

# Survey of College Students' Consumption Behavior from the Perspective of Data Analysis

Jianjian Wang<sup>a</sup>, Sihan Chen<sup>b</sup>

School of Automation, Wuhan University of Technology, Wuhan 430070, China

<sup>a</sup>wang1jian9jian88@whut.edu.cn, <sup>b</sup>707262169@qq.com

**Abstract.** College students are one of the main groups of consumption in nowadays society. At the same time, they are well educated, easily influenced by the fashion trend and having active thoughts. In nowadays china, their new characteristics of unique consumption thoughts and behaviors have tremendous research value which attracted the attention of diversity industry. Through the result of questionnaire to students from Wuhan University Of Technology and Central China Normal University, using SPSS data processing software to research and Analyze on College Students' consumption behavior, habits, the comparison of consumption between online with offline , reasons that affecting consumption, channels of consumption information, types of new businesses that they hope to add. Through overall analysis to students' consumption, the comparative analysis of liberal arts and science students, and the comparative analysis of students in different genders, to find out their internal similarity, which provides new ideas for college students' academic education, rational consumption education and the development of new business pattern in business circles.

**Keywords:** college students, consumption, comparative analysis, new formats.

## 1. Introduction

With the rapid advancement of the Internet, Internet of Things, big data, cloud computing, artificial intelligence and other technologies, it will have a huge impact on the changes in consumer habits and consumer attitudes, if not take correct, reasonable and scientific measures to point, It will inevitably have negative effects or even negative effects[1]. College students become a special subject of consumption, which have high education, unique values and consumption concepts, and they are the front-end of common culture and consumption. Studying and analyzing college students' consumption mind and behavior is helpful to recognize the development trend of social consumption. students from Wuhan University of Technology and Central China Normal University are selected as samples In this study. Wuhan University of Technology is a science and technology college with the majority of male students, and Central China Normal University is a liberal arts school with the majority of female students. This study uses random choosing sampling, using SPSS data processing software to comparatively analyze the differences of overall students, between liberal arts and science students, male and female students and provide new ideas for college students' academic education, rational consumption education and the development of new business pattern through comparison between online and offline consumption, demand for new business pattern, etc[2].

## 2. An Overall Analysis of Students' Consumption Groups

### 2.1 Basic Information of Respondents

1440 questionnaires were issued and 1434 questionnaires were recovered, with the rate of 99.6%. After the first, second verify and telephone review, 1322 effective questionnaires were completed, with an effective rate of 92.2%.

The total number of respondents of Wuhan University of technology is 983, including 547 male students and 436 female students. The ratio of male and female students is 5.6:4.4. The total number of respondents of central China Normal University is 339, including 112 male students and 227 female students. The ratio of male and female students is 3.3:6.7. Among the respondents, the

majority were sophomores, juniors and seniors, nearly 30% of respondents were juniors, followed by sophomores, accounting for 20.4% and seniors, accounting for 18.9%.

Among the students who are surveyed, 93.7% of them stay at school, 3.7% of them rent houses, and 2.6% of them live at home at weekends. The average monthly living expenses of the surveyed students are mostly between 1000 to 2000 Yuan, with an average of 1272 Yuan. The number of students whose average monthly living expenses between 1001 to 2000 Yuan predominate, accounting for more than 60%; The percentage of students whose average monthly living expenses are less than 1000 Yuan account for about 12%;The percentage of students whose average monthly living expenses are 2001-5000 Yuan account for about 10%.

## **2.2 Consumption Behavior and Habits**

Most of the students chose the nearby business districts to consume, which are close to the school and concentrated large-scale shopping plazas. Walking is the most common way for students to go out, followed by subway / bus. The ratio of choosing taxi or electric bicycle / bicycle to the consumption place is relatively low. Only few students choose private car. The survey shows the average travel time of walking is 19 minutes, while the average travel time of Subway / bus is 25 minutes, and the overall travel time tolerance of consumers is within 30 minutes.

57% of the students who take surveys go out to consumption place 2-4 times per month, and the average number of going out is 1.13 times a week per week. The one-time consumption amount of each type of consumption is between 51 to 200 Yuan. The main consumption types of the students' group are catering and shopping, accounting for 46% and 44% respectively, while the consumption of entertainment is only 10%. Nearly 80% of the students choose to go to the consumption place on weekends or holidays, but at the same time, about 20% of the students choose to go to the consumption place on working days. The students' consumption groups often choose classmates and friends as their main companions, accounting for 39.8% and 35.4% respectively. Lovers are also important companions of students' consumption groups.

## **2.3 Comparative Analysis of Online and Offline Shopping Factors**

Men's and women's clothes are the main choice of students purchased online, followed by shoes. Consumers who buy makeup/personal care products, snack, mobile digital products, products for culture and education have high percentage. Among 44% of the students who go out for shopping, those who spend less than 300 Yuan for one time predominate, and the average amount spent on one shopping trip is 229 Yuan. The average monthly online shopping consumption of the surveyed students is less than 600 Yuan, and the average monthly online shopping consumption is 451 Yuan.

## **2.4 Factors Affecting Consumer Choice**

Recommendation by relatives and friends is the main factor that influences consumers' choice of consumption place. Suggestions from peers, online reviews' social media's recommendation also affect consumers' choice of consumption place in some extent, and more than 30% of students decide the consumption place by themselves. The introduction of relatives and friends is the main channel for consumers to obtain consumption information, while microblog / blog, small red book, tik tok / kuaishou, WeChat official account and other new media channels are also important channels for consumers to get consumption information.

About 90% of the students and respondents have had the consumption experience of "new retail", with "direct-sale stores, online ordering and delivery to nearby stores" and "high popularity" being the majority. Nearly 60 percent of the 90 percent of respondents who had experienced "new retail" said they might or would experience it again; Among the 10 percent who had not experienced "new retail", 50 per cent said they would or would consume it.

## **2.5 Expected New Business Type**

Catering, entertainment, cultural and creative industries are the top three new types of businesses that consumers want to add to the region. In the business of education and training, the majority of

consumers want to increase their interest in training, certificate/postgraduate examination/civil servant training and professional art training; In the cultural and creative industry, most of the consumers want to add cooking experience, ceramic experience, woodwork creation and DIY studio; In the shopping industry, most of the consumers want to add wearing accessories, makeup and personal care and outdoor sports apparel/supplies; In catering industry, the majority of consumers want to add special theme restaurants and snack; The majority of consumers want to add traditional regular / common sports experience hall, E-sports centers and VR experience centers, in entertainment industry; In the new featured businesses, the majority of consumers hope to add smart robot service stores, smart AR clothing/makeup, and brand experience concept stores.

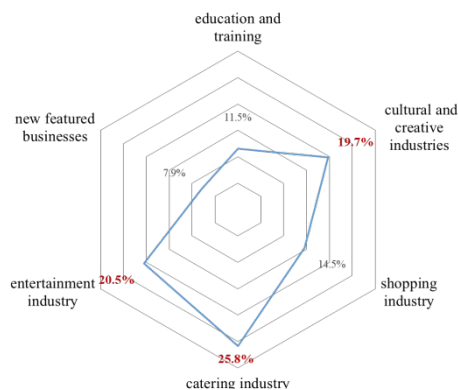


Fig 1. Expected new business type

### 3. Comparative Analysis of Liberal Arts and Science Students

Among the students who took survey, the monthly average living expenses of science students are slightly lower than those of liberal arts students. The monthly average living expenses of science students are mainly 801-2000 Yuan per month, and the liberal arts students' expenses are mainly 1001-2500 Yuan per month.

#### 3.1 Comparative Analysis of Offline Consumption of Liberal Arts and Science Students

There are significant differences between liberal arts and science students in terms of frequent consumption business circle/area. The business circle/area often consumed by arts students is decentralized, while that of science students is centralized.

The outgoing consumption frequency of liberal arts students is slightly higher than that of science students. For liberal arts students, the frequency of is about 1.3 times per week, while science students' is about 1.1 times per week. Liberal arts students tend to spend more time on shopping when they go out, while science students tend to spend more on catering. There is little difference between the two groups in the consumption of entertainment. The one-time consumption amount of liberal arts students is slightly higher than that of science students. While The one-time consumption amount of liberal arts students is about 213 Yuan, while that of science students is about 176 Yuan.

#### 3.2 Comparative Analysis of Online Consumption of Liberal Arts and Science Students

The types of goods which often purchased online by liberal arts students include men's and women's clothing, makeup and personal care products, footwear, snacks and underwear accessories, etc. While the types of goods often purchased online by science students include men's and women's clothing, shoes, makeup/personal care products, snack and mobile digital products. The amount of monthly average online shopping of liberal arts students is slightly higher than that of science students. The amount of monthly average online shopping of liberal arts students is about 497 Yuan, and science students' is about 434 Yuan.

### **3.3 Analysis on the Needs of Liberal Arts and Science Students for New Business Forms**

In the new education training forms, there is only rare difference between arts students and science students. Liberal arts students are more inclined to add interest and hobby training, examination / postgraduate examination / civil servant training, adult education / academic training, etc. While science students are more inclined to add professional art training, language training, vocational skill training and studying abroad, etc. In the new cultural and creative business, there are significant differences between liberal arts students and science students. Liberal arts students are more inclined to add baking experience, wood creation, etc. While science students are more inclined to add ceramic experience stores, DIY studio, ready-made cultural and creative products, self-service book bar, cooking learning, theme bookstore, etc. In terms of new shopping formats, there are obvious differences between liberal arts students and science students. Liberal arts students are more inclined to add clothes, hats, shoes, accessories, makeup and personal care, jewelry / watches, etc. While science students are more inclined to add home appliances / mobile digital products, outdoor sports apparel / supplies, cultural and educational supplies, etc.

In the new catering industry, liberal arts students are more inclined to new type of snack, science students are more inclined to add characteristic / theme restaurants, etc. In the entertainment industry, there are significant differences between liberal arts students and science students. Liberal arts students are more inclined to some musical bar, yoga halls, beauty / hairdressing / nail salons, teahouses / cafes, fitness centers, etc. While science students are more inclined to add VR experience halls, E-sports halls, 'Escape the Room' halls, the extreme sports experience pavilion, video game cities, and animation experience pavilion. In addition, there are some differences between liberal arts students and science students in the new featured businesses. Liberal arts students are more inclined to add smart AR clothing / make-up, online service stores, brand experience concept stores, etc. While science students are more inclined to add intelligent robot service stores, unmanned convenience stores, etc.

## **4. Comparative Analysis of Students of Different Genders**

Among the students surveyed, the monthly average living expenses of male students is slightly higher than that of female students. The monthly average living expenses of male students is 1287 Yuan per month, and that of female students is 1258 Yuan per month.

### **4.1 Comparative Analysis of Offline Consumption of Students of Different Genders**

The consumption frequency of male students is slightly higher than that of female students. For male students the frequency is about 1.2 times per week, and female students' is about 1.1 times per week. Male students are more inclined to go out for food and beverage and entertainment consumption, while female students are more inclined to go out for shopping. One-time consumption amount of male students is slightly lower than that of female students. The amount of male students is about 185 Yuan, and female students' is about 186 Yuan.

### **4.2 Comparative Analysis of Online Consumption of Students of Different Genders**

The types of goods that are often purchased online by male student consumer groups include male clothing, footwear, mobile digital products, snack, cultural and educational supplies, etc. While the types of goods that are often purchased online by female student consumer groups include women's clothing, makeup and personal care supplies, shoes, snack and underwear accessories, etc. The monthly average consumption amount of online shopping of male students is slightly lower than that of female students. The monthly average consumption amount of online shopping of male students is about 434 Yuan, and female students' is about 467 Yuan.

### **4.3 Analysis of the Needs of Students of Different Genders for New Formats**

In the new format of education, female students and male students have a few differences. Only in the category of "adult education/education training" there is a big difference, that female students

are more inclined to the new format of this type of education training. Among the newly added cultural and creative businesses, female students have significantly difference from male students. Male students are more likely to add ready-made cultural and creative products, theme exhibitions and self-serving bars, while female students are more likely to add baking experience, pottery experience and DIY studio. Among the newly added shopping forms, the differences between female students and male students are also more obvious. Male students are more likely to add home appliances/ mobile digital products, cultural and educational supplies, and outdoor sports apparel/supplies, while female students are more likely to add makeup/personal care, clothes, hats, shoes and accessories.

In new food service forms, male students are more likely than the "features/theme restaurant", female students are more likely to add "bakery/cake shop". In the new entertainment forms, there are significant differences between female students and male students. Male students are more inclined to add new types of E-sports hall, VR experience hall, secret room escape hall, animation experience hall, video game city, etc. While female students are more inclined to add new types of beauty / hairdressing / nail salon, yoga hall, teahouse / coffee shop, some musical bar, emerging extreme sports experience pavilion. In addition, there are obvious differences between female students and male students in the new featured businesses. Male students are more inclined to add intelligent robot service stores, shared KTV, brand experience concept stores, etc. While female students are more inclined to add intelligent AR clothing / makeup, shared wardrobe, etc.

## **5. Analysis of the Main Factors Influencing College Students' Consumption**

### **5.1 Experiential Viscosity Consumption**

The research results show that "short distance, convenient transportation, one-stop service and good experience" are the main factors that affect consumers' choices. By analyzing the consumption places' function orientation , structure and other factors that affect the consumer experience ,which are the first choice of the respondents, and then ,comparing with other large-scale one-stop shopping places horizontally, it can be seen that the word "experience" has gradually penetrated into all aspects of the business, to create a viscosity consumer environment for the visiting consumers and achieve a high level of consumption Flat efficiency supports the expected benefits beyond the high cost of rent and labor to ensure the healthy and sustainable operation of the brand.

### **5.2 Scenario Based Social Consumption**

The scene of consumption redefines the current social life. Taking catering as an example, popular restaurant, cross-border catering, unmanned restaurant and other new formats have made a new social definition of "eating". Restaurants with their own "ritual sense" are far more popular and profitable than other similar businesses. Consumers punch cards to show their social life, realize the realization of online dividends, and extend the value margin of offline stores to the boundless Internet world.

### **5.3 Accurate Exposure of New Media**

In the analysis of consumer information acquisition channels, the current consumers, especially the "new century" consumer groups, have a strong sense of "self", and the determination of consumption goals and consumption decisions are different from the past. Whether from the consumption area or the choice of specific consumption places, the crowd has become the popular way of the past, and the channel of public classification, official account, bean paste, know and so on is more popular. Traditional media channels have gradually withdrawn from the main channel for consumers to obtain consumer information.

## 5.4 Conformity Seeking and Consumption

College students are open-minded and good at innovation. They have a strong ability to accept new things and are more likely to try and experience new things. With the development of the Internet, the speed of information transmission is fast, and college students are no longer limited to paying attention to the consumption patterns of people around them. Stars and bloggers with many fans on the Internet are the spokespersons of fashion, personalization and new life in the eyes of college students, which will attract them to imitate[3]. As a mainstream consumer group, college students often refer to the suggestions of various microblog opinion leaders in their consumption decisions[4].

## References

- [1]. Xiaoyan Wang. Research on the Education of Online Consumption Concept for College Students in the New Era of China [P]. Proceedings of the 2018 2nd International Conference on Education Science and Economic Management (ICESEM 2018), 2018.
- [2]. Li Jing, Shen Shusheng, Liu Fangming, Tong Yuanzhi. An Survey Study on the New Characteristics of College Students' Consumption Behavior from the Perspective of Big Data [J]. Theory of Educational Technology,2017(12):19-25.
- [3]. Haoxing Zhao, Wenjuan Xu. Analysis on the Consumption Structure of College Students [P]. Proceedings of the 2nd International Conference on Economy, Management and Entrepreneurship (ICOEME 2019), 2019.
- [4]. Yu-chun Li. Research on the Influence of Weibo Opinion Leaders on College Students' Consumption Decision [C]. Advanced Science and Industry Research Center. Proceedings of 2019 International Conference on Social Science, Economics and Management Research (SSEMR 2019).Advanced Science and Industry Research Center: Science and Engineering Research Center,2019:128-136.