



## Case Study

# Analysis of Consumer Behavior in Community and Campus Based on Questionnaire-Taking Tianjin University Students and the Elderly as Examples

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**Abstract:** With the gradual improvement of the supply chain and the rapid development of the e-commerce economy, community e-commerce and campus e-commerce is getting closer to daily life. The outbreak of the new crown epidemic in 2020 has promoted online community group buying, fresh food e-commerce and campus e-commerce. With the rapid development of other formats, the consumer group has been greatly expanded. This article conducts a questionnaire survey on the community e-commerce and campus e-commerce consumer groups in the post-epidemic period, after using the “Questionnaire Star” software to make questionnaires, the research members disseminated the questionnaires among the surrounding college students through various social channels. At the same time, the researchers also visited universities and communities in Tianjin, and randomly invited college students and elderly people to fill out the questionnaires, then analyzes the consumption behavior of consumers of different age groups and living conditions in terms of consumption time, reasons for purchase, types of products purchased, and preferences for promotional activities characteristics, and then further compare the differences and similarities of the consumption behavior of the elderly and college students, deeply explore the needs of consumers, integrate and optimize data, and provide scientific decision-making suggestions for the operation of e-commerce companies between the two groups. The choice of community and campus e-commerce supply models is more realistic.

**Keywords:** community e-commerce, campus e-commerce, questionnaire survey, behavioral characteristics

**JEL Code:** M31, L86, L11

## 1. Introduction

With the overall victory of my country’s poverty alleviation campaign, the national economic level has been continuously improved, and the average income level of my country’s residents has continued to increase. Worldwide, the uses of information and communications technology (ICT) have been evolving dramatically every day. One of the most critical applications of ICT has emerged, namely e-commerce (Hassan et al., 2022). As a form of the digital economy, e-commerce can drive the development of the digital economy better and faster, and help the national economy. Brand retailers often design incentive contracts to encourage the infomediary to increase online marketing

yield and want to employ a referral commission structure in an effort to control-click fraud (Zhou et al., 2020). Shang and Wu (2020) believe that the emergence of community retail and community group buying in the new retail era has promoted the change of retail formats, and community new retail has gradually become a major trend in the development of e-commerce. Xie (2021) believes that community e-commerce (ESN) has the typical characteristics of rapidity, high efficiency and low input cost compared with ordinary e-commerce. Users can enjoy the services brought by community e-commerce in the community, and can use their favorite products more quickly. The flourishing development of online platform retailing models is giving rise to continuous improvements and upgrades of platform marketing methods, in which online coupons have gradually become the preferred marketing strategy for many platforms to attract consumers (Li et al., 2020).

Although fresh agricultural products are the core category, Professor Chen Liping, a professor at Capital University of Economics and Business, pointed out that the billion-dollar silver market such as community pension and community catering is the real growth of community business (Dou, 2021). On June 25, 2021, the 17th edition of the People's Daily published "Accelerating the Digital and Intelligent Transformation of Physical Commercial Enterprises-Upgrading Digital Retail Experience", emphasizing the need to vigorously develop new forms of circulation and new models to provide traditional stores and community stores. Build a digital supply chain system (Ji & Liu, 2016). This is also the first time a government department has published a document on community e-commerce. Zhang et al. (2017) believe that although the development of e-commerce based on the Internet of Things is still in its infancy, it means that campus e-commerce will be used by the market in the near future, and the logistics at that time will enter a new era. Recommendation service is not always beneficial to the platform, and the relatively high service strength increases the consumers' shipping demand but reduces the consumers' add-on item demand (Li et al., 2019; Zhou et al., 2022).

The campus retail industry relies on a relatively closed campus environment and unique campus background, forming a monopoly on the campus market, and the traditional retail structure limits the purchasing power of college students. The development of the Internet and the change in people's consumption concept have gradually penetrated the elderly group. The rise of "online supermarkets" and "online vegetable markets" has provided the elderly with more favorable prices and broader choices. Since December 2019, many aspects of life have changed owing to a devastating pandemic, COVID-19 (Abd Elrahman, 2021), students' enter and leave the campus and the elderly's enter and leave the community have been restricted to varying degrees. However, the two special consumer groups of college students and the elderly have great purchasing power, and their consumption demand has shifted to online, on the platform. This research is mainly devoted to analyzing the current consumption behavior characteristics of the two major consumer groups, the elderly and college students, and comparing the differences and similarities of their consumption behaviors. Further, integrate and optimize data, explore the development law of community e-commerce and campus e-commerce, provide scientific basis and decision-making suggestions for e-commerce enterprises to operate for two types of consumer groups, and optimize and develop the supply model of community e-commerce and campus e-commerce for reference.

## 2. Data source and sample descriptive analysis

Some existing studies have proved that consumer behavior is affected by multiple factors. Shim (2008) tried to figure out the relationship between online query information and online purchases. They also proposed the nature of online shopping risks, the reasons for the existence of risks, and the relationship between various risks and online shopping behaviors. Based on a comprehensive analysis of consumers' online purchase intention, Cheng and Ling (2014) found that product description, experience, website design, business image, public opinion, convenience, online shopping experience and perceived risk are the most important influencing factors of online consumer behavior. Dan (2006) believes that the pursuit of convenience and the need for special products are the main factors for online consumption. Network and computer operating experience is another important factor. Quelled & Takeuchi believe that consumers will easily use computer technology and network technology to kill time. The development of network technology also security in network payment methods and personal privacy. In order to understand the behavior patterns and consumption demands of different consumers in detail, we first conduct a random survey of consumer groups in the form of questionnaires. Taking college students and community residents in Tianjin as the survey objects, the consumption behavior characteristics of consumers of different genders, different age groups and different

living conditions were collected in terms of the consumption time period, purchase reasons, purchased product types, promotional activity preferences and platform preferences. The questionnaires were distributed through both online and offline channels on August 7. As of November 2, a total of 503 questionnaires were collected, of which 465 were valid documents, with an effective rate of 92.4%. Among the valid questionnaires, males accounted for 48.39%, females accounted for 51.61%, and consumers aged 16-24 and over 60 accounted for the largest proportion, 26.7% and 22.8%, respectively, followed by 25-35 years old, Consumers aged 50-60 and 36-49 account for 20.0%, 17.6% and 12.9% respectively, of which 30.3% of the respondents are school students, 26.2% of the respondents have jobs, and 14.4% of respondents are unemployed, and 29.1% are retired.

The questionnaire data shows that the distribution of the time period of the respondents' frequent consumption is: holidays account for 17.95%, 7-12 o'clock account for 22.42%, 12-19 o'clock account for 17.95%, 19-22 o'clock account for 24.03%, and after 22 o'clock account for 17.65%. The monthly income of the respondents is mainly about 3,500 RMB, of which 3,500-5,000 RMB accounts for the largest proportion, accounting for 28.17%, followed by 1,000-2,000 RMB accounting for 19.57%, 5,000-8,000 RMB accounting for 17.85%, and 2,000-3,500 RMB. The proportion is 15.7%, and the proportion below 1,000 and above 8,000 is the least, about 10%. The monthly online shopping expenses are mainly concentrated in less than 300 RMB, accounting for more than 75%, 50-1,000 accounted for 17.42%, and more than 1,000 RMB accounted for 6.88%. Since most of the respondents are college students or the elderly, their overall income is relatively low. Correspondingly, the monthly online shopping expenses are also at a low level, mainly distributed below 300 RMB. Consumers have no obvious preference for promotion methods. Discounts, gifts, free postage, and coupons are all welcomed by consumers, and the proportion is relatively balanced. Among them, discounts are the most popular preferential method for consumers. The most important factor for consumers to consider when shopping online is product quality, accounting for more than 30%, followed by brands accounting for 24.56%, and platform and price accounting for 22.6%. The proportion of several considerations is relatively balanced, and the quality of goods is the part that consumers are most concerned about. About 36% of consumers are willing to take the initiative to share, 30% of consumers are often shared, and 34% of consumers say they have never shared an experience. More than 60% of college students believe that the construction of campus networks has provided convenience for online shopping. Nearly 30% of consumers said that they would go to offline physical stores for inspection and trial before online shopping. About 30% of consumers occasionally have the above behavior, and 40% of consumers said that it never happened. More than 50% of students said that the school has never provided corresponding shopping support, nor participated in related activities.

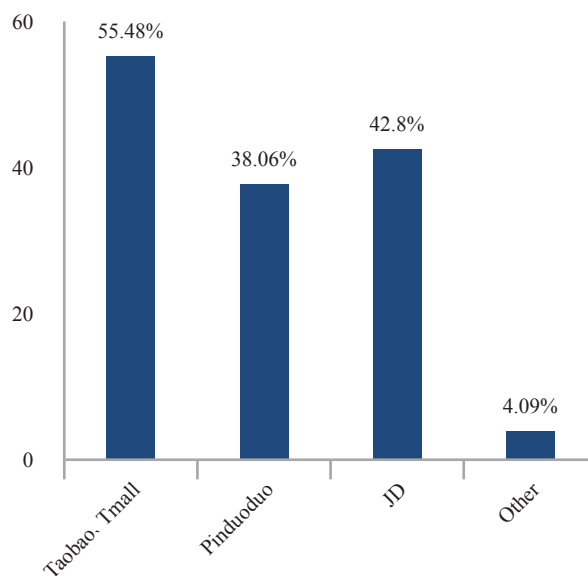
Among the respondents, 55.48% of the most frequently used e-commerce platforms are Taobao and Tmall. JD.com and Pinduoduo ranked second and third, accounting for 42.8% and 38.06% respectively. As shown below.

The most commonly used APP selection can be drawn from the data in Figure 1. Taobao, Pinduoduo, and JD.com are three major e-commerce platforms. They are the most commonly used shopping software by more than 95% of consumers, and Pinduoduo is one of them. Dark Horse has formed a very objective scale, and relevant data show that the number of users and platform traffic is still growing, and it is expected to make further breakthroughs. Taobao ranked first with a significant advantage, becoming the most commonly used software for more than half of the respondents. In addition to e-commerce platforms, community e-commerce is also promoted through social channels such as WeChat groups and Moments, integrating mini programs and community leaders into the supply chain.

The questionnaire data shows that the proportion of respondents who contacted community e-commerce through WeChat groups, Moments and friend recommendations accounted for 23.2%, 21.3% and 24.6% respectively, and the proportion of respondents who contacted community e-commerce through mini programs was 26.0%, and other methods accounted for 4.9%. It can be seen that social mode is the main way for respondents to contact community e-commerce. It can be speculated that the combination with social e-commerce may help the rapid growth of community e-commerce customer acquisition, and the social channels and social mapping scope of community e-commerce should be actively expanded. The data shows that the frequency distribution of the respondents to the community e-commerce shopping is relatively balanced, the group should be concentrated in the range of 13%-17%, of which never and 5-6 per month accounted for the most, 16.77% and 16.13% respectively, the proportion of shopping more than once a day is the least, 9.25%, followed by once a month, once a week, and 4-5 times a week. The data shows that, first of all, community e-commerce has only tapped a shoal, and further promotion is needed to expand its influence to expand new customers. Secondly, even for consumers who understand community e-commerce, the frequency of

consumption through community e-commerce still has a lot of potentials. There is room for improvement, indicating that the consumption power of old customers needs to be further stimulated. In terms of user consumption sustainability, 28.39% of the respondents said they are more willing to continue to consume through community e-commerce, 27.53% are very willing, followed by 21.29% willing, 13.55% unwilling, and 9.25% very unwilling, more than 77% of users are generally willing to make continuous consumption through community e-commerce.

Correspondingly, 25.38% of consumers are very willing to keep in touch with people related to community shopping, 26.02% are more willing, 21.72% are willing, and the overall willingness rate exceeds 73%, which shows that consumers are relatively satisfied with the initial experience of community e-commerce and the enthusiasm is relatively high, this state is very conducive to the further expansion of the community e-commerce market. Through the questionnaire, we also learned that among the main types of commodities the respondents purchased through community e-commerce, vegetables and fruits accounted for 19.88%, shoes and hats and apparel accounted for 17.31%, electronic products accounted for 11.38%, daily necessities accounted for 20.44%, and beauty products accounted for 10.08%, books accounted for 13.6%; respondents' satisfaction with community e-commerce: 18.92% very satisfied, 42.37% somewhat satisfied, 22.15% average, 8.6% dissatisfied, 7.96% very dissatisfied. It shows that consumers buy a wide variety of products through community e-commerce and their overall satisfaction is high. The main reason is that the choice and convenience of community e-commerce account for 19.93% and 18.5% respectively. Trends, home delivery, social interactivity, and good word of mouth. In addition to surveying consumers' behavior towards community e-commerce, the questionnaire also subdivided the consumers' vegetable and fruit shopping situation. 28.39% of consumers said they didn't pay attention to the online shopping, but only bought offline. There will be online and offline comparisons, and 20% of consumers say they only browse online, but do not buy.



**Figure 1.** The most commonly used APP selection

### 3. Data analysis

#### 3.1 Correlation analysis

Correlation analysis is a statistical method used to test whether there is a dependency relationship between research objects and to explore the direction and degree of correlation. It is often used to test the correlation between random variables  $x$  and  $y$ . relationship (Liu, 2021). In this study, the correlation analysis of the consumption behavior of consumers of different ages and genders is shown in Table 1.

**Table 1.** Analysis of the correlation between shopping time and consumption amount

variable	The correlation	A frequently used shopping APP	Time of consumption	Average monthly online spending	Share goods and shopping experience	age	Monthly income (including living expenses)
A frequently used shopping APP	Pearson correlation	1					
Time of consumption	Pearson correlation	-038.	1				
Average monthly online spending	Pearson correlation	-055.	037.	1			
Share goods and shopping experience	Pearson correlation	064.	-100.*	048.	1		
age	Pearson correlation	197.**	-112.*	190.**	276.**	1	
Monthly income (including living expenses)	Pearson correlation	028.	-088.	251.**	205.**	435.**	1

Note: \* P < 0. 05; \*\* p < 0.

### 3.1.1 Consumer daily behavior and its correlation analysis

According to the above correlation analysis results, it can be concluded that there is a significant correlation between consumer age and the use of shopping platforms, monthly average online shopping expenses, monthly income and desire to share at a 99% significance level, and they are all positive relationships. It shows that consumers of higher age, mainly the elderly, have higher incomes, correspondingly, the online shopping costs are also higher, and they tend to choose JD.com for shopping. The consumption choices have stronger independence and autonomy, and they are not affected by others and are not easily affected the influence of others. On the contrary, young consumers, mainly college students, have lower incomes, so online shopping expenses are relatively low, and they are more inclined to choose Taobao, Pinduoduo and other platforms for shopping, actively share products with friends, and discuss shopping experiences. There is a significant and negative correlation between consumer age and online shopping time at the 95% significance level. It can be speculated that due to the difference in work and rest habits, older consumers, mainly the elderly, are more inclined to shop on holidays or during the day, while young consumers, mainly college students, tend to shop at night.

**Table 2.** Consumer daily behavior and its correlation analysis

variable	The correlation	Favorite promotions	Online shopping is the main consideration	Whether to go to the physical store inspection trial	Monthly income (including living expenses)	age
Favorite promotions	Pearson correlation	1				
Online shopping is the main consideration	Pearson correlation	066.	1			
Whether to go to the physical store inspection trial	Pearson correlation	059.	-044.	1		
Monthly income (including living expenses)	Pearson correlation	031.	163.**	053.	1	
age	Pearson correlation	112.*	212.**	165.**	435.**	1

Note: \* P < 0. 05; \*\* p < 0.

In this study, the correlation analysis of the income of different consumers, main considerations for online shopping, consumer age, favorite promotion methods, and whether to go to the physical store for inspection and trial consumption behavior is shown in Table 2.

According to the below correlation analysis results, it can be seen that older consumers, mainly the elderly, prefer promotions such as giving points, gifts or coupons. At the same time, because their income is higher than that of young consumers, they should consider the platform where the merchant is located and the quality of the product when shopping online. In contrast, because of the lower income of young consumer groups, mainly college students, they prefer promotions such as package postage or discounts. The factors that are more weighed when shopping online are the price and quality of goods. What is different from daily cognition is that the exhibition hall effect of older consumers, mainly the elderly, is weaker than that of young consumers, mainly college students.

### 3.1.2 Community e-commerce consumption and its correlation analysis

Table 3 shows the consumption of e-commerce in the community, such as the e-commerce channels that come into contact with the community, the frequency of community e-commerce shopping, and the types of goods purchased, and their correlation analysis. According to the above correlation analysis results, it can be concluded that the age of consumers has a significant positive correlation with the type of goods purchased and the willingness to continue consumption through community e-commerce, and there is a significant negative correlation with the channel of contact with community e-commerce.

**Table 3.** Correlation analysis of basic consumer behaviors of community e-commerce

variable	The correlation	Reach out to community e-commerce channels	Community e-commerce shopping frequency	Type of goods purchased	Are you willing to keep spending	Willingness to keep in touch with relevant people	age
Reach out to community e-commerce channels	Pearson correlation	1					
Community e-commerce shopping frequency	Pearson correlation	026.	1				
Type of goods purchased	Pearson correlation	047.	436.**	1			
Are you willing to keep spending	Pearson correlation	154.**	332.**	420.**	1		
Willingness to keep in touch with relevant people	Pearson correlation	192.**	376.**	406.**	526.**	1	
age	Pearson correlation	-100.*	008.	246.**	098.*	053.	1

Note: \*  $P < 0.05$ ; \*\*  $p < 0.01$ .

It can be shown that elderly consumers, mainly contact community e-commerce through related people's Moments and WeChat groups, while young consumers, mainly college students, mainly contact community e-commerce through friend recommendations and small programs. It verifies the above speculation about the desire to share in this study from the side. In terms of the types of commodities purchased, elderly consumers buy more daily necessities, books and other commodities, while the purchasing power of young consumer groups, mainly college students, mainly contributes to vegetables, fruits, shoes, hats, clothing and beauty products, etc. Therefore, it can be inferred that the consumption demands of the elderly consumer group and the college student consumer group are significantly different. And in the agricultural product consumption market, which is dominated by vegetables and fruits, a large number of young people have already passed Taobao's "local fresh food", Pinduoduo's "Duoduo Shopping", JD.com's "Jingdong Fresh", Meituan's "Meituan Choice" and other platforms have had a deeper contact with online food markets, and have obtained a relatively good shopping experience due to relatively low prices and home delivery services, so they are



more inclined to buy vegetables and fruits online, and maintain higher consumption. Frequency (in the questionnaire options, the consumption frequency is distributed from high to low, so a higher value means a lower frequency). The desire for continuous consumption and the desire to keep in touch with community e-commerce stakeholders (community leaders) are significantly stronger. It can be seen that the young consumer groups, mainly college students, are more sensitive to new things and accept new things faster, while the older consumer groups, mainly the elderly, mainly buy daily necessities, and the consumption frequency is relatively low, the response to new things is relatively slow, but the consumption habits are more independent and stable.

**Table 4.** Correlation analysis between community e-commerce consumption experience and gender and age

variable	The correlation	How to buy fruits and vegetables	Do you think community shopping is more efficient than traditional shopping	Whether they are satisfied with community e-commerce in general	gender	age
How to buy fruits and vegetables	Pearson correlation	1				
Do you think community shopping is more efficient than traditional shopping	Pearson correlation	072.	1			
Whether they are satisfied with community e-commerce in general	Pearson correlation	-035.	334.**	1		
gender	Pearson correlation	095.*	-040.	-103.*	1	
age	Pearson correlation	-118.*	084.	174.**	-004.	1

Note: \* P < 0. 05; \*\* p < 0.

The correlation analysis results of factors such as the way of buying vegetables and fruits, whether community shopping is more efficient than traditional shopping, and overall satisfaction with community e-commerce are shown in Table 4. According to the above correlation analysis results, it can be concluded that there is a significant correlation between consumer age and consumer satisfaction with community e-commerce, it is positively correlated, and there is a significant negative correlation with the way of buying vegetables and fruits. First of all, it can be speculated that consumers who are generally satisfied with community e-commerce also believe that community e-commerce is more efficient than traditional e-commerce models. Secondly, it shows that elderly consumers, are less satisfied with community e-commerce, and they are more inclined to buy vegetables and fruits in offline channels such as vegetable markets or supermarkets, while young consumers, mainly college students due to the low income, wide information sources and many contact channels, etc., the effect of the exhibition hall is stronger. When buying vegetables and fruits, they tend to choose the best ones online and offline. This also verifies the speculation in Table 2 from the side.

### 3.1.3 Campus e-commerce consumption and its correlation analysis

Whether the campus network construction provides convenience for online shopping, whether the campus is satisfied with the logistics and distribution, whether the school often holds discount shopping activities and other campus e-commerce consumption and its correlation analysis are shown in Table 5. According to the below correlation analysis results, first of all, it can be concluded that there is a significant positive correlation between consumers' monthly income (including living expenses) and whether consumers often participate in discount shopping activities held by schools, and the overall satisfaction with campus e-commerce, whether there is a significant negative correlation between willingness to continue consumption. Secondly, whether consumers are willing to continue to consume through campus e-commerce has a significant positive correlation with their satisfaction with campus logistics and distribution and overall satisfaction with campus e-commerce.

**Table 5.** Correlation analysis of basic consumption of campus e-commerce

variable	The correlation	Whether campus network construction provides convenience for online shopping	Are you satisfied with the logistics distribution on campus	Does the school often hold discount shopping activities	Do you often participate in discount shopping activities held by the school	Overall satisfaction	Are you willing to keep spending	Monthly income
Whether campus network construction provides convenience for online shopping	Pearson correlation	1						
Are you satisfied with the logistics distribution on campus	Pearson correlation	164.**	1					
Does the school often hold discount shopping activities	Pearson correlation	476.**	110.*	1				
Do you often participate in discount shopping activities held by the school	Pearson correlation	451.**	130.**	689.**	1			
Overall satisfaction	Pearson correlation	041.	378.**	043.	035.	1		
Are you willing to keep spending	Pearson correlation	-057.	424.**	074.	030.	391.**	1	
Monthly income	Pearson correlation	314.**	-062.	070.	101.*	-095.*	-140.**	1

Note: \* P < 0. 05; \*\* p < 0.

It can be inferred that, first, it can be speculated that consumers with lower monthly income (including living expenses) are more motivated to participate in the school’s discount shopping activities. Secondly, it is very obvious that consumers who are more satisfied with the logistics and distribution on campus are satisfied with the overall campus e-commerce and have higher and more willing to continue spending. Finally, the construction of campus network, the situation of campus logistics and distribution, and the situation of the school holding preferential activities have a great impact on the enthusiasm of students to participate in preferential shopping activities. It can be seen that if it is necessary to further stimulate the purchasing power of college students and expand the campus e-commerce consumer market, it is very important to have a complete campus network system and an efficient campus logistics and distribution system.

### 3.2 Cluster analysis

Cluster analysis mainly studies the different consumption behavior characteristics of consumers who contact community e-commerce through WeChat groups, Moments, Mini Programs, friend recommendations and other ways in terms of shopping frequency, shopping category, consumption amount and overall satisfaction.

In Table 1 below, the initial clusters are divided into five categories, representing the five categories of consumers who are exposed to community e-commerce through WeChat groups, Moments, Mini Programs, friend recommendations, and other methods. The numbers 1-7 in “Frequency of Purchases” represent the consumption frequencies: once a day or more, 4-5 times a week, once a week, 5-6 times a month, once a month, less Once a month and never. The larger the value, the lower the frequency; the numbers 1-5 “Consumption Willingness” represent the level of consumption willingness, the larger the value, the lower the consumption willingness, which is consistent with the overall satisfaction in the fourth row; The products represented by the numbers 1-8 in “Mainly buy goods” are: vegetables and fruits, shoes, hats, apparel, electronic products, daily necessities, beauty products, books, others and have never been purchased; The factors represented by the numbers 1-5 in “ Main consideration “ are: price, quality, brand, merchant’s platform and others.

From the data in the Table 6, it can be inferred: the first type of consumers, that is, consumers who contact community e-commerce through WeChat groups, have extremely low consumption frequency and hardly buy. In terms of shopping categories, the answers and purchases of consumers from WeChat groups. The frequency is highly



consistent, most of them say they have never purchased, and when asked about their willingness to shop in the community, they also say they are unwilling to know. Although these consumers do not conduct community e-commerce consumption, their monthly online shopping consumption is not less than that of the other four types of consumers, which are about 300-500 RMB. In addition, it is remarkable that: The most important consideration for the other four types of consumers when shopping online is product quality, but their main consideration is “price”. According to the questionnaire feedback of such consumers, we can find that consumers from WeChat groups do not feel the attraction of community e-commerce, let alone understand community e-commerce, which is a huge consumer group that has not yet been tapped. Their spending power is no less than that of the other four types of consumers. They have access to WeChat groups and are very concerned about prices. Therefore, in the process of expanding the community e-commerce consumption market in the future, operators and decision makers can carry out a series of consumption stimulation activities around WeChat groups, to attract such consumers at lower prices, and shift their consumption attention to community e-commerce, which will help to further develop the consumer market. The second type of consumer, that is, consumers from the Moments, consumes once a week. Compared with consumers from WeChat groups, the frequency of consumption has increased significantly, and such consumers also have a very strong willingness to continue to consume, and their main purchases are “daily necessities”. The consumption experience of this type of consumer is very good, and there is a trend of continuous consumption, but there is still room for further improvement in consumption frequency; the third, fourth and fifth types of consumers, that is, consumption from mini programs, friend recommendation and other channels consumers have great similarity in consumption behavior and have a relatively strong willingness to continue to consume. The purchased commodities are mainly concentrated in vegetables, fruits, shoes, hats and clothing. The main considerations when consuming are product quality and overall consumption experience. All of them are a stable part of the community e-commerce consumer group.

**Table 6.** Final cluster center

	Cluster				
	1	2	3	4	5
Purchase frequency	7	3	5	2	2
Willingness to continue to consume	4.2	1.7	2.3	3.6	1.6
Mainly buy goods	8	4	2	2	2
overall satisfaction	3	2	2	2	2
Online shopping cost/month	3	3	3	3	3
Main consideration	1	2	2	2	2

The above five types of consumer data show that there are still a large number of consumers waiting to be tapped into community e-commerce, and some of them have come into contact with community e-commerce consumers whose consumption frequency is not high. The good news is that most of the consumers who have shopped through community e-commerce have obtained a good consumption experience and expressed their willingness to continue to consume. In the future, policymakers should focus on two parts: digging out potential consumers and increasing the frequency of consumption by existing consumers. To tap potential consumers, can focus on users who are not active in WeChat groups, put lower-priced products in the group, and launch promotions such as discounts to attract consumers. In addition, operators can also expand product types, improve product quality, provide better distribution services and other aspects to make targeted adjustments and improvements, increase consumers’ consumption frequency, help community e-commerce grow the overall turnover, and achieve comprehensive development.

## 4. Conclusion

Based on the research theories related to community e-commerce and campus e-commerce, through the statistical analysis of the survey data of the older consumer groups dominated by the elderly and the young consumer groups dominated by college students, the conclusion is drawn. The following main research conclusions are obtained from the characteristics of consumption behavior of the two consumer groups.

### 4.1 *Community e-commerce*

(1) The number of community leaders needs to be expanded urgently. A group leader is equivalent to an offline site. Only when these sites are connected to a systematic and complete consumer network can they provide consumers with more thoughtful services. First of all, old users can enjoy faster and more targeted logistics and distribution services, which will directly affect the frequency of consumers' consumption through community e-commerce, the sustainability of consumption and the shopping experience of consumers. Secondly, the head of the group can not only expand new users and expand the market through WeChat groups, circles of friends, etc., but also cultivate new heads of new customers. The new head of the group maintains old customers and taps new customers through social circles and community circles, thus forming a virtuous circle.

(2) Staff need to develop relevant professional qualities. Consumers who consume through community e-commerce and have a high evaluation of community e-commerce have a higher willingness to keep in touch with staff (such as community leaders). Staff (such as community leaders) maintain a good social relationship with customers, which can increase customer stickiness and customer activity, but at the same time this relationship is affected by many unstable factors, so the professional quality of staff (such as community leaders) is very important.

(3) Further explore the fresh agricultural product market. Fresh agricultural products play an extremely important role in community e-commerce shopping categories. The supply of fresh food through community e-commerce has obvious advantages such as low cost, less loss, more users, high efficiency, and a large market. Its development has also attracted the attention of the government and e-commerce enterprises. However, the purchasing power of the majority of fresh food consumer groups, mainly the elderly, is still concentrated in offline supermarkets and vegetable markets. Has an obvious showroom effect. Therefore, the community e-commerce consumption model needs to be further promoted, and the influence can be expanded by improving service levels and product quality, so as to maintain old users and expand new customers.

(4) Community + socializing. The proportion of users who contact community e-commerce through WeChat groups, Moments and friend recommendations accounts for nearly 70%. It can be seen that social mode is the most important way for respondents to contact community e-commerce. The combination of community e-commerce and social e-commerce will help the number of community e-commerce customers grow rapidly, so we should actively promote the combination of community e-commerce and social e-commerce, and expand the scope of community e-commerce mapping through social channels.

(5) Differential enterprise alliances. The shopping chain of community e-commerce requires not only e-commerce platforms and community leaders, but also the participation of suppliers, errand distribution platforms and network service providers. These enterprises with different functions form an alliance to form a systematic, complete and efficient community e-commerce platform. Closed-loop shopping chain. For example, consumers have a lot of demand for products from community e-commerce. The joining of different suppliers can not only enrich product categories and provide more shopping options, but also optimize the shopping network and make product distribution more efficient. Network construction has a very important impact on the shopping experience of consumers, especially college students. The joining of network service providers can reduce consumers' shopping costs and improve consumers' shopping experiences.

(6) New possibilities for old age care. The elderly in the communities have more leisure time, the social needs, entertainment needs and consumption needs of daily life are difficult to meet, and health management is difficult to guarantee. This is a difficult problem in today's society, and these concerns about the elderly are destined to be transformed into the silver market, thereby detonating the development of community e-commerce. Community e-commerce is the forerunner of community business development. Enterprises can use their existing user base to actively promote other businesses. For example, enterprises can develop social networks on the basis of e-commerce.

First, the establishment of social networks is conducive to the cultivation and mining of community e-commerce customers. Social value, the improvement of various experience values obtained from interaction (Liu & Li, 2021), is not only conducive to the development of community e-commerce, but also to the physical and mental health of the elderly.

## 4.2 Campus e-commerce

The number of Chinese college students is increasing year by year. Data shows that in 2020, the total number of Chinese higher education students will reach 41.83 million. At the same time, with the development of the economy and the continuous improvement of residents' living standards, the average monthly living expenses of college students have also gradually increased. The median monthly income is 1,516 RMB. It is estimated that the annual consumption scale of Chinese college students in 2021 will be about 760.9 billion RMB, the consumption potential is huge. The campus environment has the characteristics of a community environment. Suggestions for community e-commerce can be used directly except for pension issues. However, the campus environment is more closed and the market is more single. Therefore, some additional suggestions for the market operation of college students' consumer groups are put forward.

(1) Optimize the construction of the campus network. The income of the student group is limited, and the extra network cost increases the consumption cost of college students. The survey data shows that a complete campus network can help reduce the consumption burden of students, thereby further improving the shopping experience.

(2) Actively organize preferential shopping activities. The survey shows that there is a very significant correlation between the enthusiasm of students participating in campus preferential activities and the frequency of related activities held by schools. It is a very effective means to expand the student consumer group, stimulate the purchasing power of students, expand the campus e-commerce consumer market, and hold related activities.

(3) Improve the logistics and distribution system. The overall satisfaction of student consumer groups with campus e-commerce is highly correlated with the efficiency of logistics and distribution. College students have more spare time, and the phenomenon of part-time students is also very common. The platform can train part-time team leaders among the student groups, which can improve the efficiency of campus e-commerce logistics and distribution at a lower cost, optimize the campus e-commerce shopping network, and improve Student consumer groups' satisfaction with campus e-commerce.

## Conflict of interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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