

Research on the Characteristics and Influencing Factors of Undergraduates' Online Consumption

—Based on the Empirical Investigation of Undergraduates' in Lanzhou City

Tian Yaping
Tianjin University of Traditional Chinese Medicine

Liu Shuang *
Tianjin University of Traditional Chinese Medicine
* Corresponding Author

Abstract—With the accelerating pace of life and the rapid spread of e-commerce, the new consumption mode of online consumption is gradually infiltrating into all aspects of the lives of Chinese residents, affecting and changing the lives of residents. Online consuming behavior has become one of the hot issues of scholars at home and abroad. This paper takes undergraduates in Lanzhou as the research object, and conducts an in-depth investigation on the online consumer groups characteristics, behavioral characteristics, psychological characteristics, risk prevention characteristics and influencing undergraduates through questionnaire survey and literature research. The study found that the factors affecting the online consumption of undergraduates in Lanzhou are gender, personal economic status and the price of goods or services. According to the characteristics and its influencing factors, the paper guides college students to cultivate scientific consumption awareness from the students themselves, families and universities, and puts forward some suggestions on promoting the development of network consumption platform, such as launching specific products or services in target market, providing low-cost and high-quality products to target customers, and strengthening the security of online consumption.

Keywords—Lanzhou, Undergraduates, Online Consumption, Influencing Factors

I. Introduction

Online consumption refers to the process of people using the Internet as a tool to meet their own needs [1]. With the rapid development of the Internet and the rapid popularization of e-commerce, online consumption has gradually penetrated into all aspects of resident consumption; the Internet has a great impact on traditional consumer behavior. More and more people are beginning to position consumer activities as networks, making online consumption become a symbol of fashion [2]. According to the 40th Statistical Report on Internet Development in China, the majority of Chinese netizens are 10-39 years old, of which the proportion of 20-29 years old netizens is the highest, reaching 29.7%, among the Chinese netizens, the student group accounted for the highest proportion, at 24.8% [3]. Nowadays, as a special group of society, college students' consumption potential and ability to pay can not be underestimated, especially in terms of online consumption. While college students' online consumption behavior is becoming more and more common, online consumption has become an important part of college students' life.

A. Online Consumption Characteristic of Undergraduates in Lanzhou

The survey targets are undergraduates from various colleges and universities in the 3 counties and 5 districts of Lanzhou. During the survey from February to March 2018, 200 questionnaires were distributed to undergraduates in Lanzhou, and 200 questionnaires were collected. Among them, 186 were valid questionnaires, and the effective rate was 93%. The questionnaire is divided into three parts, namely basic information, online consumption survey and network consumption risk. The basic information part investigates the gender, grade, professional background, household registration, living expenses of the respondents and so on. Online consumption survey mainly investigates the frequency of online shopping, age of contact, ways of understanding network consumption, amount of network consumption and consumption limit, economic situation, mode of payment, reasons for network consumption, consumption types and factors affecting consumption. The network consumption risk module explores how students deal with express package, meanwhile, investigating rights violation treatment and rights protection methods.

B. Maintaining the Integrity of the Specifications

The template is used to format your paper and style the text. All margins, column widths, line spaces, and text fonts are prescribed; please do not alter them. You may note peculiarities. For example, the head margin in this template measures proportionately more than is customary. This measurement and others are deliberate, using specifications that anticipate your paper as one part of the entire proceedings, and not as an independent document. Please do not revise any of the current designations.

II. ONLINE CONSUMPTION CHARACTERISTIC OF UNDERGRADUATES IN LANZHOU

The survey targets are undergraduates from various colleges and universities in the 3 counties and 5 districts of Lanzhou. During the survey from February to March 2018, 200 questionnaires were distributed to undergraduates in Lanzhou, and 200 questionnaires were collected. Among them, 186 were valid questionnaires, and the effective rate was 93%. The questionnaire is divided into three parts, namely basic information, online consumption survey and network consumption risk. The basic information part investigates the



gender, grade, professional background, household registration, living expenses of the respondents and so on. Online consumption survey mainly investigates the frequency of online shopping, age of contact, ways of understanding network consumption, amount of network consumption and consumption limit, economic situation, mode of payment, reasons for network consumption, consumption types and factors affecting consumption. The network consumption risk module explores how students deal with express package, meanwhile, investigating rights violation treatment and rights protection methods.

A. Online Consumer Groups Characteristics of Undergraduates in Lanzhou

According to the survey data, among the 186 respondents who participated in the survey, there were 72 males and 114 females, accounting for 38.7% and 61.3% respectively. 56.5% of the respondents were senior students, besides, juniors and younger students accounted for 43.5% of the total number. Among the respondents, there were 27 people with a network age of more than 6 years. The data shows that the number of living expenses between 501 and 1500 yuan is 140, accounting for 75.3% of the total, all of them are undergraduates. More than 50% of the students who participated in the survey do not have income sources other than the family's living expenses. Therefore, the living expenses of the students are greatly affected family's economic by situation.

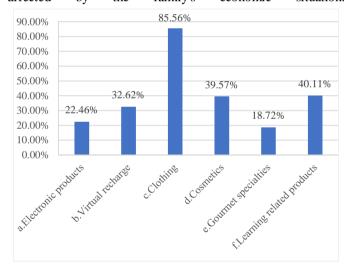


Fig. 1. Respondents' online consumption of goods or service types

B. Online Consuming Behavior Characteristics of Undergraduates in Lanzhou

• The survey data shows that the respondents spend about 1-2 times a week on online consumption, which accounts for 85.5% of the total number of people surveyed. And, the third-party payment was the most frequently used, followed by online bank payment and bank remittance, accounting for 51.6%, 31.7% and 14.5% respectively. Besides, the types of goods or services purchased by the college students were clothing, learning related products, cosmetics, virtual recharge, electronic products and gourmet specialties, among which clothing accounted for the highest

proportion and gourmet specialties accounted for the lowest. The specific data is shown in Fig.1

C. Psychological Characteristics of Undergraduates' Online Consumption in Lanzhou

According to the survey data, the main reasons for the respondents to choose online consumption are the convenience, quickness and time-saving, the choice of goods with more favorable prices, the variety and style of products, and the satisfaction of consumers' demand for high quality services. The highest percentage of options is time savings and the lowest is quality of service. The specific data is shown in Fig. 2

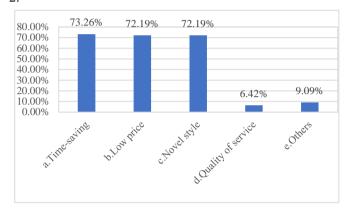


Fig. 2. The main reason for respondents to choose online consumption

D. Risk Prevention Characteristics of Undergraduates' Online Consumption in Lanzhou

TABLE I. INVESTIGATION ON EXPRESS PACKAGE DISPOSAL

Methods	Male	Female	A	
Methods	Amount (%)	Amount (%)	Aggregate	
Throw away directly	31 (47.0%)	35 (53.0%)	66 (35.5%)	
Tear off express list	38 (33.0%)	77 (67.0%)	115 (61.8%)	
Others	3 (60.0%)	2 (40.0%)	5 (2.7%)	

Investigation on risk prevention characteristics of online consumption of students in Lanzhou mainly focuses on the way the respondents deal with express package and the method they deal with the infringement of their rights and interests during consumption. According to the survey, 61.8% of the respondents chose to tear off the express list and then throw away the packaging, while the respondents who chose to throw away the express package directly accounted for 35.5% of the total, as shown in TABLE I. The data shows that when students' legitimate rights and interests are infringed, 8.1% of the 186 respondents choose to give up right, 57.0% of the respondents depend on the situation to make a decision, and only 34.9% of the respondents will choose to defend their rights resolutely. As shown in TABLE II.



III. INFLUENCING FACTORS OF ONLINE CONSUMPTION FOR UNDERGRADUATES IN LANZHOU CITY

A. External Factors

a) Commodity Price:

According to the data analysis, 59.1% of the respondents spend between 101 and 500 yuan a month on the Internet, and 27.4% of the respondents spend less than 100 yuan a month on the Internet. Therefore, due to economic constraints, the price of goods will be the first consideration when students consume.

TABLE II. INVESTIGATION ON THE METHODS OF DEALING WITH INFRINGEMENT OF RIGHTS AND INTERESTS

Methods	Male	Female	Aggregate	
Methods	Amount (%)	Amount (%)		
Give up rights	7 (46.7%)	8 (53.3%)	15 (8.1%)	
Depends on circumstances	40 (37.7%)	66 (62.3%)	106 (57.0%)	
Resolutely defending rights	25 (38.5%)	40 (61.5%)	65 (34.9%)	

b) Logistics Distribution Speed:

Lanzhou is an important pivot of the new economic belt of Longhai & Lanxin in the west, and an important transportation hub and logistics center, it is also a communication hub and scientific research and education center in the northwest. Especially with the development of urban construction, more and more universities have moved to the suburbs of the city. Students in the suburbs will rely more on online consumption because of the inconvenient traffic in the city. However, due to the waiting time for receipt after consumption, the speed of logistics distribution is also an important factor affecting the online consumption of undergraduates in Lanzhou.

c) Online Consumption Security:

With the continuous development of the network, the various items of network consumption are gradually improving, and the security of online consumption is strengthened. However, due to the lack of self-protection awareness, the problem of online consumption security is constantly occurring. 21.39% of the students in the survey were worried about safety problems due to their lack of safety awareness.

B. Internal Factors

a) Economic situation:

According to the survey, more than half of the students participating in the survey do not have an economic income other than the family's living expenses. At the same time, 40.1% of the students have a monthly living allowance of less than 1,000 yuan, and the students' online consumption behavior must take into account the necessary expenses for living. Due to the limitation of economic income, students will be more cautious when they consume online. So the economic situation is one of the important factors that affect the consumption behavior of undergraduates in Lanzhou.

b) Grade level

The amount of student online spending increases as the grade increases. Among the 186 students who participated in the survey, there were 25 spending more than 1,000 yuan per

month through online consumption, of which only 17 were seniors and above. Many senior students can increase their income through internships and other means, so that the expenditure on online consumption is limited by economic conditions, which will be lower than that of junior students.

c) Gender Factor

Gender also has an impact on Internet consumption behavior. According to the survey data, 63.6% of the 110 respondents who spent between 101 yuan and 500 yuan on the Internet each month were female, while 81.8% of the respondents who spent between 501 yuan and 1000 yuan on the Internet each month were female. It can be seen that gender is also one of the factors that affect students' online consumption.

d) Consumption Psychology

The development of Lanzhou is far from that of the southeast coastal area. Consumers' consumption behavior is easily attracted by the new things. Therefore, many respondents value that they can touch more popular things or commodities through Internet consumption, which can broaden their horizons and satisfy their consumer psychology in pursuit of fashion.

IV. TEST ON INFLUENCING FACTORS OF UNDERGRADUATES' ONLINE CONSUMPTION IN LANZHOU

A. Chi-square Test for Influencing Factors of Online Consumption

Through data reduction and analysis of influencing factors on the results of the questionnaire, Chi-square test was used to test the significance of each variable on undergraduates online consumption. According to the conclusion of the previous study, it can be assumed that grade, gender, economic status, commodity prices, logistics and distribution speed, fashion-seeking consumption psychology, online consumption security and other variables have an impact on students' network consumption behavior. The chi-square test method is used to verify the above hypothesis. It is verified that the P values of the above factors are all less than 0.05. It can be seen that the above variables have significant influence on the online consumption behavior for students. Therefore, we can believe that the grade, gender, economic status, commodity prices, logistics and distribution speed, the pursuit of fashion consumption psychology and online consumption security and other variables have an impact on undergraduates' online consumption in Lanzhou. The details are shown in TABLE III.



TABLE III. SIGNIFICANCE TEST ON INFLUENCING FACTORS OF ONLINE
CONSUMPTION

	Chi-square (χ²) A	symptotic significance(P)
Grade	130.000	0.000
Gender	9.484	0.002
Economic Situation	243.860	0.000
Commodity Price	36.151	0.000
Logistics Distribution	39.763	0.000
Consumption Psychology	36.151	0.000
Online Consumption Security	244.108	0.000

B. Multiple Linear Regression Analysis

According to the analysis above, the regression equation is: . Assuming that the above indicators are independent variables. the model is established as follows: . among them, for gender, for economic situation, for commodity price, for grade, for the speed of logistic distribution, for fashion-seeking consumption psychology, for online consumption security. The dependent variable of the multiple linear regression analysis model is Y, which is the monthly online consumption amount of undergraduates in Lanzhou, the monthly amount is an important index to measure the online consumption behavior and ability of students. By means of multiple linear regression analysis, the author found that the monthly online consumption amount varies with the changes of these seven variables, and found the indicators among the seven indicators that have a linear relationship with the online consumption level of undergraduate in Lanzhou, so as to conclude the influencing factors.

As can be seen from TABLE IV, the probabilities of grade, logistics distribution, fashion-seeking consumption psychology and online consumption security are all greater than the significant level of 0.05, so the four independent variables can not be used in the regression equation. The reason for this result is that the number of samples selected in this linear regression analysis is not large enough to reflect the linear relationship between dependent variables and independent variables more accurately. As can be seen from TABLE V, the P values of the independent variables of gender, economic status and commodity prices are 0.002, 0 and 0.001 respectively, which are all less than 0.05, the results show that there is a linear regression relationship between the three independent variables and the monthly online consumption amount of students. So the author concludes that the influencing factors of online consumption of undergraduates in Lanzhou are gender, personal economic situation and the price of goods or services.

V. Measures to Improve Undergraduates' Online Consumption

A. Promote the Healthy Development of Online Consumption Platforms

a) Further Analysis of the Target Market to Launch Specific Products or Services

Undergraduates' online consumption has the psychological characteristics of pursuing individualized products. For this reason, the business can further subdivide the target market into groups of College students, especially female students who have stronger desire to consume on the Internet. Paying attention to their consumption behavior characteristics can not only help enterprises and businesses understand the current fashion trends, product popularity, market saturation of product, and market share, but also help to grasp the future major consumer groups in the Northwest. Combined with the characteristics of online consumption, according to the needs of different genders, grades and different time periods, the target market is accurately segmented, thus reflecting the differentiated product and marketing differences.

TABLE IV. VARIABLES OUTSIDE THE MODE

Independent		Non-standardized Coefficient		t	p
Variable	В	Standard Error	Beta		
Grade	0.054	0.056	0.064	0.961	0.338
Logistics Distribution	0.127	0.102	-0.085	1.237	0.218
Consumption Psychology	0.126	0.101	0.085	1.253	0.212
Online Consumption Security	0.026	0.07	-0.025	0.372	0.711

b) Providing Good and Inexpensive Products to Target Customers

From the above analysis, we can see that the consumption of college students in Lanzhou is limited by their own economic conditions, and the consumption behavior of the group is affected by several objective factors, including the price of goods or services, quality and the fashion-seeking consumption psychology. Because the consumption level of undergraduates in Lanzhou is limited, choosing good and cheap products has become the mainstream consumption concept of the group. In order to satisfy the students 'consumption psychology, the merchants can first investigate the specific consumption level so as to strengthen the preferential treatment of goods and save costs as much as possible.

c) Strengthening Online Consumption Security

Online consumption has become an important way for students to consume, but the issue of network consumption security caused by it is worth considering. Due to the numerous problems on the network, the environment of online consumption for students is not safe, so that it is necessary to formulate corresponding measures to improve. Merchants need to regulate their own online sales behavior, to be sincere service, not to provide false information, but also to keep the personal information of consumers strictly confidential. The



state must further strengthen the construction of relevant laws and regulations, and all parties must strengthen security measures.

TABLE V. MULTIPLE LINEAR REGRESSION COEFFICIENT

Independent Variable	Non-standardized Coefficient		Standardized Coefficient		
	В	Standard Error	Beta	- t	p
Constant	0.921	0.200		4.599	0.000
Gender	0.282	0.091	0.207	3.108	0.002
Economic Situation	0.237	0.043	0.366	5.532	0.000
Commodity Price	0.319	0.098	-0.215	3.253	0.001

B. Cultivate the scientific consumption behavior

The group of undergraduates is in a critical period of mental formation, they are easily attracted to a wide range of network products and services on the market. Especially, there are various temptations and traps in network consumption. College students should consume rationally, establish a reasonable consumption structure according to their own economic situation [4], have a reasonable plan when consuming, and cultivate good consumption habits. The influence of family education on students is imperceptible, and the financial source of college students is generally provided by the family. So families should play an active role in habit development of students, optimize the growth and education environment, cultivate healthy consumption psychology of college students [5], and promote rational consumption behavior of College students. Colleges and universities should also guide students to rationally adjust the consumption structure, educating students to have a plan, purpose, no blindness, and no comparison in online consumption so as to meet their reasonable consumption needs. Through lectures and theme activities, colleges and universities can actively guide college students to establish a correct consumption concept, so that college students can maintain rational consumption while pursuing fashion and personality [6]. At the same time, with

the help of the above forms, the students will be educated on the network consumption risk, improve the students' awareness of security during online consumption, and improve students' awareness of rights protection, so as to avoid college students accidentally falling into the online consumption trap.

VI. CONCLUSION

In conclusion, the network consumption of undergraduates in Lanzhou is influenced by gender, personal economic status and the price of goods or services. With the rapid development of the network and the rapid popularization of e-commerce, network consumption has become an indispensable part of people's lives. As the principal part of online consumption, the student group has a great influence on network consumption. This paper analyzes the characteristics of undergraduates' online consumption and its influencing factors from the perspective of undergraduates. It is hoped that it can guide college students to cultivate scientific consumption awareness and provide some useful suggestions for the development of online consumption platform.

REFERENCES

- Wangqian. Study on College Students' Network Consumption Psychology and Intervention Strategies[J]. Journal of HuNan Industry Polytechnic. 2016(04):110-112. (In Chinese)
- [2] Yanxueyuan, Zhangrui. An empirical study on the influencing factors of Internet consumption behavior in China[J]. Commercial Times, 2014 (33):10-12. (In Chinese)
- [3] The 40th Statistical Report on Internet Development in China [R/OL]. Beijing: Chinese Internet Information Center, 2017[2017-8-5].http://www.cnnic.net.cn/.htm (In Chinese)
- [4] Zhangzhiqiang. Research on Internet consumption of college students in the Internet plus Era[J]. Legal World for Employees, 2017 (10):193. (In Chinese)
- [5] Zhangwenxi. Talking about College Students' Network Consumption Psychology[J]. The Guide of Science & Education, 2015 (07):115-116. (In Chinese)
- [6] Tianfengquan, Huangna. Influencing Factors of College students' Online Shopping Behavior[J]. Consumption Economy, 2015 (04):89-91. (In Chinese)