

Research on the Influence of Logistics Service Quality on Consumers' Repeated Purchase Willingness under the Group - Buying Mode of Agricultural Products Community

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Abstract: With the advancement of the rural revitalization strategy, the infrastructure in rural areas in China has been continuously improved, and the rural logistics system has also been gradually established and improved. The community group buying model developed against this background and has become one of the main ways for consumers to purchase fresh agricultural products online. Fresh agricultural products are difficult to preserve and easy to be corrupted. The community group buying model of agricultural products must improve its logistics service quality to maintain the relationship with consumers and develop sustainably and healthily. This paper verifies the impact of logistics service quality on consumers' repeat purchase intention under the agricultural product community group buying mode, and the results show that the tangibility, assurance, reliability, responsiveness, empathy, and convenience of logistics service quality have a significant impact on consumers' repeat purchase intention. It has a positive impact, and consumer satisfaction plays a mediating role in this process.

Keywords: Agricultural products; Community group buying; Logistics service quality; Consumers' willingness to purchase repeatedly

1. Introduction

The comprehensive advancement of the rural revitalization strategy and the rapid development of Internet technology has accelerated the trend of network-based sales of agricultural products. In 2021, the General Office of the State Council issued an opinion on accelerating the construction of the rural delivery logistics system, pointing out that rural delivery logistics is an important channel for agricultural products to leave the village and enter the city, further clearing the way for the development of rural e-commerce. With the improvement of rural infrastructure and the continuous improvement of the rural logistics system, the community group buying model of agricultural products has become a breakthrough in the development of rural e-commerce. The community group buying of agricultural products is a group buying model with fresh agricultural products as the main category, and adopts the method of "online reservation + store self-pickup". At the beginning of the development of the community group buying model, the goal was to expand the retail scale, focusing on the cost advantage and ignoring the quality and individual needs of consumers for logistics services, so the development was relatively slow. In recent years, "contactless" services should have security and flexibility and have been widely used, and the advantages of the community group buying model have gradually become prominent. Fresh agricultural products are just-needed categories. Consumers buy them frequently and pay attention to the freshness of such products. Therefore, it is very important to provide fast and personalized logistics services under the agricultural product community group buying model. At present, there are certain problems in the timeliness and personalized distribution of agricultural product community group purchase logistics, such as the quality loss caused by excessive storage time or improper storage, which reduces consumer satisfaction and affects consumers' willingness to repeat purchases. To improve the logistics service quality of community group buying of agricultural products, enhance consumer satisfaction, and increase consumers' willingness to repeat purchases, this paper constructs a relationship model between logistics service quality and consumers' willingness to repeat purchases under the mode of community group buying of agricultural products. Under the model, the mechanism of logistics service quality on consumers' repurchase behavior is to seek the policy mechanism for the sustainable development of rural e-commerce and to enrich and expand the research scope of community group buying models, which will help the development of rural e-commerce and promote rural e-commerce.

modernization process.

2. Literature review and research hypothesis

2.1. Community group buying research trends

The community group buying model emerged in China in 2015. As a new digital economic form, its development is subject to consumers' traditional concepts and consumption habits, and the initial development process is relatively slow ^[1]. The period from 2015 to 2019 belongs to the initial stage of community group buying research. There are few relevant studies at this stage, mainly focusing on the analysis of the community group buying model, and we are in the stage of understanding the new retail model of community group buying. In 2020, the "stay-at-home economy" and "contactless delivery" will develop rapidly, and the community group buying market will expand rapidly ^[2]. Therefore, the research on community group buying from 2020 to 2022 will enter a stage of rapid growth. At this stage, scholars conducted in-depth research on the community group buying model from the perspectives of resource integration, content production, and emotional marketing, and their attitudes towards the community group buying model were also mixed, mainly from the community leader, community group buying model, etc. Features, disadvantages of community group buying, and logistics system are discussed. In the research on the community leader, the central position of the leader is affirmed, the leader plays multiple roles, and the interaction of different roles can stimulate consumers' willingness to buy. The community group buying model has the characteristics of emotion, a pre-sale system, convenience, and low price. The pre-sale system is conducive to reducing the inventory cycle. Emotional, convenience and low prices have attracted a large number of consumers. The community group buying model has lower costs in terms of customer acquisition and circulation ^[3]. The low price of community group buying has aroused the discussion of scholars, who believe that low price is beneficial to consumers, but it has an impact on traditional retail. At the same time, community group buying is a kind of digital economy, and the realization of precise marketing relies on the acquisition of user information, which violates consumer privacy to a certain extent ^[4]. In the study of the community group purchase logistics system, the importance of the improvement of the logistics system to the community group purchase model has been affirmed. The improvement of the community group buying logistics system can not only improve circulation efficiency and reduce losses but also meet consumers' diverse pick-up requirements, and improve consumer satisfaction and repeat purchase intentions

2.2. Logistics service quality and consumers' repeat purchase intention

At present, most of the research is based on the SEQUAL model to measure the service quality and based on it, the measurement dimension of the logistics service quality is established. According to previous studies, logistics service quality can be measured from six dimensions: tangibility, assurance, reliability, responsiveness, empathy, and convenience. Tangibility refers to the professionalism of logistics equipment and the promotional materials involved. As perishable products, agricultural products have high requirements for fresh-keeping equipment in the logistics process. In addition, food has relatively high requirements for sanitation and disinfection equipment ^[5]. Guarantee is for logistics service personnel, mainly their professionalism. Reliability refers to the ability of logistics to fulfill its commitments, such as whether the product is in good condition, whether the delivery time and location are accurate, etc. Responsiveness refers to the timeliness and effectiveness of the logistics system of the community group buying platform in responding to consumer needs. Empathy means that logistics services can meet the special needs of consumers and provide personalized services. Convenience refers to convenient logistics services, such as the flexibility of pick-up time, the simplicity of pick-up operation, etc ^[6].

The logistics service quality of community group buying can promote consumers' willingness to purchase repeatedly. The research of Zhu Yongming et al. (2020) ^[7] confirmed the influence of logistics service quality on consumers' repurchase intention in cross-border e-commerce. The research of Li Hui et al. (2022) ^[8] shows that the professional level of logistics equipment will affect consumers' trust in it, and it is a factor considered by consumers in purchasing decisions. Stank et al. (2003) ^[9] believed that in logistics services if logistics service personnel can provide more professional services, it will improve consumer satisfaction. Yi Shuxin (2020) pointed out that when the product received by consumers is well-preserved, they will buy again through this channel ^[10]. Wu Jinnan et al. (2014) ^[11] believe that the timeliness of order processing will make consumers have a pleasant shopping experience, and thus choose this channel again for purchase. Cheng Juan (2022) ^[12] believes that logistics services should start

from the perspective of consumers, meet the individual needs of consumers, provide simple and convenient services, and optimize the time and place of delivery or pick-up, to retain customers and increase the Customer return rate. From this the following assumptions are made:

H 1: The tangibility of logistics service quality positively affects consumers' willingness to repeat purchases.

H 2: The guarantee of logistics service quality has a positive impact on consumers' willingness to repeat purchases.

H 3: The reliability of logistics service quality has a positive impact on consumers' willingness to repeat purchases.

H 4: The responsiveness of logistics service quality has a positive impact on consumers' willingness to repeat purchases.

H 5: The empathy of logistics service quality positively affects consumers' willingness to repeat purchases.

H 6: The convenience of logistics service quality has a positive impact on consumers' willingness to repurchase.

2.3. The mediating role of consumer satisfaction

According to the expectation confirmation theory, consumers will form a psychological perception of products or services based on the experience of the first consumption behavior and then compare it with the initial expectations. The comparison gap determines consumer satisfaction, and consumer satisfaction will further Influence consumers' repeated purchase intention and behavior ^[13]. Consumers' logistics demand for fresh products continues to increase with the acceleration of consumption upgrading. The quality of logistics service is directly related to the purchasing experience of consumers. Improving the quality of logistics service can affect consumer satisfaction, which in turn affects consumers' evaluation and subsequent choices of community group buying platforms ^[14]. Consumers pursue the freshness and quality of agricultural products, but fresh agricultural products are difficult to store and perishable. They have high requirements for the tangibility and reliability of logistics service quality. Improving the tangibility and reliability of logistics service quality is conducive to satisfying consumers. Requirements for the quality and freshness of agricultural products. In addition, consumers use community group buying platforms to purchase fresh agricultural products based on the advantages of rich product types, low prices, convenience and time-saving, etc., which requires logistics services in four dimensions: assurance, responsiveness, empathy, and convenience. Be perfect, improve consumer satisfaction, and attract consumers to choose to buy agricultural products on the community group buying platform again ^[15]. If the quality of community group buying logistics services can meet or even exceed consumers' expectations, consumers' willingness to repeat purchases will also increase ^[16,17]. From this the following assumptions are made:

H 7: Customer satisfaction plays a mediating role in the influence process of logistics service quality on repeat purchase intention.

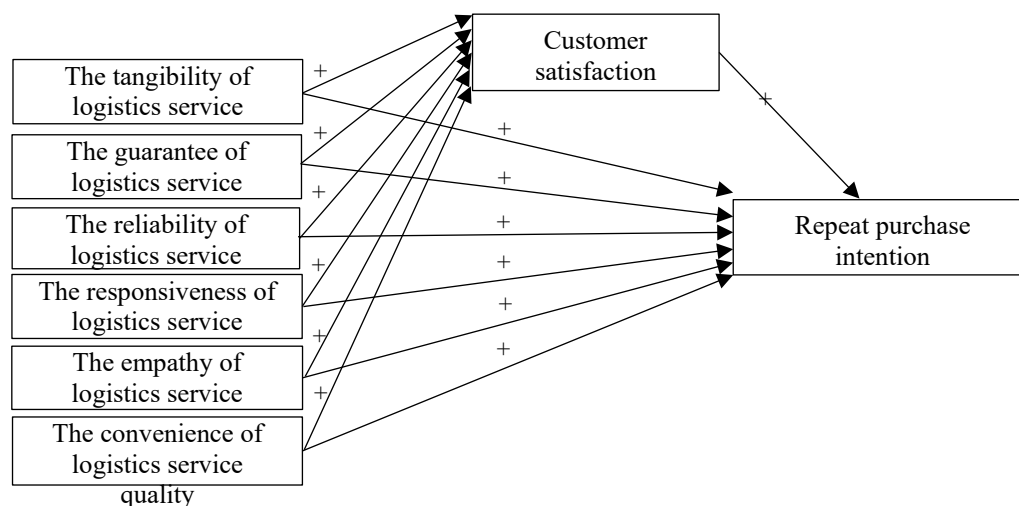


Figure 1: Research model

To sum up, the research model of this paper is shown in Figure 1.

3. Research Design and Testing

3.1. Variable measure

A mature scale helps to ensure the reliability and validity of the questionnaire. Therefore, the items of this study are based on the mature scale, and the item expressions are adjusted according to the characteristics of the research. Among them, the measurement of the six dimensions of logistics service quality is based on the research of Cheng Juan (2022) ^[12], Li Hui (2022) ^[8], etc., and the measurement of consumer satisfaction is based on the research of Quan Chunni et al. (2018) ^[18]. In the study, the measurement of consumers' repeated purchase intentions draws on the research of Li Baoku et al. (2022) ^[19]. The six dimensions of logistics service quality, consumer satisfaction, and consumers' willingness to repeat purchases are all measured with a 5-level Likert scale.

3.2. Survey Method and Sample Composition

This study adopts the questionnaire survey method, uses questionnaire design and filling software to collect questionnaires, generates sharing links and distributes them to user groups and circles of friends of various community group buying platforms, and invites consumers who have used community group buying to fill in the questionnaires. It took 15 days to collect the questionnaires. Based on the total number of questions in the questionnaires, a total of 220 questionnaires were collected. After excluding 6 invalid questionnaires, a total of 214 valid questionnaires were obtained.

Judging from the sample composition shown in table 1, the proportion of men and women in the sample is relatively balanced, among which women account for 5.7 % and men account for 4.3 %. The possible reason why women are more than men is that women are consumers who buy fresh agricultural products more. In the age composition, young people and middle-aged people accounted for a large proportion, and the elderly group aged 55 and above accounted for a small proportion. Analyzing the reasons behind it, it may be that young and middle-aged people are more accepting of emerging digital economic forms. In addition, young and middle-aged people are busy with school and work. To save time and convenience, they will use more community group buying. According to the statistics on education level, the proportion of consumers with a college degree or above is higher than 65 %. It can be considered that the respondents can understand the items of the questionnaire. In the composition of monthly income, it is concentrated in 2,000-10,000 yuan, accounting for 76.7 %, indicating that the income of consumers who use community group buying is mostly at a normal level, and the community group buying model has fewer restrictions on consumers' income levels.

Table 1: Sample Descriptive Statistical Analysis

variable	options	frequency	percentage (%)	Cumulative percentage (%)
gender	male	92	43	43
	Female	122	57	100
age	15-24	43	20.1	20.1
	25-34	66	30.8	50.9
	35-44	43	20.1	71
	45-54	50	23.4	94.4
	55 and above	12	5.6	100
	High school (technical secondary school) and below	70	32.7	32.7
education level	junior college	90	42.1	74.8
	undergraduate	31	14.5	89.3
	Master degree and above	twenty three	10.7	100
	less than 2000	twenty one	9.8	9.8
monthly income	2000-5000	80	37.4	47.2
	5001-10000	84	39.3	86.4
	higher than 10000	29	13.6	100
total		214	100	

3.3. Reliability and Validity Testing

Reliability testing can judge whether the collected data is true and reliable. This paper conducts a reliability test on the six dimensions of logistics service quality, consumer satisfaction, consumers' willingness to repeat purchases, and the scale as a whole. The Cronbach's Alpha coefficient is used, as shown in Table 2, the Cronbach's Alpha coefficient of each variable is greater than 0.9, indicating that the reliability of the entire scale is very good.

Table 2: Questionnaire reliability test

variable	Cronbach's alpha coefficient	number of items
Tangible quality of logistics service	0.902	3
Logistics service quality assurance	0.923	4
Logistics service quality and reliability	0.924	4
Logistics service quality responsiveness	0.933	5
Logistics Service Quality Empathy	0.919	4
Logistics service quality and convenience	0.912	3
consumer satisfaction	0.930	4
Consumer repeat purchase intention	0.942	5
Overall scale	0.961	32

Table 3: KMO test and Bartlett's test

KMO test and Bartlett's test		
KMO value		0.927
Approximate chi-square		6527.309
Bartlett test for sphericity	df	496
	P	0.000***

Note: ***, **, * represent the significance levels of 1%, 5%, and 10% respectively

Table 4: Table of Rotated Factor Loading Factors

measurement standard	Rotated Factor Loading Factor								common degree
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	
Tangibility Q1	0.276	0.234	0.158	0.125	0.196	0.187	0.121	0.789	0.884
Tangibility Q2	0.3	0.242	0.101	0.121	0.202	0.143	0.086	0.75	0.804
Tangibility Q3	0.161	0.215	0.164	0.176	0.182	0.135	0.094	0.798	0.827
Guaranteed Q1	0.203	0.172	0.134	0.821	0.2	0.178	0.149	0.127	0.872
Guaranteed Q2	0.097	0.16	0.145	0.81	0.142	0.227	0.148	0.118	0.82
Guaranteed Q3	0.156	0.133	0.16	0.796	0.118	0.124	0.191	0.111	0.779
Guaranteed Q4	0.162	0.148	0.117	0.81	0.204	0.147	0.122	0.075	0.802
Reliability Q1	0.237	0.21	0.835	0.178	0.151	0.131	0.14	0.147	0.911
Reliability Q2	0.105	0.254	0.792	0.095	0.093	0.152	0.24	0.021	0.802
Reliability Q3	0.152	0.19	0.824	0.145	0.043	0.129	0.12	0.075	0.798
Reliability Q4	0.208	0.114	0.806	0.141	0.184	0.075	0.083	0.193	0.809
Responsive Q1	0.846	0.203	0.131	0.175	0.156	0.152	0.187	0.183	0.92
Responsive Q2	0.746	0.161	0.231	0.119	0.171	0.113	0.171	0.147	0.744
Responsive Q3	0.771	0.167	0.223	0.09	0.219	0.118	0.132	0.088	0.768
Responsive Q4	0.796	0.137	0.044	0.174	0.142	0.217	0.169	0.142	0.8
Responsive Q5	0.804	0.163	0.167	0.138	0.075	0.126	0.021	0.198	0.781
Empathy Q1	0.205	0.228	0.16	0.177	0.171	0.828	0.159	0.114	0.905
Empathy Q2	0.091	0.136	0.063	0.199	0.179	0.804	0.098	0.21	0.802
Empathy Q3	0.225	0.207	0.076	0.154	0.166	0.818	0.036	0.092	0.829
Empathy Q4	0.171	0.208	0.27	0.185	0.109	0.725	0.241	0.055	0.779
Convenience Q1	0.172	0.201	0.207	0.25	0.181	0.191	0.813	0.102	0.916
Convenience Q2	0.208	0.211	0.15	0.222	0.149	0.113	0.767	0.125	0.798
Convenience Q3	0.194	0.143	0.211	0.155	0.143	0.153	0.816	0.068	0.84
Satisfaction Q1	0.208	0.196	0.2	0.177	0.821	0.133	0.123	0.212	0.905
Satisfaction Q2	0.212	0.123	0.049	0.132	0.82	0.208	0.125	0.125	0.828
Satisfaction Q3	0.224	0.242	0.178	0.163	0.773	0.092	0.085	0.171	0.81
Satisfaction Q4	0.074	0.146	0.079	0.217	0.82	0.182	0.16	0.096	0.82
Repeat purchase intention Q1	0.206	0.818	0.246	0.157	0.173	0.196	0.15	0.162	0.914
Repeat purchase intention Q2	0.166	0.732	0.255	0.169	0.153	0.204	0.088	0.226	0.78
Repeat purchase intention Q3	0.139	0.778	0.155	0.151	0.138	0.233	0.106	0.202	0.797
Repeat purchase intention Q4	0.263	0.804	0.105	0.129	0.147	0.136	0.124	0.068	0.804
Repeat purchase intention Q5	0.113	0.81	0.177	0.135	0.179	0.112	0.198	0.158	0.827

For the test of validity, the KMO value and the Bartlett spherical test value are first calculated, as shown in table 3, the KMO test result shows that the KMO value is 0.927, and the Bartlett spherical test result shows that the significant P value is less than 0.01, the level Significantly, indicating that there is a correlation between item variables, which is suitable for exploratory factor analysis. When the number of principal components is chosen to be 8, the characteristic root of the variable explanation is higher than 1, and the contribution rate of the variable explanation reaches 82.7%. Exploratory factor analysis is shown in Table 4. After rotation, the factor loading coefficients are all higher than 0.7, and the measurement items of each variable are all attributed to the same factor, which shows that the scale has good discriminant validity and construct validity.

As shown in Table 5, the chi-square degree of freedom ratio (CMIN /DF) is 1.163, reaching an excellent level. Root mean square error (RMSEA) = 0.028 < 0.05, within the excellent range. In addition, the three values of IFI, TLI, and CFI are all greater than 0.8, and the measurement results are good. In summary, the CFA model in this study has a good degree of fitness.

Table 5: Model Fit Test

index	Guideline	results of testing
CMIN /DF	1-3 is excellent, 3-5 is good	1.163
RMSEA	<0.05 is excellent, <0.08 is good	0.028
IFI	>0.9 is excellent , >0.8 is good	0.891
TLI	>0.9 is excellent, >0.8 is good	0.864
CFI	>0.9 is excellent, >0.8 is good	0.880

On the premise that the CFA model has a good fit, the convergent validity (AVE) and combination reliability (CR) of each dimension of the scale are further tested. Among them, AVE is required to reach 0.5, and CR value is required to reach 0.7. As shown in Table 6, the AVE values of each dimension are above 0.5, and the CR values are above 0.7, indicating that each dimension has good convergent validity and combination reliability.

Table 6: Scale convergent validity and combined reliability test

	path relationship	Estimate	AVE	CR
YXX1	<--- tangibility	0.941	0.776	0.912
YYX2	<--- tangibility	0.847		
YYX3	<--- tangibility	0.852		
BZX1	<--- guaranteed	0.937		
BZX2	<--- guaranteed	0.9	0.782	0.935
BZX3	<--- guaranteed	0.848		
BZX4	<--- guaranteed	0.85		
KKX1	<--- reliability	0.968		
KKX2	<--- reliability	0.868	0.757	0.925
KKX3	<--- reliability	0.799		
KKX4	<--- reliability	0.835		
XYX1	<--- Responsiveness	0.984		
XYX2	<--- Responsiveness	0.846	0.784	0.948
XYX3	<--- Responsiveness	0.867		
XYX4	<--- Responsiveness	0.877		
XYX5	<--- Responsiveness	0.847		
YQX1	<--- Empathy	0.98	0.801	0.942
YQX2	<--- Empathy	0.861		
YQX3	<--- Empathy	0.88		
YQX4	<--- Empathy	0.854		
BLX1	<--- convenience	0.98	0.814	0.929
BLX2	<--- convenience	0.855		
BLX3	<--- convenience	0.866		
MYD1	<--- consumer satisfaction	0.97		
MYD2	<--- consumer satisfaction	0.887	0.819	0.948
MYD3	<--- consumer satisfaction	0.869		
MYD4	<--- consumer satisfaction	0.89		
CFGM1	<--- Consumer willingness to repurchase	0.971	0.815	0.957
CFGM2	<--- Consumer willingness to repurchase	0.892		
CFGM3	<--- Consumer willingness to repurchase	0.876		
CFGM4	<--- Consumer willingness to repurchase	0.887		
CFGM5	<--- Consumer willingness to repurchase	0.885		

The discriminant validity test of the scale is shown in Table 7. In this discriminant validity test, the

standardized correlation coefficients between each dimension pair are smaller than the square root of the AVE value corresponding to the dimension, indicating that there is a good correlation between each dimension. discriminant validity.

Table 7: Scale discriminant validity test

	tangibility	guaranteed	reliability	Responsiveness	Empathy	convenience	consumer satisfaction	Consumer willingness to repurchase
tangibility	0.776							
guaranteed	0.482	0.782						
reliability	0.515	0.521	0.757					
Responsiveness	0.653	0.555	0.56	0.784				
Empathy	0.585	0.537	0.558	0.579	0.801			
convenience	0.55	0.582	0.547	0.621	0.544	0.814		
consumer satisfaction	0.593	0.535	0.525	0.556	0.536	0.517	0.819	
Consumer willingness to repurchase	0.655	0.503	0.576	0.581	0.606	0.543	0.564	0.815
AVE square root	0.881	0.884	0.870	0.885	0.895	0.902	0.905	0.903

3.4. Correlation Analysis and Path Analysis

Correlation analysis and regression analysis were carried out based on the reliability and validity test results. In this paper, Pearson correlation analysis was carried out to test the relationship between variables. The analysis results are shown in Table 8. It can be seen from the table that there is a positive correlation between the six dimensions of logistics service quality, tangibility, assurance, reliability, responsiveness, empathy, convenience, and consumer satisfaction. Positive relationship. There is a positive correlation between consumer satisfaction and consumers' willingness to repeat purchases.

Table 8: Correlation matrix

	tangibility	guaranteed	reliability	Responsiveness	Empathy	convenience	satisfaction	repeat purchase intent
tangibility	1							
guaranteed	0.443***	1						
reliability	0.439***	0.438***	1					
Responsive ness	0.565***	0.461***	0.486***	1				
Empathy	0.476***	0.511***	0.438***	0.492***	1			
convenience	0.42***	0.526***	0.502***	0.501***	0.479***	1		
satisfaction	0.526***	0.496***	0.414***	0.496***	0.486***	0.467***	1	
repeat purchase intent	0.572***	0.478***	0.534***	0.518***	0.542***	0.507***	0.508***	1

Note: ***, **, * represent the significance levels of 1%, 5%, and 10% respectively

According to the analysis results in Table 9, it can be seen that in the test of the path hypothesis relationship in this study, the significant positive predictive of the tangibility of consumers' willingness to repurchase ($\beta = 0.571$, $P < 0.01$), so the hypothesis H 1 is established. Guarantee significantly positively predicts consumers' willingness to repurchase ($\beta = 0.478$, $P < 0.01$), so hypothesis H 2 is established. Significant reliability positively predicts consumers' willingness to repurchase ($\beta = 0.534$, $P < 0.01$), so hypothesis H 3 is established. Responsiveness significantly positively predicts consumers' willingness to repurchase ($\beta = 0.518$, $P < 0.01$), so hypothesis H 4 is established. Empathy significantly positively predicts consumers' willingness to repurchase ($\beta = 0.542$, $P < 0.01$), so hypothesis H 5 is established. Convenience significantly positively predicts consumers' willingness to repurchase ($\beta = 0.507$, $P < 0.01$), so hypothesis H 6 is established.

Table 9: Path test result

x	→	Y	unstandardized coefficient	standardized coefficient	SE	CR	P
tangibility	→	satisfaction	0.561	0.525	0.062	9.035	0.000***
guaranteed	→	satisfaction	0.545	0.496	0.065	8.349	0.000***
reliability	→	satisfaction	0.429	0.414	0.065	6.650	0.000***
Responsiveness	→	satisfaction	0.516	0.496	0.062	8.366	0.000***
Empathy	→	satisfaction	0.508	0.486	0.063	8.125	0.000***
convenience	→	satisfaction	0.470	0.467	0.061	7.720	0.000***
tangibility	→	repeat purchase intent	0.625	0.571	0.061	10.186	0.000***
guaranteed	→	repeat purchase intent	0.539	0.478	0.068	7.960	0.000***
reliability	→	repeat purchase intent	0.567	0.534	0.061	9.238	0.000***
Responsiveness	→	repeat purchase intent	0.552	0.518	0.062	8.865	0.000***
Empathy	→	repeat purchase intent	0.581	0.542	0.062	9.432	0.000***
convenience	→	repeat purchase intent	0.524	0.507	0.061	8.602	0.000***
satisfaction	→	repeat purchase intent	0.521	0.508	0.060	8.637	0.000***

Note: ***, **, * represent the significance levels of 1%, 5%, and 10% respectively

3.5. Mediating effect test

The repeated sampling method (Bootstrap) was used to test the mediating effect, and the results are shown in Table 10. In the table, X1, X2, X3, X4, X5, and X6 respectively represent the tangibility, guarantee, reliability, and response of logistics service quality. Sex, empathy, and convenience, M represents consumer satisfaction, and Y represents consumers' willingness to repeat purchases. The 95% confidence interval of the indirect effect does not include the number 0, which shows that in the process of the impact of logistics service quality on consumers' willingness to purchase repeatedly, the mediating effect of consumer satisfaction is significant, and the tangibility, guarantee, and reliability of logistics service quality Sexuality, responsiveness, empathy, and convenience will first affect consumer satisfaction, and then through consumer satisfaction will affect consumers' repeat purchase intention. Hypothesis H7 is verified.

Table 10: Bootstrap test of mediation effect

path	c total effect	a	b	a*b mediation effect value	a*b (Boot SE)	a*b (z value)	a*b (P value)	a*b (95%BootCI)	c' direct effect	test results
X1 => M => Y	0.625***	0.561***	0.295***	0.165	0.036	4.629	0.000***	0.085 ~ 0.222	0.460***	partial mediation
X2 => M => Y	0.539***	0.545***	0.369***	0.201	0.037	5.438	0.000***	0.111 ~ 0.253	0.337***	partial mediation
X3 => M => Y	0.567***	0.429***	0.355***	0.152	0.030	5.062	0.000***	0.085 ~ 0.204	0.415***	partial mediation
X4 => M => Y	0.552***	0.516***	0.341***	0.176	0.035	5.068	0.000***	0.100 ~ 0.237	0.376***	partial mediation
X5 => M => Y	0.581***	0.508***	0.329***	0.167	0.036	4.617	0.000***	0.090 ~ 0.230	0.414***	partial mediation
X6 => M => Y	0.524***	0.470***	0.356***	0.168	0.033	5.097	0.000***	0.102 ~ 0.229	0.356***	partial mediation

Note: ***, **, * represent the significance levels of 1%, 5%, and 10% respectively

4. Conclusion and Enlightenment

This paper uses software such as SPSS 26.0 to verify that the tangibility, assurance, reliability, responsiveness, empathy, and convenience of logistics service quality under the agricultural product

community group purchase model have a positive impact on consumers' repeat purchase intentions. At the same time, consumer satisfaction plays an intermediary role in the impact of logistics service quality on consumers' repeat purchase intention. According to the conclusion of the research, the following enlightenment is given for the community group buying model of agricultural products and its logistics services:

First, for community group-buying platforms with fresh agricultural products as the main category, when choosing a third-party logistics company or using self-operated logistics, you should evaluate the professionalism of the equipment to ensure that the fresh agricultural products are safe during transportation. damage can be minimized. This is because fresh agricultural products are perishable, cannot be collided, and must be kept fresh, which places extremely high requirements on storage equipment, sanitation and disinfection equipment, and loading and unloading equipment. For logistics companies, if it is the logistics promotion of agricultural products, they should pay attention to displaying the professionalism of equipment and reflecting the tangibility of their logistics services. Second, the community group buying agricultural products should focus on cultivating the professionalism of logistics service personnel, especially the delivery personnel at the end of logistics and community leaders. They directly contact consumers, and their professionalism directly affects consumers' evaluation and perception of community platforms. . Community group buying platforms should train relevant personnel to make their business operations proficient and standardized. Third, the community group buying platform must respond to consumer needs promptly and process consumer order information promptly. Fourth, the community group buying platform for agricultural products should track the logistics status of consumer orders, confirm and communicate on time when abnormalities are found, and ensure that the goods can be delivered to consumers in a timely and accurate manner. Fifth, the community group buying platform for agricultural products should consider the individual needs of consumers. The self-pickup points set up in the community should take into account the journey of consumers to pick up the goods. At the same time, the pick-up time should also be flexible. Get off work late and wait for crowd service, etc. Sixth, the community group buying platform should consider the convenience of the whole process from placing an order to picking up the goods. For the following orders, there is a small program to place the order conveniently or report directly to the community leader to place the order on his behalf. To pick up the goods, you need to check the pickup code or directly report the phone number, etc. This is very important for the elderly to use community group buying.

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