

# *A Study on Elderly Consumers' Satisfaction with the Convenience of Community Business Services*

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**Abstract:** Along with the development of an ageing population, the consumer market for the elderly is gradually receiving widespread attention. Community commerce has the characteristics of convenient services, which not only can provide certain convenience to the life of the elderly, but also can fully explore the consumption potential of the elderly, and promote the formation of consumption dividends. However, for the elderly, the degree of service convenience will have an impact on their satisfaction with the community business, and if the evaluation of community business service convenience is too low, the consumption of the elderly will be affected accordingly. The article uses a community business demonstration area as an example for analysis, aiming to study the satisfaction of elderly consumers with the convenience of community business services for reference.

## 1. Introduction

In the context of the country's rapid economic development, people's income levels have also risen significantly[1]. However, compared to developed countries abroad, China still lingers at a medium level of development. At present, the basic contradiction in our society has gradually changed to the contradiction between the people's growing demand for a better life and their inadequate and unbalanced development. This is a clear indication that the pace of economic development in China is not sufficient to satisfy people's needs for quality of life. With the gradual advancement of China's urbanisation process, community businesses are gradually appearing in the public eye and are quickly gaining a foothold around communities across the city by virtue of their convenience[2]. At the same time, the explosive development caused by the Internet has led to the arrival of the experience economy, which has not only provided consumers with convenient services but has also shifted their attention to the convenience of the services provided by community businesses and the shopping environment, among other factors.

## 2. Overview of community business

Community commerce emerged in the United States in the 1950s. In the 1950s, when the number of cars owned by families was increasing and more highways were being built on the outskirts of cities to promote economic development, urban dwellers were spreading to the suburbs,

which gradually led to the formation of community businesses to serve the residents of newly built suburban areas. In foreign countries, community businesses are usually in the form of shopping centres. A shopping centre is a modern retail format, consisting of a cluster of shops and facilities, which are developed and managed as a whole, usually with one or a few shops as the core and a large number of shops surrounding it. Shopping centres often have wide parking areas and are located close to the road, which makes it easier for customers to shop. Overseas community commercial centres usually adopt the practice of separating development and operation, with the developer mainly carrying out the initial development and the operator mainly leasing and operating, leading to a corresponding benign operation mechanism[3]. In terms of domestic commercial community development, it is still in its infancy, with community businesses generally using historically formed shops along the streets as carriers. This form of business is naturally formed, unified planning is obviously insufficient, the grade of business is relatively low, and the community business function is not comprehensive enough. Along with the continuous development of the real estate industry, especially the maturing of commercial real estate, community business has also gained unprecedented progress. More community commercial projects such as lifestyle plazas and shopping centres have emerged in the country. Regarding the facilities of community business in China, it is developing towards an experiential place with integrated architecture, space and landscape, which can create a crowded and lively place for community residents. In general, the current domestic community business usually has a heavy residential ground floor character, and there is still a large gap compared to the mature community business model overseas.

### 3. Empirical Analysis

This paper takes a community business demonstration area in a city as the object of study. The community and its surroundings were gradually developed from the countryside, and the community business mainly adopted the retail hawker model, with relatively little infrastructure, not very convenient transportation and a relatively deviant overall environment. With the increase in the importance attached to community commerce by the municipal government, plans have been issued and relevant policies and opinions have been released, leading to a gradual transition from the pursuit of quantity to the pursuit of quality, the gradual improvement of relevant infrastructure, the granting of funds to community commerce and other related measures to ensure that the development of community commerce becomes convenient, so that the corresponding consumption needs of community residents can be well met. At present, the community business has been well developed, with many brands in the community business, providing convenience to the community residents[4]. The underground station near the community has facilitated the transportation of the residents, eliminating the need for young people to share the bus with the elderly, which not only saves the time of the young but also reduces the burden of the elderly in their consumption activities.

At present, the community has a relatively complete distribution of business types, but the overall distribution density of the outlets is relatively low for the community, and the scale of the outlets is relatively small. The distribution of the various types of businesses varies, with a large number of restaurants in the vicinity of some of the communities and relatively few other businesses, which does not meet the needs of the community residents for convenience and variety of living and consumption. Although the chain rate of community businesses has reached 50%, it is only a step forward in terms of the high quality demand of the residents. The blind introduction of some brand resources and the failure to integrate them effectively has had a negative effect. This paper therefore examines how the convenience of community businesses affects the satisfaction of

older people and considers what can be done to improve the current situation.

### 3.1. Descriptive statistical analysis

The questionnaire was distributed in the community, using both paper and electronic questionnaires. The questionnaire was administered to a simple stratified random sample of consumers in the community. The questionnaires were distributed randomly to customers of all ages over 50 years of age who consume in the shops in the community, which ensured that the results were fair and researchable. A total of 350 questionnaires were collected during the overall research campaign. During the distribution of the questionnaires, instructions were given to the older consumers to ensure that they understood how to complete the questionnaires. A total of 41 questionnaires were found to be invalid and 309 questionnaires were found to be valid, with a return rate of 88.0%.

#### 3.1.1. Descriptive statistics of sample characteristics

Descriptive statistical analysis was implemented for the basic characteristics of the older consumers who participated in the research study, using both quantitative and proportional forms, to analyse the actual distribution of older consumers. The details are shown in Table 1.

Table 1: Distribution of sample characteristics

Projects	Number	Percentage (%)	
Gender	Male	160	51.8
	Female	149	48.2
Age	50-55	54	17.5
	56-60	86	27.8
	61-65	73	23.6
	66-70	73	23.6
	>70	23	7.4
Income level	≤3000 Yuan	117	37.9
	3001-4000 Yuan	126	40.8
	4001-5000 Yuan	44	14.2
	>5000 Yuan	22	7.1
Academic qualifications	Primary school and below	40	12.9
	Junior High School	77	24.9
	High School	45	14.6
	Specialties	59	19.1
	Undergraduate	73	23.6
Work	Master's degree and above	15	4.9
	Work	63	20.4
	Not working	246	79.6
Living conditions	Living alone	270	87.4
	Not living alone	39	12.6

In terms of the actual sample collected, the distribution of older commercial consumers in the community is more balanced in terms of gender, age and education. In terms of monthly disposable income levels, over 77% of seniors had a monthly disposable income of less than \$4,000. In terms of work status, over 97% of older people were not working, indicating that the majority of older people in the community were either retired or unemployed. In terms of living conditions, more than 87% of the elderly live alone. This is related to the fact that the majority of young people are living and working outside the home, but with the ageing of the population, the number of elderly people living alone is increasing, thus creating more problems in terms of social care and social

harmony.

### 3.1.2. Descriptive statistics on the convenience of community business services

Five dimensions of community business are analysed, as shown in Table 2.

Table 2: Descriptive statistics of community business services facilitation

Projects	N	Average value	Standard deviation
Decision facilitation	309	4.0021	0.95647
Convenience of opportunity	309	4.0313	0.93788
Trading convenience	309	3.9913	0.93701
Welfare Facilities	309	3.9880	0.94406
After-sales convenience	309	3.9861	0.93327
Valid N (list status)	309		

The corresponding descriptive statistics for the convenience of community business services show that the higher the mean value, the more convenient the service is. Of these, the highest mean value for convenience of opportunity indicates that it is relatively easy for older customers to obtain convenience of opportunity from community business services. The relatively low standard deviation indicates that there is not much variation in the opinions of the older consumers interviewed in relation to the formation of convenience of opportunity.

### 3.1.3. Descriptive statistics on the satisfaction of older consumers

Descriptive statistics were implemented for the corresponding satisfaction of older consumers, as shown in Table 3.

Table 3: Descriptive statistics of elderly consumers' satisfaction

Dimensionality	N	Average value	Standard deviation
Promotional effect	309	3.96	1.108
Price	309	3.97	1.111
Quality	309	4.04	1.123
Service attitude	309	3.93	1.020
Expectations	309	4.02	1.127
Valid N (list status)	309		

The overall satisfaction level of older people with community business services is relatively high, as shown by the consumer satisfaction profile. Within this, the corresponding mean value of service attitude is lower compared to the other dimensions, and the standard deviation is also relatively low, indicating that the differences generated by older consumers in this regard are not significant.

## 3.2. Questionnaire reliability analysis

Table 4: Reliability statistics

Category	Cronbach's Alpha	Number of items
Overall questionnaire	0.736	20
Convenience of community commercial services	0.857	5
Older consumers' satisfaction with community businesses	0.882	5
Perceived age	0.571	4
Reverse intergenerational impact	0.810	6

SPSS 21.0 was applied to standardise the corresponding variables, after which the

questionnaire's corresponding reliability was checked, as shown in Table 4.

It was observed that the overall Cronbach's alpha of the questionnaire was greater than 0.5, indicating a relatively high level of internal consistency and high reliability.

### 3.3. Questionnaire validity analysis

SPSS 21.0 was applied to conduct a factor analysis for the elderly consumer satisfaction study and a principal component analysis was used to test for KMO and Bartlett, as shown in Table 5.

Table 5: Test of variables KMO and Bartlett's

Kaiser-Meyer-Olkin for sampling adequacy	Metrics	0.897
Bartlett's test for sphericity	Approximate cardinality	4810.891
	df	190
	Sig	0.000

After implementing factor analysis for all variables, a KMO value of 0.879 was obtained, indicating that factor analysis was more appropriate. The Sig value in the Bartlett corresponding sphericity test was 0.000, which was below the significant level, so the original hypothesis was rejected, indicating that the variables were correlated with each other and could be analysed by factor analysis. Details of the disinfection analysis are shown in Table 6.

Table 6: Validity analysis table

Variables	Indicators	Rotation factor loadings
Convenience of community commercial services	Decision facilitation	0.818
	Convenience of opportunity	0.820
	Trading convenience	0.838
	Welfare Facilities	0.811
	After-sales convenience	0.834
Older consumers' community business satisfaction	Promotional effect	0.617
	Price	0.625
	Service attitude	0.601
	Quality	0.681
	Expectations	0.657
Perceived age	Perceived age	0.751
	Age of appearance	0.703
	Behavioural age	0.711
	Age of interest	0.955
Reverse intergenerational impact	Consumer innovation	0.610
	Consumer communication	0.698
	Consumer recommendation	0.665
	Emotional attitudes	0.604
	Emotional Associations	0.703
	Consumer perception	0.681

The above table shows that most of the information can be extracted by the factors, and the factor loadings of each relevant indicator are greater than 0.5, indicating that the indicators are valid, so the questionnaire has a high efficiency.

### 3.4. Correlation analysis

#### 3.4.1. Correlation between different dimensions of service facilitation and consumer satisfaction

The SPSS 21.0 statistical software was applied to analyse the information on the variable data, and the Pearson method was applied to analyse the correlation between the corresponding dimensions of community business service convenience and consumer satisfaction, as shown in Table 7.

Table 7: Correlation analysis between different dimensions of service facilitation and satisfaction

Satisfaction	Convenience of service	Decision facilitation	Convenience of opportunity	Transaction convenience	Benefits Facilitation	After-sales convenience
	0.495##	0.446##	0.444##	0.451##	0.545##	0.444##

Note: ## indicates  $P < 0.01$ .

The above table shows that there is a significant positive correlation between the dimensions of convenience of community business services and the satisfaction of elderly consumers at the 0.01 level, indicating that hypothesis H1 is valid.

#### 3.4.2. Correlation analysis between other variables

The correlation analysis of the other variables is shown in Table 8, where the convenience of community business services and the satisfaction of elderly consumers are positively correlated at the 0.01 level, the reverse intergenerational influence and the convenience of services are significantly positively correlated at the 0.05 level, the reverse intergenerational influence and the satisfaction of elderly consumers with the community business are significantly positively correlated with each other at the 0.05 level, and the rest of the variables do not have a significant correlation.

Table 8: Correlation analysis of the variables of interest with each other

Satisfaction	M	SD	Age (Q1)	Income (Q2)	Gender (Q3)	Academic qualifications (Q4)	Employment status (Q5)	Living alone (Q6)	Degree of satisfaction	Perceived age	Convenient service	Reverse intergenerational influence
Q1	2.75	1.20	1									
Q2	1.90	0.88	-0.055	1								
Q3	1.47	0.51	0.001	0.013	1							
Q4	3.29	1.51	0.057	0.015	-0.042	1						
Q5	1.81	0.41	0.097	-0.088	-0.041	0.000	1					
Q6	1.13	0.32	-0.019	0.039	0.003	0.072	0.095	1				
S	3.98	0.90	0.014	0.029	0.017	-0.025	0.008	0.020	1			
PA	3.17	0.81	-0.059	-0.041	0.084	-0.003	-0.024	0.058	-0.007	1		
SC	3.98	0.86	0.027	0.026	0.022	0.009	0.007	0.000	0.495##	-0.006	1	
RIG	4.02	0.90	0.004	0.027	0.042	-0.020	0.002	0.015	0.287#	0.000	0.233#	1

Note: ## means  $p < 0.01$ , # means  $p < 0.05$ .

#### 3.4.3. Regression analysis

Regression analysis of service convenience on satisfaction.

Gender, working conditions, living conditions and educational background in the sample are taken as control variables, and community business service convenience is taken as independent variables, and regression is carried out step by step. See Table 9 for details.

Table 9: Analysis of fitting degree of community business service convenience to satisfaction regression model

independent variable	dependent variable	R -square	Adjusted r-square	variance ratio	significance
(constant)					
Convenient service	degree of satisfaction	0.479	0.457	142.245	0.000

The above table shows that the goodness of fit of the corresponding regression model for service convenience, after adjustment, is 0.457, indicating that 45.7% of the variance in satisfaction can be explained by service convenience, and that the F in the retrospective model for service convenience in community businesses, for each of the different dimensions of satisfaction with elderly consumption, is 142.246 and is relatively significant, fully indicating that the corresponding regression model for service for convenience satisfaction model can be established.

Table 10: Regression coefficients for different dimensions of community business service facilitation against satisfaction

Independent variable	Dependent variable	B	Standard error	Standard Coefficient	T-value	Significance
(Constant)	Satisfaction	0.178	0.180		0.991	0.322
Decision facilitation		0.197	0.046	0.207	4.172	0.000
Convenience of opportunity		0.177	0.047	0.182	3.730	0.000
Trading convenience		0.208	0.048	0.213	4.240	0.000
Welfare Facilities		0.201	0.046	0.206	4.255	0.000
After-sales convenience		0.173	0.048	0.177	3.551	0.000

Through the regression analysis for the corresponding dimensions of community commercial service convenience, the T-value of each dimension reaches a significant level, indicating that the independent variables in the above Table 10 have relatively good predictive effects on the satisfaction of elderly consumers. Hypothesis 1: The higher the level of convenience of community business services, the higher the satisfaction of older consumers with community business services.

1a: The higher the level of decision convenience, the higher the satisfaction of older consumers with community business services.

1b: The higher the level of decision convenience, the higher the satisfaction of older consumers with community business services.

1c: The higher the degree of transactional convenience, the higher the satisfaction of older consumers with community business services.

1d: The higher the degree of welfare convenience, the higher the satisfaction of older consumers with community commercial services.

1e: The higher the degree of after-sale convenience, the higher the satisfaction of older consumers with community commercial services.

The corresponding standardized retrospective coefficients for decision convenience, opportunity convenience, transaction convenience, welfare convenience, and after-sale convenience in Table 10 are 0.207, 0.182, 0.213, 0.206, and 0.177, respectively, so the retrospective equations of community business service convenience and elderly consumer satisfaction with each other are: satisfaction = 0.178+0.207#Decision Convenience+0.182#Opportunity Convenience + 0.213# Transaction Convenience + 0.206# Welfare Convenience + 0.177# After-sale Convenience.



#### 3.4.4. Moderating analysis of age

The relationship between variables X and Y, which are defined in terms of their relationship with each other, can change when a third variable, M, is introduced, and this relationship can be expressed in terms of M, which is referred to as a moderating variable. The moderating variable M can be qualitative, such as gender and marital status, or quantitative, such as age and income level. The moderating variable M can have an impact on the trend and degree of correlation between the independent and dependent variables.

Before examining the moderating effect, the dependent and independent variables should be judged in their respective categories. In this study, a 5-point Likert scale was applied, with the data being continuous variables, and then a hierarchical regression was applied to test whether the corresponding interaction effects of the independent and moderating variables were significant. This is divided into the following parts: firstly, the data corresponding to the independent and moderating variables are standardised by subtracting the mean from the data corresponding to the independent and moderating variables and then substituting them in the regression equation. Secondly, the product term is created for the multiplication of the centralised independent and moderating variables, and is also centralised. Finally, centralised independent variables, moderating variables and product terms were added to the regression equation and interaction effects were calculated using SPSS 21.0 software.

#### 3.4.5. Research findings

##### 1) Relationship between service convenience and elderly consumer satisfaction

Community business service convenience is positively correlated with older consumer satisfaction, where the correlation coefficients for convenience of decision, convenience of opportunity, convenience of transaction, convenience of welfare and convenience of after-sales are 0.446, 0.444, 0.451, 0.545 and 0.444 respectively, which are significantly positive at the 0.01 level with older consumer satisfaction. The correlation between the two items is relatively significant at the 0.01 level. The beta coefficients are 0.207, 0.182, 0.213, 0.206 and 0.177 respectively, all significant at the 0.01 level, indicating that convenience of decision, convenience of opportunity, convenience of transaction, convenience of benefits and convenience of after-sales services in community business are able to enhance consumer satisfaction with the community business accordingly. The convenience of transactions also has a greater positive impact on older consumers, indicating that the convenience of transactions in community business can contribute to the reduction of time and physical effort of older people and increase the satisfaction of older consumers.

#### 3.4.6. Perceived Age Moderating Effect

Perceived age plays a negative moderating role in the relationship between convenience of community business services and older consumer satisfaction, where the corresponding positive effect of convenience of community business services on older consumer satisfaction is significantly reduced after the perceived age moderating variable is applied. The results of the separate tests for the corresponding dimensions of convenience of community business services are as follows.

For decision convenience, the addition of the moderating variable for perceived age increases the positive impact of decision convenience on the satisfaction of older consumers. With a relatively small perceived age, the corresponding positive effect of decision convenience and older consumer satisfaction is increased. The creation of a choice of convenience increases the comparative mentality of older consumers and encourages them to be more selective, suggesting that older



consumers spend more time comparing and less time evaluating the convenience of community business services.

In terms of convenience of opportunity, with the addition of a moderating variable corresponding to perceived age, the greater the perceived age, the greater the positive effect of convenience of opportunity on older consumers, indicating that perceived age negatively moderates the effect of convenience of opportunity and satisfaction of older consumers. Correspondingly, the younger the perceived age, the higher the degree to which the opportunity facilitation is directed towards older consumer satisfaction. Where opportunity facilitation creates consumption services for older people, older people with a higher perceived age are more likely to spend more time and energy on consumption to satisfy their pastimes and pleasures in life. Therefore, the convenience of opportunity does not increase the satisfaction of the relatively older consumers at this time.

For community convenience, with the inclusion of age as a moderating variable, the greater the perceived age, the stronger the positive relationship between convenience and older consumer satisfaction. This suggests that perceived age has a positive moderating effect on convenience and older consumers. In addition, the lower the perceived age, the lower the corresponding satisfaction level of transaction convenience for older consumers. The corresponding setting of green channels for the settlement of transactions or the convenience of payment methods will ensure a better experience for older consumers. However, the older the perceived age, the higher the transaction requirements for the convenience of community business services, and the more they expect a quick solution to the transaction process and the completion of the corresponding transaction. As a result, the older the perceived age, the lower the corresponding satisfaction level of older consumers.

The positive relationship between the perceived age and the corresponding satisfaction of older consumers is stronger with the inclusion of the perceived age-adjusted variable for welfare benefits. This suggests that perceived age moderates the effect of perceived convenience and the corresponding satisfaction of older consumers. The younger the perceived age, the higher the satisfaction level of welfare facilities for older consumers. There are various ways in which the convenience can be provided, such as free door-to-door deliveries and gifts, all of which are effective in increasing older consumers' satisfaction with the convenience of community business services. Consumers with a relatively high perceived age are more likely to be concerned about the convenience and will consider the availability of the convenience as a factor in their consumer satisfaction rating. As a result, older consumers with lower perceived age are less likely to be overly motivated by less welfare benefits, and perceived age is a negative moderator in the relationship between welfare benefits and older consumers.

In terms of after-sales convenience, no significant moderating effect was observed when the moderating variable of perceived age was added to the equation. This is related to the perception of after-sales convenience, which is usually more time and effort consuming, and therefore less perceived by older consumers, so the addition of perceived age does not have a significant effect on the positive relationship between after-sales convenience and the corresponding satisfaction of older consumers. Therefore, there is no moderating effect of perceived age on the relationship between after-sales convenience and older consumer satisfaction.

#### 4. Conclusion

There are some shortcomings in this study, as each city has different levels of development and consumption, so there are some differences in consumer attitudes and habits, and the sample selection is limited. In addition, although the two moderating variables selected for this study were proven to have some moderating effect, the existence of mediating variables and the existence of additional variables were not investigated. Therefore, future research could explore mediating

variables, or other moderating variables, to enrich this area of research.

## References

- [1] Du Zhipeng. *Study on the evolution of spatial and temporal differences in population aging in Jiangsu Province [D]*. Nanjing Normal University, 2014.
- [2] Wang Fang. *Research on Community Sense of Belonging and Its Influencing Factors in Urumqi City [D]*. Xinjiang Normal University, 2019.DOI: 10.27432/d.cnki.gxsfu. 2019.000438.
- [3] *Business Survey Reports (Selected 11)* Link [https://www.fwsir.com/Article/html/Article\\_2021032](https://www.fwsir.com/Article/html/Article_2021032)
- [4] Qi dan. *Research on the impact of community commercial service convenience on the satisfaction of elderly consumers [D]*. Capital University of Economics and Business, 2019.DOI: 10.27338/d.cnki.gsjmu. 2019.000778.