career of the family economic pillar is engaged in, the more motivated the students are to save because they have no confidence in their future family overall income.

Table 6. Estimated results of three factors:precautionary saving, minimizing travel, rational consumption tendency

Variable name	Precautionary saving	Minimizing travel	Rational consumption tendency
Gender	0.0161	0.0259	-0.0131
Grade	-0.0033	-0.0012	0.0023
Source of cost of living	0.0043	-0.0016	0.0077
Average monthly consumption expenditure level	-0.0011	-0.1131	-0.0017
Habitual residence	-0.0699	-0.0548	-0.0074
Family economic pillar	0.0034	0.0056	0.0042
The highest education level of family economic pillar	0.0098	0.0123	0.0660
Occupation type of family economic pillar	-0.0722	-0.0067	0.0031

Note: regression results report marginal effects.

Secondly, this paper analyzes the impact factor of minimizing travel. According to table 6, the attribute of habitual residence has a significant impact on minimizing travel. The marginal effect is -0.0548, which indicates that the proportion of minimizing travel of college students who live in villages or towns is 5.48% higher than that of urban college students. It can be explained that minimizing travel is also a way of preventive savings. Minimizing travel is negatively related to the average monthly consumption expenditure level. The higher the consumption level is, the lower willingness of college students to reduce travel plans. It means that students with high consumption behavior can reduce the probability of taking public transportation by taking a taxi or driving their own cars, And their willingness to travel is limited by Novel Coronavirus Pneumonia.

Thirdly, this paper analyzes the impact factor of rational consumption tendency. There is a positive correlation between rational consumption tendency and family pillar education level, which indicates that the higher the family pillar education level is, the higher of college students' rational consumption tendency is. This may be related to parents' education. Families with higher education level may pay more attention to guide college students to consume rationally.

4. Conclusion

Through the investigation of questionnaire data, this paper focuses on the influence of College Students' consumption concept and behavior under the background of normalization of Novel Coronavirus Pneumonia. The conclusion is as follows:

1). The consumption level of some college students was lower than that before the epidemic, and some college students had retaliatory consumption under the background of normalization of Novel Coronavirus Pneumonia. Among the respondents, 21.46% of the college students' consumption level decreased compared with that before Novel Coronavirus Pneumonia, 57.31% of the college students' consumption level was as the same as that before, and 21.23% of the college students' consumption level increased compared with that before. The main reasons for the decrease of College Students' consumption were preventive saving, travel reduction and rational consumption tendency. Among

them, minimizing travel had the greatest impact, followed by rational consumption tendency and preventive savings.

2). Through the analysis of the factors affecting consumption behavior, college students living in villages and towns, as well as those whose parents' profession is not stable, were more likely to have preventive savings motivation; college students living in villages and towns, as well as students with lower monthly consumption level, were more likely to minimize travel; college students whose parents had higher education levels paid more attention to rational consumption after Novel Coronavirus Pneumonia.

5. Policy suggestions

Through the research on the causes of influencing the consumption level of college students, we know that living in villages and towns, low monthly consumption level, family economic pillar 's unstable profession have a significant impact on students' consumption behavior. Under the background of the normalization of Novel Coronavirus Pneumonia, colleges need to pay more attention to the students whose family income is greatly affected by Novel Coronavirus Pneumonia, and should give preference to these students. Colleges also need to pay attention to the changes of students' consumption and campus life due to Novel Coronavirus Pneumonia, and guide them positively.

5.1 Policy preference to affected students

Colleges should investigate the family situation of the students. For the students whose family income are greatly affected by Novel Coronavirus Pneumonia, colleges can try to provide part-time jobs opportunities and give some policy preference in the scholarship evaluation to help these students tide over this special and difficult period.

The results show that college students who live in villages and towns, with lower monthly consumption level and those whose parents' profession is not stable, chose to reduce consumption after Novel Coronavirus Pneumonia because of the expected decline in income. Therefore, colleges should actively and accurately implement policies to help these students who were greatly affected by the epidemic to tide over this special and difficult period. First, colleges should investigate the family situation of students and find out the students whose family incomes were greatly affected by the epidemic situation. Second, colleges can try to provide part-time jobs opportunities and give some policy preference in the scholarship evaluation to help these students. Finally, colleges can offer students with special difficulties a green channel for student loans.

5.2 Giving instructions over rational consumption concept

This epidemic has awakened some students' awareness of rational consumption. Colleges should take this opportunity to bring the cultivation of college students' correct consumption concept into the moral education of college students, and guide students to build up rational consumption concept. First of all, in the construction of campus culture, colleges should promote the traditional virtue of diligence and thrift, curb the trend of comparison, and advocate rational consumption and moderate consumption. Colleges can set up courses related to consumption and finance, popularize courses in the fields of consumer behavior and consumer psychology in order to help students c form rational understanding of consumption in essence. Colleges can make full use of wechat, microblog, short video planforms and other new media platforms to warn students of rational consumption by publicizing negative cases such as online loan fraud and bad platform induction.

5.3 Enrich students' spare campus life

Considering the normalization of Novel Coronavirus Pneumonia, students' normal travel will be affected to a certain extent, and students' campus life will also extend. Therefore, enriching students' colleges activities or competitions, especially on line activities can meet the normal social needs of students and reduce the risk of infection of Novel Coronavirus Pneumonia. First, increase the frequency and expand the types of school sports activities and literary competitions to meet the

interests of different students. Secondly, colleges should extend the opening hours of sports and cultural facilities such as gymnasium, stadium, library and concert hall. Finally, the linkage between schools should be enhanced, such as organizing school ball games, conducting band tours, and sharing book resources which maximize the usage of resources and make students feel different campus culture atmosphere.

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